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"AT THE VERY LEAST, THIS YEAR'S LOOKING GREAT FOR PC GAMING"



2020 was a funny old yeah, eh? Well, maybe 'funny' is the wrong word. Regardless, we must forge on with the hope that 2021 might be a bit brighter – even if that does just turn out to be the light of the first nukes going off.

At the very least, this year's looking great for PC gaming. In our huge feature, we've run down a metric boatload of fantastic new titles coming in

2021. The future's bright – just maybe don't look out the window.

ROBIN VALENTINE Specialist in Big lists

Twitter

@robinIvalentine

This month

Spent a lot of time looking at the Wikipedia page '2021 in videogames'.

Rohi

ROBIN VALENTINE PRINT EDITOR

robin.valentine @ futurenet.com



The PC Gamer team



FRASER BROWN
Specialist in
Sword-based succession

This month

Glimpsed a grim vision of a corrupted, dying British Isles. Insert your own Brexit joke here.



RACHEL WATTS
Specialist in
Tolkien tourism

Tolkien touris

This month
Quested across the whole
of Middle-earth in
Minecraft, searching for
precious content.



STEVEN MESSNER Specialist in

Grinding faction rep

This month Reviewed an MMO

Reviewed an MMO expansion, which means he didn't have time to do anything else.



ALEX SPENCER
Specialist in

Remote demos

This month

Freelancer Alex wrote almost our entire preview section this month. If you don't like it, blame him.

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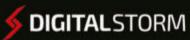


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SUB STANDARD

Sci-fi sex game teams up with racist YouTuber, apologizes, then backtracks

where you recruit sexy aliens and then bang them. Since developer Studio FOW cancelled Early Access plans, players hadn't seen gameplay yet—even though its first chapters are due early 2021.

So there was anticipation for the first look at its "Tactical Grid Combat, Waifus and SHMUP Gameplay!". However, that exclusive was given to a YouTuber, Arch, a controversial figure who used to post as Arch

Warhammer until Games Workshop decided it wanted no association: It made Arch remove the word 'Warhammer' from his channel, and warned others not to work with him.

When the *Subverse* reveal video was posted to Reddit, there was such backlash the mods eventually stated,

"WE ARE SORRY FOR JUMPING INTO A POLITICALLY CHARGED SITUATION" "We will be automatically removing any future content made by this YouTuber to our subreddit."

DOWN THE TUBE

Subverse creators Studio FOW responded through community manager FOWChan, "We were not aware at the time that he had made racist and other controversial statements in the past," and, "We know now this was a mistake."

However, that post was soon deleted and followed by one that reversed position, from the same account, And then there was an apology for the earlier apology, "We are sorry for jumping into a politically

BAN HAMMER

MULTIBOXERS BANNED



Blizzard has finally updated its policy on Input
Broadcasting Software. WoW players can still have multiple

accounts, but they will have to alt+tab between them to avoid a ban. $\blacksquare sJ$

ELF CHECK

RINGS MMO REVIVED



Lord of the Rings Online is being given a new lease of life some time this year. Developer Daybreak is

promising "modernized visuals" and upgrades to "key game systems". ■AK



FRESH THREADS

CHRISTMAS JUMPER



Microsoft continues its tradition of 'ugly' Christmas sweaters with one that pays homage to MS Paint. For

every one sold, a portion of the profits head to nonprofit Girls Who Code. **JR**

DEMI O THE STATE OF THE STATE





ABOVE, TOP: Studio FOW has declared that following this mess it won't be working with Arch, or indeed anyone outside the team, in a promotional capacity again.

ABOVE, BOTTOM:

As well as the usual moans about feminism and how Warhammer and Star Wars have been ruined by SJWs, Arch has a second channel devoted to topics like Islam, immigration, and his right to use the n-word.

charged situation so quickly. *Subverse* has no political affiliation." The final act in this farce came when StudioFOW developer Tibor then re-re-apologized, writing, "It is disappointing that under my watch this mess happened [...] I let the backers down and I let our fans down. This is a game to be enjoyed by everyone..."

Here are some things Arch has said in the past. In a de-listed video he calls Warhammer's Gnoblar "house n****s" (boasting the phrase is something "for which this channel is rightly famed"). Various Discord leaks show Arch has blamed black people for slavery, as well as calling Asian people "ching chongs".

Arch claims such statements are humorous. Asked for comment he wrote, "Racism is absurd and therefore makes for a good joke because it is universally recognized as absurd [...] As a YouTube channel I neither have, wish or can discriminate against any one ... I have repeatedly and loudly argued against racism in multiple videos."

Partnering with a YouTuber gives up some control over how people react to your game, but StudioFOW's claim it "has no political affiliation" is strained by teaming up with a person who produces reactionary political videos and uses language like the above. It's said there's no such thing as bad publicity. But some things sure look like it.

Jody MacGregor, Rich Stanton

Highs & Lows



HIGHS

Alphafold

New AI, Alphafold, has made unprecedented advances in protein-folding.

Planeception

Developer Rami Ismail flew from Montreal to Amsterdam in a real plane, while piloting the same route in *Microsoft Flight Simulator*.

Fornite

The Galactus event ended up involving over 15 million players.

Fortnite. again

Epic announced there will be no in-person *Fortnite* events in 2021...

Monster Hunter

The new Monster Hunter movie contains a joke that has angered the Chinese audience, and led to the review-bombing of *Monster Hunter: World.*

RTX 3090 heist

Thieves stole around \$340,000 worth of RTX 3090 cards from an MSI factory in China.

LOWS





HOBBIT FORMING

This team dedicated ten years to building Middle-earth in MINECRAFT

he Minecraft community continues to blow minds with its incredible builds, but even in that lofty company Minecraft Middle-earth stands out. This block-by-block recreation of JRR Tolkein's world has to be seen to be believed.

All of Middle-earth's top hot-spots—and everything else—has been recreated in the blocky sandbox. You can take a quiet stroll through Hobbiton, delve into the depths of Moria, and so much more. Ever wanted to swan dive off the apex of Minas Tirith? I've done it—it's awesome.

Minecraft Middle-earth celebrated its ten-year anniversary last month, so I spoke with the server's founder Nicky Vermeersch, also known as q220, about its humble beginnings, and why anyone in their right mind would take on such an ambitious build.

Vermeersch was first introduced to *Minecraft* when it was still in beta in 2009, and like many others who played early on in the game's development, he was completely captivated. As a moderator on a Dutch *Minecraft* server, the idea of building Middle-earth was a concept that quickly began to float around the server's community.

"I grew up with Lord of the Rings, like most people around 30 years old, I imagine," Vermeersch says. "We had people who were interested from the *Minecraft*

forums, so we had this solid player base to start with. We began building the basic locations, like Bree and Hobbiton, then after publishing screenshots, people got hooked on what we were doing and started joining the project."

Recreating an entire fantasy world inside a sandbox back in 2009 was far from an easy task, especially as the team didn't have many of the tools that builders have today. Software such as Dynmap, WorldPainter, and WorldMachine are now vital for planning, but for the *Minecraft* Middle-earth builders, much of what they've achieved was done freestyle.

"Looking back it was chaos," Vermeersch says. "Those tools didn't exist, so it was people running around and counting blocks. It was very much like, 'Oh, yeah, we have to do this' and 'that has to go over there'. That was a disaster, really. Building Hobbiton was OK, but when we had to bridge the distances between major locations it became more of a problem."

WORLD BUILDING

Over the past ten years, the Middle-earth team has grown from a modest forum group to having around 300 members who are actively building and supporting the server. The process of researching and recreating an accurate representation of Tolkien's world requires the input of the whole community. "The biggest, most iconic



New build

Modern Minecraft builders begin their projects on a customisable map, choosing a flat terrain for easy building. But the Middle-earth team didn't have that in 2009, so had to start with a fully landscaped world which they carved away at. If a mountain happened to be in the way, the builders would remove it block by block ("which was really labor intensive").





FAR LEFT: Gondor's largest city, Minas Tirith, in all its blocky glory.

LEFT: I climbed all the way to the top of Isengard and didn't break a sweat.

VIRTUAL TOUR My top four must-see locations to visit in Minecraft Middle-earth



RIVENDELL

If you're wondering where the very precious one ring is, you'll find it here at the Council of Elrond.



HELM'S DEEP
The server lets you set the time and weather so you can recreate dramatic scenes like the Battle for Helm's Deep.



THE MINES OF MORIA
The mines are difficult to navigate but worth it for a special appearance waiting for you at its exit.



HOBBITON

Aww, Hobbiton, as charming and delightful as in the books and films. Is it time for second breakfast yet?

builds are usually handled exclusively by senior members or our best builders," Vermeersch says. "We then organize build contests, basically, where everyone can be involved. We set it in a blank world and ask, for example, for houses in Minas Tirith and people begin building. We give them guidelines and present them with pictures of like, for example, Roman architecture, as kind of a mood board. Then we look around at the builds and find out what works and what doesn't work."

The references the team use are the descriptions from the books and scenes from the films, but Vermeersch also says the group use their own fantasy concepts to fill vast parts of the map that Tolkien only alludes to.

"Mordor is a good example," Vermeersch says. "It's going to be really tough since we'll also have to make up unique assets that haven't been shown anywhere on the map.

"YOU CAN TAKE THE EXACT SAME PATH AS THE FELLOWSHIP TOOK TO GET TO MORDOR"

Gondor was another place that needed more. In the movies, you only get introduced to it as that huge white city and the broken ruins, but it's so much more than that. We have Pelargir which is a huge commerce port that isn't introduced in the movies, and if you visit it, there are tons of individual houses and all of them are built by hand."

Minecraft Middle-earth was live when the Hobbit trilogy released between 2012-2014, and I ask Vermeersch if the server got excited to see new parts of Tolkein's world visualized. "When the first Hobbit got released, we saw a huge increase in visits for people," he says. "But we

hadn't really built anything that appeared in The Hobbit except for a couple of places like The Shire or Rivendell. So of course, we had to disappoint a lot of people.

"The Hobbit actually takes place in a different location, so we haven't built areas like Lake-town or the location where the Battle of the Five Armies happens. That kind of stuff we haven't touched yet."

The *Minecraft* Middle-earth map is currently 29,000 by 30,000 blocks, which makes an area of around 870 square kilometres. That's around the same size as Dallas, Texas, so it's understandable that the team might not want to tackle the wider realms of Tolkien's universe

quite yet. If you did want an itinerary of what to see in Middle-earth, the server has the perfect tour for you.

"When you head out into The Shire at the server's spawn point, you'll find footsteps on the ground," Vermeersch says. "It's a

guideline. You can go out and take the exact same path as The Fellowship took to get to Mordor. Sometimes it branches, which indicates where The Fellowship split up and you can choose who to follow."

Even after ten years working on the server, the *Minecraft* Middle-earth team shows no signs of slowing down. It's a mind-boggling server and is a prime example of how players are using the sandbox in incredible ways. You can check out the server for free by heading over to the team's official website, or if you're feeling generous you can donate to help the team run things. **Rachel Watts**

Positive Influence

INSPIRATIONS AND CONNECTIONS IN GAMES

SMALL FRY

How OVERCOOKED's tiny team took over our living rooms

he story of *Overcooked* begins at Cambridge Wizard School. At least that's what Ghost Town Games programmer Oli DeVine calls it, with a knowing wink to the absurdity of the UK education system. Officially known as Cambridge University, it taught him two things: First, he didn't want to be an academic. And second, local co-op wasn't dead.

"University can be quite an isolating experience," DeVine says. "The thing that got me through it was having people round and playing videogames in my room, or going home and playing with my brothers."

The games industry had largely turned its back on shared screen experiences, necessitating complex setups with multiple consoles and TVs connected via LAN. "That was such a pain in the butt," DeVine remembers, "but you'd still do that, because the experience of being in the same space was so much better."

DeVine stayed in Cambridge to work at Frontier, where he met his future creative partner, Phil Duncan. Today, Frontier is best known for its own evolving games, *Elite Dangerous* and *Planet Coaster*. But back then, it subsisted mainly on one-off projects that varied wildly in size.

On *Disneyland Adventures*, the team was so big that departments were cut off, with no sense of the game in its entirety—a situation the pair says leads to the segmented feel of modern open world games like *Assassin's Creed*. But working on tighter projects opened their eyes to how much

nimbler a small team could be. "Generally speaking, me and Oli have tried to avoid working with four multinational studios at once," Duncan jokes.

Inspired by a former Frontier colleague, *Lone Survivor*'s Jasper Byrne, the two set up Ghost Town Games as an independent. The plan was to sell 20,000 copies of their first game—a target that seemed manageable before handing in their resignations, and daunting soon after.

"I don't think either of us at the time were particularly big cooks," Duncan says. "I'd done my stint working as a barman and waiter, so I had some knowledge of how a kitchen operates—when a team is working seamlessly, and the orders are coming in and out at the same rate, and if someone's having a bad day, how it can ... fall apart."

Neither developer had a repertoire of impressive meals, however. That's apparent in the 'naive' recipes of the original *Overcooked*, which had burgers, burritos, and an onion soup consisting of just three onions. "If we were making the game now from scratch, it would probably be a more diverse and interesting palette," DeVine says.

SPINNING PLATES

Overcooked became a success—and for the sequel, Ghost Town worked alongside a full kitchen of Team17 staff. There's no other way to put it: The pair were worried they might have too many cooks. "It's something we were reticent about, because of the experience with a big team at Frontier," Duncan says. "Are decisions going to be slower and harder to make? But in actual fact, because we'd already made the first game, and the second one was building off that foundation, it wasn't slowing us down."

If *Overcooked* lends itself to easy metaphor, that's because it captures something essential about cooperation. Its primary lesson, that you need to keep lines of communication open to work effectively with others, proved useful when collaborating with Team17. And the back and forth of two effective co-op partners is clearly reflected in DeVine and Duncan's dynamic.

"I'm a 'measure four, five, 300 times before you cut' kind of guy," Duncan says, "And Oli's a 'just cut it' kind of guy. He makes me a little less cautious."

"Good," DeVine replies. "You probably make me think that there are consequences to actions. What we get from working together is similar to playing a level of *Overcooked*. We've got this optimization to our work now. We try stuff, mix it up, and pick up where the other person stops." *Jeremy Peel*

OVEN READY

The best games inspired by Overcooked



CATASTRONAUTS
Moves the action to a
flaming spaceship in the
midst of battle. Thankfully,
the fire extinguishers work
exactly as you expect.



MOVING OUT
Introduces a key innovation:
Physics. Carrying a couch
means not only wrestling
with a co-op partner, but
Newtonian mechanics too.



TOOLS UP!
Renovate a house by
matching the blueprint. In a
twist, only the player holding
the blueprint controls the
camera angle.







FAR LEFT: Lobbing a dirty plate into the pool doesn't count as cleaning it, weirdly.

LEFT: Overcooked 2's expanded team has enabled an impressive pace of seasonal updates.



GLASS CANNON

How Obsidian built its reputation for masterful, yet buggy, RPGs

he irradiated toilet bowl offers one of the bleakest dilemmas in *Fallout: New Vegas*. In hardcore mode, you have to stay hydrated in the desert or face dwindling stats and, ultimately, death. In a pinch, a gulp of 200-year-old piss water might just save your life. Temporarily, at least: In an interestingly ironic twist, the effects of radiation poisoning in *Fallout* are much the same as dehydration.

It's a literal poisoned chalice, the ultimate bad deal. Yet most players took it, glugging down the brown stuff at one point or another in order to survive.

It's the same dilemma faced by the large independent developer. Where small indies can keep costs low, and publisher-owned studios enjoy corporate security, outfits like Obsidian exist for many years in a mode of terrifying fragility. With hundreds of employees on payroll who need a cheque at the end of every month, these developers rarely have the option of turning publishers down. They need to sign the next project, balancing creative integrity with practical compromises. For a decade and a half, it was Obsidian CEO Feargus Urquhart's job to circle that toilet bowl without ever resorting to slurping the cursed liquid within.

"There is a seedy underbelly to game publishing and development, in which there are a lot of developers that have to make games they wouldn't choose at all to do, to keep the doors open," Urquhart told IGN Unfiltered a few years ago. "It's a really hard decision to make, particularly when the deal you're getting is maybe not even one that covers your cost. We've been offered a lot of that stuff, and we've made the conscious decision to turn it down."

DARK ALLIANCES

Today, Obsidian is owned by Xbox. But to understand the games the studio has made across its 17-year history to square the brilliant writing with the bugs and the unfinished stories—you need to bear that older context in mind, the survival mode of the big contractor. The first compromise came immediately after Obsidian was founded. Its initial staff was almost entirely made up of refugees from the shuttered Black Isle Studios, which had worked on not only *Fallout* and *Icewind Dale*, but the *Baldur's Gate: Dark Alliance* series of action role-playing games. The developer had pitched a *Dark Alliance*-style Star Wars game to LucasArts—and believe it or not, was bummed out to be handed *Knights of the Old Republic II* instead. It was only when Urquhart called up Bioware's two doctors—Ray Muzyka and Greg Zeschuk, then building an RPG empire—that Obsidian came around to the business sense of accepting a project that wasn't its own idea.

In many ways, *Knights of the Old Republic II* set the template for Obsidian's run of troubled, yet inspired, RPGs. It delivered as a sequel to BioWare's epic story, while rejecting the black-and-white morality of the

Force in favor of a nuance that felt subversive in the Star Wars universe.

BELOW: Alpha Protocol offered a heady mix of Bond, Bourne, Bauer and bugs.

BOTTOM: Stick of Truth was a success for Obsidian, but Ubisoft developed its sequel in-house.

Yet it also felt rushed, because it was: From the moment of signing the contract, Obsidian was given 15 months to make the game happen. Particularly galling was an extension the studio believed it had secured—only to later be told the game had to come out for Christmas 2004 after all. The team cut a whole planet, stripped back its branching ending,





ART IMITATES LIFE

Times Obsidian's battle for survival was reflected in its games



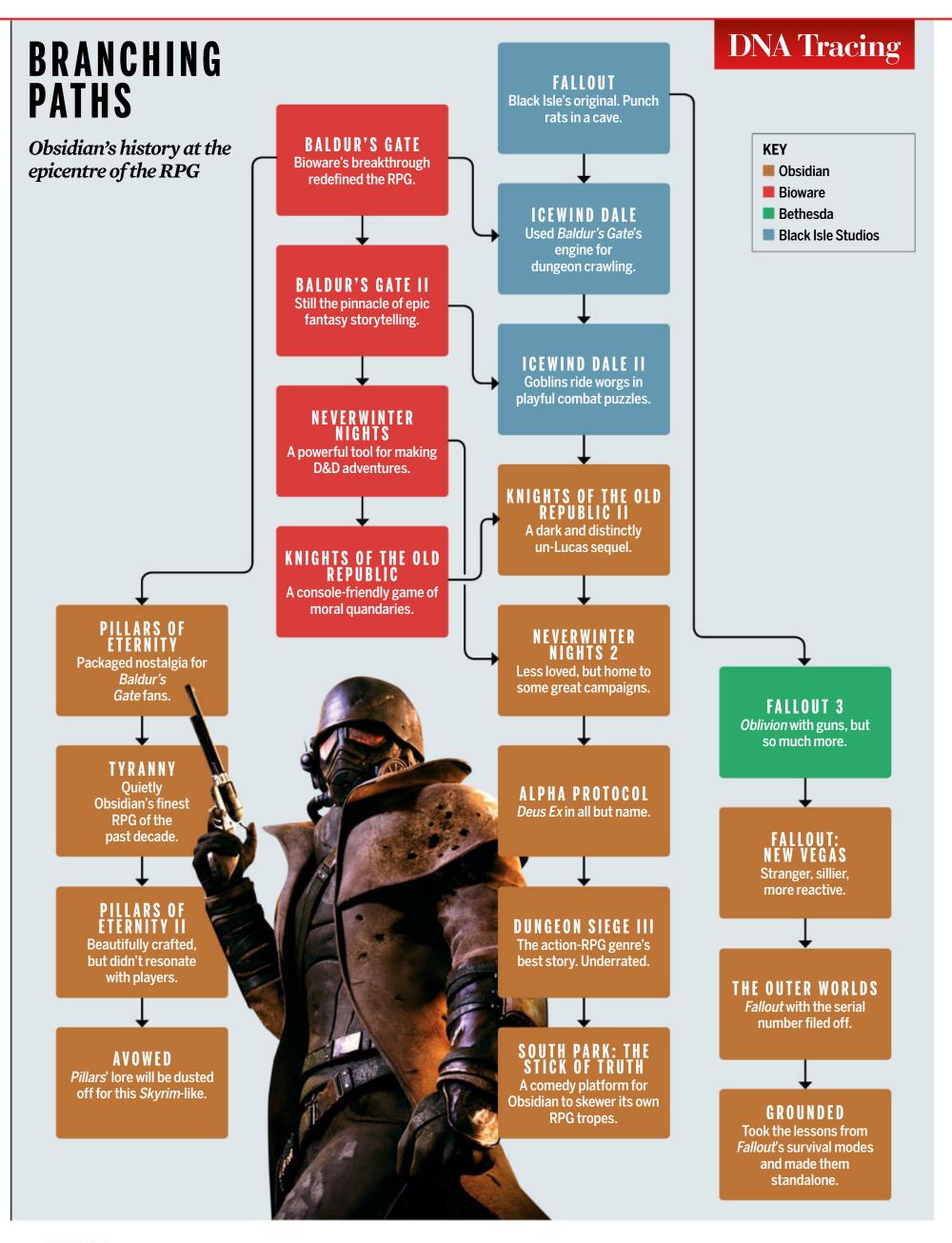
FALLOUT: NEW VEGAS Hardcore mode turned Fallout into a hunt for pure water sources.



THE OUTER WORLDS In this survival mode, water is something you have to save up for.



GROUNDEDSup dew from the grass to fend off death, if the ants don't get you first.



and sucked it up. With the mould set, Obsidian became the studio publishers went to for RPG sequels on a tight budget. *Neverwinter Nights 2, Fallout: New Vegas, Dungeon Siege III*—all were accomplished but compromised. In tandem, the developer developed a reputation for first-class storytelling and runaway bugs, the latter of which it has only lately begun to shake.

Throughout the late 2000s, it certainly felt as if Obsidian was constantly on the verge of a megahit. Mainstream gamers had discovered a taste for choice and consequence, and the studio's skillset was perfectly aligned with the zeitgeist. It seemed as if the right game could become Obsidian's *Mass Effect*, firing the team into the realm of huge franchise budgets, financial security, and leisurely QA time.

But the game was rigged. Obsidian *did* have its megahit in *New Vegas*, a densely reactive adventure which proved hugely popular despite its technical shortcomings. But as a contractor, the studio didn't stand to benefit nearly so much as publisher Bethesda did. Infamously, Obsidian

missed out on a bonus by a single Metacritic percentage point, and Urquhart has since described the decision to withhold that cash boost as "petty". The bonus is a moot point, however—it was the studio's subservient position in the business that prevented it from reaping the potential rewards.

A NOSTALGIC RETURN TO THE ERA OF ISOMETRIC RPGS WAS ONLY BENEFICIAL

an evil regime.

of Eternity II after it, sold badly despite critical acclaim. The response left the latter's game director, Josh Sawyer, confused—lacking confidence and unsure of how to push forward. The Outer Worlds,

But Tyranny, and Pillars

released last year, felt somehow RPG-by-numbers, as if Obsidian was newly afraid to follow its instincts.

In that sense, the Xbox acquisition is Obsidian's toughest challenge to date. While the studio's days as a toilet-orbiting survivor are over, security brings difficult questions. With proper funding, will the dream Obsidian game prove to be what the public wants? Or is the bittersweet scent of unfulfilled potential a key part of the charm? We won't know until the launch of its biggest pitch yet the *Skyrim*-killer *Ayowed*



engine to build *Tyranny*, a brave and strange journey

morality on its head—casting you as a lieutenant who

Knights of the Old Republic II, Tyranny turned videogame

might at best sneak small acts of good into the running of

through the ruined realm of a Marxist Sauron. Like

Warfare might have paid the bills, but was a tricky sell for RPG fans.

BOTTOM: Ship battles were a novel, and naval, highlight of *Pillars of Eternity II*.

CONFIDENCE CRISIS

Kickstarter actually provided a partial way out. For Obsidian, a nostalgic return to the era of isometric RPGs was only beneficial. The move to 3D had never favored its writing, which flourished in the literary space where players' imagination filled in the blanks for the distant character sprites. And once the studio had made the old-fashioned fantasy *Pillars of Eternity*, it used the same





Fights in Tight Spaces





NEED TO KNOW

RELEASE Early 2021 **DEVELOPER**Ground Shatter

PUBLISHER
Mode7, Bithell Games

LINK fightsintightspaces.com

FIGHTS IN TIGHT SPACES

Finally, a deckbuilding game to make Jason Statham proud



gent 11 is the kind of person who smooths back his hair at the start of a brawl, straightens his tie before breaking a nose with the flat of his hand. You

never actually see his face, but from the way he bobs around, the man seems very happy in his work as he crushes windpipes, stomps on faces and cracks skulls against countertops.

If that brings to mind a certain other numerically-monikered agent, well, he's certainly in the mix—especially Daniel Craig's take on Bond as a brutal besuited psychopath. But the star of *Fights in Tight Spaces* is also John Wick, Henry Cavill reloading his arms, and every single character Jason Statham has ever played

"When we first started, I got Connie [Duffy], who does our video editing, to put together a big folder of scenes clipped out of films," lead designer James Parker says. "The elevator fight scene from Captain America, the corridor fight from Old Boy, the bathroom fight from Mission: Impossible—all these scenes that capture people's imaginations."

This is not exactly an unusual mix of reference points for a videogame, admittedly. But Fights in Tight Spaces isn't an action game. It's a mix of roguelike, deckbuilder, and turn-based tactics. Parker is upfront about his influences here, too, "The games I'd been playing a lot around the time were Slay the Spire and Into the Breach." If you can hold those two games in your head, and splice them with The Stath's back catalogue, you're most of the way to imagining Fights in Tight Spaces.

Each fight plays out on a (tight, natch) grid. You're surrounded by the usual selection of thugs, goons, and henchmen, who break the old cinematic rule to mob you all at once—but luckily, they're slow to



PLAYED

act. That gives you a turn to get yourself out of danger, dispatching as many of them as you can along the way. And the stunts you're going to be using to achieve this? Well, that's what your deck is for.

A standard hand of cards might include a block, a dodging maneuver or two, and a nice little selection pack of kicks and punches. So you knife past this enforcer, then shoulder-barge him into the path of a gunman, before turning to deliver a roundhouse to another lad with a blowtorch. End turn, and their choreographed moves all play out, and your first victim takes a bullet to the head from his former pal. And a great big smile breaks out across your face.

DIE HARD

Fights in Tight Spaces isn't just a game inspired by action heroes. It tries to force you to play like one—taking out foes with style. "Dodging is cool when it means you force someone with a gun to shoot his mate in the head. Getting out of the way when you've only got a bit of health left, and you want a breather, that's thematically appropriate," Parker says. "But we don't want the best tactic to be just getting out of the way, because that's not particularly empowering. It doesn't make you feel like a cool action hero, it makes you feel a bit like a wimp."

Enter the game's combo system, designed to encourage more aggressive play. Every successful attack causes the combo meter to tick up, boosting the damage on some attacks and unlocking powerful finishing moves that can only be played when the combo hits a certain number. For every square you move, though, it chips away at your current combo. So ideally, you don't want to be dodging in and out of enemies' attacks—you want to move them around you, like the river flows around the stone.

This balance is one that Parker and his team at Ground Shatter are still trying to find themselves. For my money, staying in one place is currently too risky. The

IT'S A MIX OF ROGUELIKE, DECKBUILDER AND TURN-BASED TACTICS

Fights in Tight Spaces

rhythm of these fight scenes requires the hero to be taking hits, and Agent 11 is made of glass. Blocking can be effective, but it never feels quite right, especially when the guns come out—and besides, one small miscalculation and you're a step closer to permadeath. Healing is a rare treat, even by comparison to *Slay the Spire*, and I often found myself preferring the wimpier option.

"At the moment, we are pretty unfair on the player," Parker admits. To date, the game has relied on a group of testers, and their tastes run a little masochistic. "Even I struggle to play it quite a lot of the time," he says. "If someone like me can't play it, then we probably need to tailor it for a wider range of players."

This is beginning to change, though. The game was (technically) a launch title for Xbox Series X & S, via Microsoft's Game Preview programme, helping to expand the player base ahead of a PC Early Access launch. In case you're wondering which flavor of Early Access we're talking about here (other varieties including: 'Basically complete', 'barely left the programmer's keyboard', and 'hugely overambitious mess'), Fights in Tight Spaces is one of those where the core loop is already solid, but the shape of the game around it is still wobbly. Kind of like those Ben & Jerry's tubs with the lump of frozen cookie dough in the middle.

MISSION: IMPOSSIBLE?

To use a non-ice-cream-based example: There's currently no persistent progression in the game. When a run ends, you're kicked back to the start menu, with no dopamine-loosening level-up bar ticking up or fresh unlockables to take into the next. This isn't down to Parker being some kind of roguelike puritan-he just doesn't know which bits to lock off yet. "Knowing what's going to be both worthwhile enough to give players as a reward, but also not so important that they'll miss it if they don't have it, it's quite a fine line to draw," he says. "That's going to be a thing that comes further down the line."

This is a smart approach, although does mean *Fights in Tight Spaces* will probably be the rare game that slims

"IF WE HAD WIZARDS IN THE GAME, IT WOULD MAKE LIFE SO MUCH EASIER FOR ME"

down in Early Access—at least, the first-run version of it. But Parker, aware of the deep card pools offered by the competition, wants to keep it growing too. "We can't come out the gate saying 'well, we're a small new game so we've only got ten cards', that's never going to wash," he says—and Parker is constantly thinking of new mechanics and new ways to bend the existing ones. "Every time I take a break from putting in new cards, when I come back to it, I'll realize: Oh, there's a whole kind of suite of things that I haven't considered yet that we can do."

There are a couple of complications, though, that make implementing these ideas trickier than *Slay the Spire*'s 'here's some scribbled MS Paint card art while we test it out' approach. "Unlike the majority of deckbuilding card games, we have that full 3D physicality where everything is animated. So there's a lot of content to create, and it has to look amazing." Which is where those action-movie sizzle reels come back into play, along with YouTube videos of martial artists doing the same move over and over—perfect reference material for an animator.

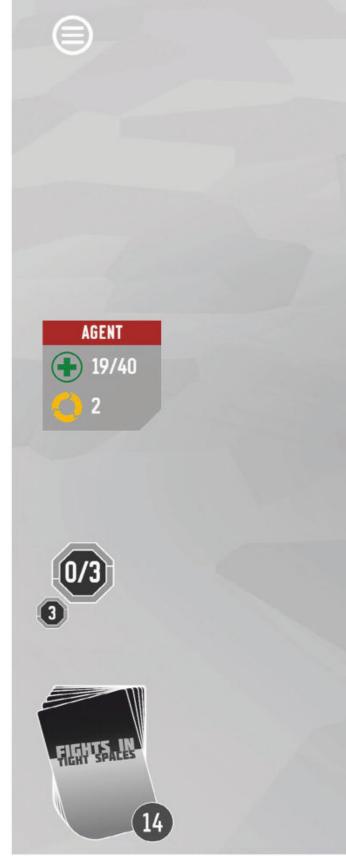
The second complication stems right from that action-movie theming. "If we had wizards in the game, it would make life so much easier for me," he says. "Then you can have a spell where a plant comes out of the ground on the other side of the game board and sucks someone underground." Because of its theme, the game can't rely on this kind of abstraction. Every move has to be grounded in reality (the movie version, at least) and expressed through Agent 11's movements.

So, I ask Parker, why make it harder for yourself? "A lot of those card games don't personally appeal to me, thematically speaking. I'm not really a fantasy fan, those worlds don't interest me particularly." The action-movie thing isn't just an affectation for Parker, it's a genuine passion—his office is more 'Jason Statham mugs' than 'Lord of the Rings posters', as he puts it.

This brings a lot of challenges when you're making a card game, but also has potential to open (or rather, kick down) a new door, he reckons "to find other people like me for whom something like *Monster Train* or whatever is not quite visually, or thematically, the thing they're after". The kind of person who can appreciate a good cracked skull or crushed windpipe, and understands the value of being immaculately dressed while you do it.

Alex Spencer





PREVIEW









Scavengers

NEED TO KNOW

RELEASE 2021 **DEVELOPER**Midwinter Entertainment

PUBLISHER Improbable

LINK

playscavengers.com

SCAVENGERS

Battle royale meets survival game, to fight it out in the snow

he first real surprise playing *Scavengers* is the map. I think I've got the measure of it, and then the captain of my three-person team—Midwinter's head of production Mary Olson—mentions something I can't see. I scroll the mouse wheel to realize I've been looking at a small fraction of the nine square kilometers of snow known as Cascade Springs.

This is a good thing, as it turns out, because it puts more distance between us and the other players stalking the tundra. Looked at one way, Scavengers is a battle royale: There's a big map, a shrinking circle, and 60 players trying to scrape together gear and eliminate the competition. But you can, just about, PLAYED make it to victory without killing a single other person. That's certainly Olson's preferred approach. At the first sound of an approaching engine, or the red minimap dots that indicate enemy fire, she encourages us to flee like a ledge-dangling Gandalf.

Not that the match passes without bloodshed, however—because players aren't the only threat you need to be worrying about when having a go at *Scavengers*. The map itself is hostile, with freezing temperatures, roaming blizzards and the occasional bear mauling.

And then there are the hundreds of Al-controlled baddies you're sharing it with, split into two factions: The Outlanders, who provide more than enough gun battles for my first outing, and the grotesquely mutated Scourge.

THE MAP ITSELF IS HOSTILE, WITH ROAMING BLIZZARDS AND THE OCCASIONAL BEAR

Both cluster around objective points, applied to the map randomly at the start of each match. Find one, fight back the local mobs, and you'll be rewarded with scrap for crafting weapons and upgrades, or the data point canisters that decide each game's winner, or pieces of salvage that—as long as you survive—can be exchanged for longer-term unlocks. It's enough to keep you busy even if you dodge your fellow players, and Midwinter Entertainment is hoping this will help attract players averse to the bloodbath of a battle royale.

CYBERJUNK

Like, for example, Olson: "I'm probably in that player category that is the big question for everyone: Can a player who prefers PvE play this game, have fun and be successful?" Midwinter is confident it can make a satisfying competitive shooter, but blending it with something more akin to a survival game? That's something the studio is still working on as the game heads into a closed beta.

It's already led to a major reinvention of Scavengers' endgame, where players rush to a dropship for evacuation. In early playtests, this was a single, tiny point on that enormous map. "And the second you entered it, you were safe," Olson explains. But that didn't quite work, which brought Midwinter to the current approach: a large arena, and a one-minute countdown. When it reaches zero, the dropship at the center takes off,

aboard gets to keep their spoils.

This means each game can have multiple winners. Following Olson's lead, I hide under one of the ship's ramps until the last second, then break cover and I hop on board. Victory! Of a sort. But if you can't accept being halfway down the scoreboard as a win, then there's plenty of reason to turn this into a bloodbath. When players die, they drop their data points in the snow, which also happen to decide who sits at the top of the table.

and every team with a representative

It's like a psychological test for what kind of player you are deep down. In my case, a conflict-avoidant coward who's happy in their little corner of the map. But hey, that means I'm exactly the person *Scavengers* is trying to invite in.

Alex Spencer

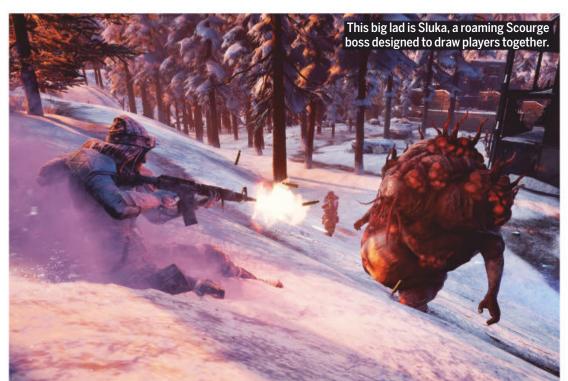






PREVIEW









EARLY ACCESS PREVIEW







Hammerting



You need to dig ever deeper

in order to progress.

NEED TO KNOW

EXPECT TO PAY

DEVELOPERWarpzone Studios

PUBLISHER Team 17

hammerting.com

HAMMERTING

Building a well-oiled machine deep beneath the earth

aising an army of warriors to drive back the forces of evil and save the world is all very well, but no one ever thinks about where all those swords and helmets are going to come from, do they? Turns out, they're the product of a handful of hard-working dwarfs 200 feet underground who've been living on nothing but mushrooms for a year.

That's what management sim

Hammerting suggests, at least. As the war for the Overworld rages above, your job is to corral your team of hairy-faced ore-enthusiasts into digging out a mountain and building a mine productive enough to keep the armies of good supplied and ready for battle.

Well, I say mine, it'll also sort of be a foundry, forging the ore you uncover up into weapons and tools. And a quarry, shaping rock into building materials. And a farm, growing hardy underground crops. And a tailor, and a laboratory, and a cookhouse...

That is to say, your dwarfs are as multi-talented as the needs of the world above are diverse, and a healthy colony is one that takes advantage of every bounty the deep earth offers up—in order to keep your dwarves happy, earn as much as possible through trade, and even ensure the forces of good win key battles. It's perhaps a little unfocused, but for better or worse this is a game that delights in its many complex production lines.

Want to build a new foundry? Well you'll need mortar, which is made at a

stonemasons. To make it, they'll need granite gravel—that's made out of granite chunks, which are produced at a quarry—and lime—that's made at the arcanist's workshop, by combining water and bone ash from the cave farm. Of course, you'll need to fight skeletons to get enough bones, so better get to the blacksmith's and make some swords and... well, you get the idea.

BEARD SCIENCE

It's very much fiddly by design. The satisfaction comes in managing every little step of these processes, along with all the needs of the workers performing them—and when your carefully-crafted engine of metal, stone, and half-sized humanoids is humming along, it is a lovely feeling. At the same time, however, it does become wearisome manually overseeing it all. A little automation would be welcome (though that is promised to arrive in a future update).

A classic element of this breed of pursuit-of-perfection games is spanners getting thrown into your precious works. *Hammerting*, cleverly, invites you to do

that to yourself. Research is tied to how much of the depths you've explored, and the lower levels are home to unique and valuable buildings, as well as a host of new sources. It's impossible to resist diggin

resources. It's impossible to resist digging too greedily and too deep, ultimately disturbing the many monsters that dwell down there in the dark—though while the dwarfs of Moria were undone by a demon of shadow and fire, it only takes a few giant rats or an ambulatory slime to cause chaos in my hold.

The Early Access build already feels like a rich, layered experience to me, if perhaps in need of a smoother UI and other quality-of-life improvements. But the devs have plans for a whole cartload of extra features to come, from fluid dynamics to fishing. To be honest, for a simpleton like myself that sounds a bit intimidating—there's a lot going on in the game already, and I'm not sure how much more can be stacked on top before it becomes information overload. But if you've got a head for these sorts of things and a beard to match, it's clear you'll be well served for a long time to come.

Robin Valentine

IT ONLY TAKES A FEW GIANT RATS OR A SLIME TO CAUSE CHAOS IN MY HOLD

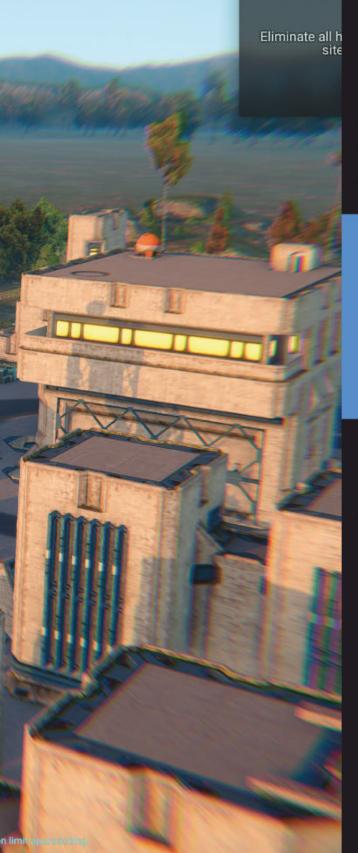
EARLY ACCESS PREVIEW







Phantom Brigade







NEED TO KNOW

EXPECT TO PAY \$30

DEVELOPERBrace Yourself Games

PUBLISHER In-house

bit.ly/361KTPJ

PHANTOM BRIGADE

A time-twisting tactics game that mechs a big impression

t's been a while since a tutorial has blindsided me quite the way *Phantom Brigade*'s did. Since *XCOM: Enemy Unknown* first introduced me to the pleasures of turn-based tactics, I've gobbled up practically every entry in this sordid little subgenre. Misleading chances-to-hit, unexpected iron man fatalities—these are just facts of life for me now.

And yet. Here I was in the middle of Phantom Brigade's first proper mission, feeling like a wine snob trapped in a cellar where every bottle has been produced by dumping the contents of five others into a blender. Naturally, there's a heady aroma of BattleTech—scenery-wrecking mech battles where you're managing PLAYED heat output and limb damage, all while trying not to scuff enemies' machines too badly so you can nick bits afterwards. But let the taste linger a little longer, and Into the Breach comes through strong, with a sci-fi doohickey that lets you see five seconds (ie, one turn) into the future to plan around your enemies' attacks before they make them.

Ignore the mechs for a moment, and you might pick up more subtle notes of *Frozen Synapse*. You're never in the dark about your opponents' intent, but it's got that same unmistakable rhythm: Short bursts of action, carefully balancing each millisecond and pixel of movement, before inevitably muttering 'sod it' and hitting play to watch the results play out.

This is an admirable amount to squeeze into a single game—and I should

ALL THAT LOVELY SCENERY COMES APART LIKE IT'S MADE OF MATCHSTICKS

note that this is without even getting into the strategy layer—but seeing the push-and-pull of all these systems in action for the first time... well, it makes for a rather brutal first impression. There are almost always too many numbers on the screen, further obfuscating a world that's already layering potential futures over a frozen present. And I'm wary of anyone who mixes deterministic predictive turns with probabilistic damage values, the tactics game equivalent of creating rosé by mixing red and white.

STEEL YOURSELF

But *Phantom Brigade*'s presentation makes a pretty strong case for pushing through. The mechs cut a sharp figure, their Gundam-like shapes contrasting with the pines and misty mountains and colorful little houses they fight among. The interface, its numerical excesses aside, deserves a shoutout too. It's wonderfully bright, with each potential action (run, shoot, eject pilot to relative safety) given its own trademark color and minimalist icon blocks that unfurl like an infographic from a coffee-table book on

design. These actions are dropped onto the timeline in a manner that'll be immediately familiar to anyone who's used video-editing software.

Most importantly, though: When you do sod it all, and convert that theoretical planning into solid practice, the results are astonishing. All that lovely scenery comes apart like it's made of matchsticks, and the mechs dart around with the kind of precise animation that makes me reach for words like 'balletic' to describe walking tanks.

And while this pretty face was winning me over, something funny happened. I started to acquire a taste for *Phantom Brigade*'s peculiar blend of ideas. The decisions still don't quite crunch the way I want from a tactics game, and there are some bare patches (switching out mech parts is less Final Cut, more OpenOffice Calc) but that's what Early Access is for. The developer is planning a year-long path to 1.0, with hefty monthly updates along the way. And while I don't have one of those prediction doohickeys handy, it's easy to imagine this game growing and flourishing into something essential.

Alex Spencer



ASUS PC DIY DAY RECAP

Stay tuned for the latest PC DIY tips from ASUS and and to enter into upcoming giveaways and contests

Building your own PC, also known as PC DIY, is one of the most fulfilling journeys for a gamer. And, with thousands of online resources, guides, and user-friendly components, it's easier than ever to get started building the PC of your dreams, whether you're an overclocker looking for the best performance possible or someone who's totally new to gaming.

To give back to the growing community of PC builders, from newbies to veterans, ASUS celebrated all things PC DIY during its inaugural PC DIY Day on December 3. You can catch up on everything that happened during the event at the ASUS Republic of Gamers Twitch channel at Twitch.tv/asusrog for a load of interactive and educational videos featuring your favorite PC builders all catered to builders of any experience level. That's just a portion of the excitement, as ASUS also launched contests and giveaways, with much more to come.

If you're totally new to PC DIY, don't worry— ASUS has put together a handy, step-by-step guide on its PC DIY Day hub with everything you

need to know to build your own gaming PC.

You can find content, resources, giveaways, and more at the ASUS PC DIY online hub at us.rog.gg/DIYPCG, which will serve as a continually updated source for all your building needs.

PC BUILDING MADE EASY: RECAPPING THE FIRST EVER ASUS PC DIY DAY

The first ever PC DIY Day, presented by ASUS, was jam-packed with fun activities and content for PC builders and gamers of all skill levels. Hosted by ROG Stream Team member and professional esports shoutcaster Jon Kefaloukos (aka Falloutt), viewers were treated to giveaway opportunities, streamer challenges, and discussions with some of your favorite content creators and PC DIY influencers.

To kick off PC DIY Day, a Beat the Clock Challenge featured a line-up of talented content creators (and PC builders of various skill levels), including Noisybutters, Aruuu, Allenownz and Rowdyrogan, who went on to demonstrate the fundamental steps needed when building a PC in a three-part segment and timed build challenge.

PC DIY Day viewers also had a chance to tune into a Women Who Build roundtable, where content creator AndieTheLab was joined by NoisyButters and ARUUU to discuss some of their favorite products and their experiences when it comes to building a PC.

As part of PC DIY Day festivities, content

TUNE IN FOR MORE GIVEAWAYS

Check out the ASUS PC DIY online hub at <u>us.rog.gg/DIYPCG</u> for PC DIY-related resources, guides, events, and for upcoming giveaways and contests!

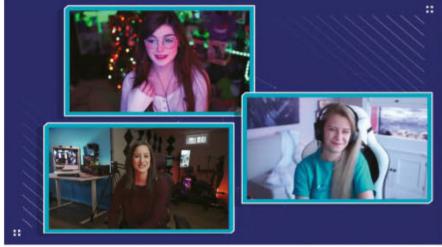
creator AndieTheLab also worked on an all-new PC build featuring the distinct ASUS ROG Z11 mini- ITX case. Regarding her build experience with the Z11 case, Andie highlighted how easy it was to assemble this eye-catching and compact form factor PC: "The Z11 was also unique because it came with the fans already built in and an extension hub that made accessory connections way simpler. The angled motherboard tray also created a unique working environment for cable management and the all

metal and glass surface on the case just elevated the whole experience. Once I was finished, I was SO happy with the way it turned out."

Following the roundtable, ASUS's very own Juan J.
Guerrero was joined by special guest ModsByBen,
JayZTwoCents, and PC Gamer's Jorge Jimenez, to discuss all things PC DIY, from components to modded builds, and share some personal insights of their own.







And, what's PC DIY Day without some gaming to put PC builds to the test? PC DIY Day featured a dual gaming-slash-PC build stream with professional COD player Clayster and a few of his friends, juggling PC building with a few thrilling rounds of Call of Duty: Warzone (and even pulling through with a win). Finally, ASUS Elite Games rounded out the day with a Minecraft Build Battle, offering awesome prizes in exchange for unique, larger-than-life PC builds, made entirely with Minecraft blocks check out the winning build above!

THE ASUS LEGACY: PC DIY-ING SINCE 1989

PC DIY transcends personal passion for the team at ASUS. It's actually been an integral part of the ASUS DNA launching its very first products over 30 years ago: the Cache 386/33 and ISA 486/25 motherboards. Since 1989, ASUS has shipped over half a billion





motherboards globally—enough to circle the globe nearly four times.

From 2006 to 2010, ASUS continued to make innovative products for the rapidly increasing number of gamers, introducing the Republic of Gamers (ROG) brand in 2006 and the TUF Gaming (The Ultimate Force) brand in 2010. Between these two product lines, ASUS offered an entryway into the PC DIY market with sturdy and dependable motherboards under the TUF Gaming brand and high-performance platforms for the most ambitious PC modders with the ROG brand.

Nowadays, you can turn to ASUS for just about any component in your PC build, as it makes most of what you need to kit out your own system. ASUS motherboards, graphics cards, monitors, CPU coolers, cases, power supplies, peripherals, and more are built to deliver high performance, dependable operation, and user-friendly experiences all the way from the hardware itself to the software that controls it. And if you're an experienced PC DIY-er looking for cutting-edge design and innovative features for your next build, you'll find ASUS is an outstanding choice with thousands of prestigious awards to its name in 2019 alone (an average of 11 every day), and it continues to be an innovator in PC products to this day.

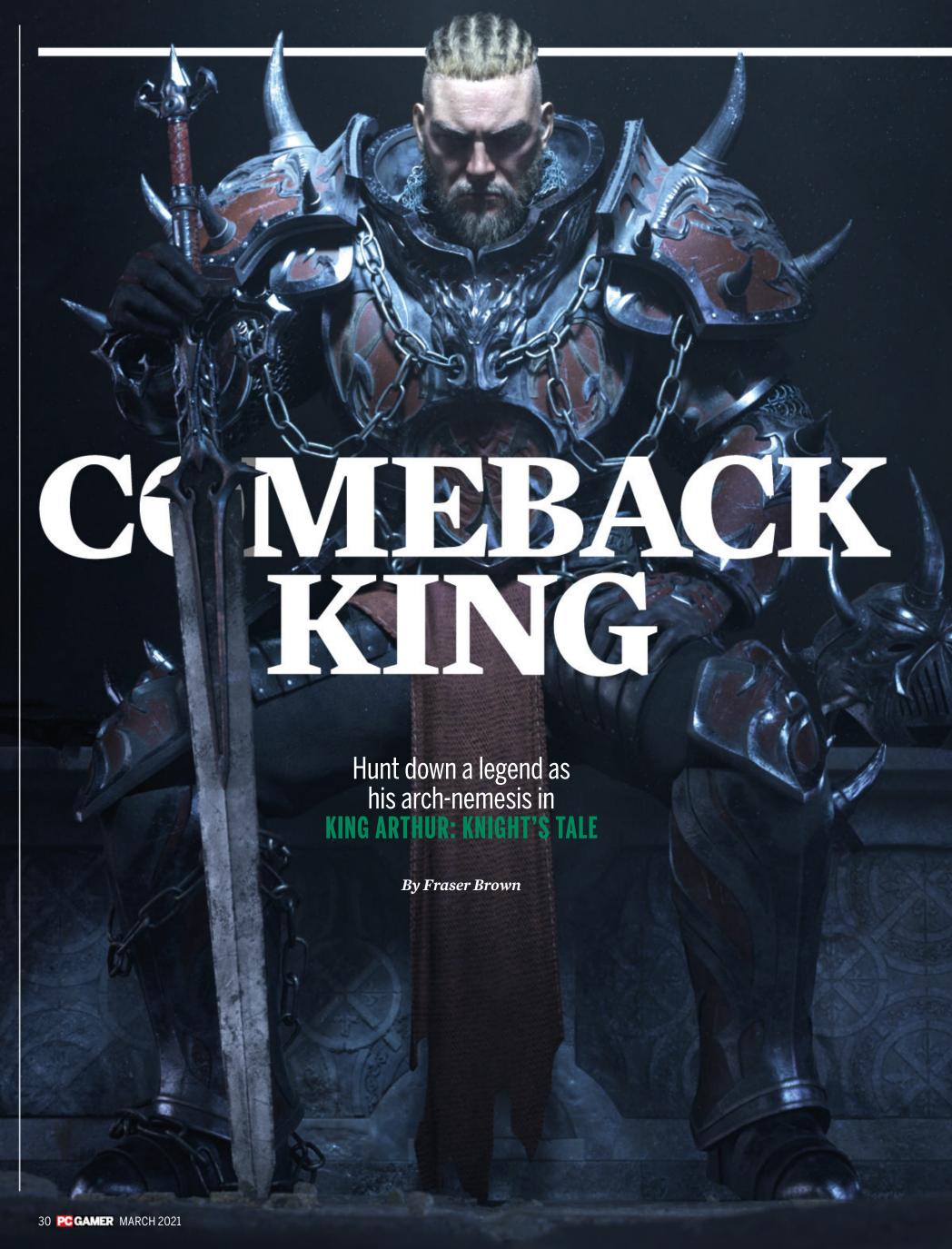
Beyond creating top-notch PC components for gamers and creators, ASUS also continues to foster greater inclusivity among PC DIY enthusiasts and builders of all ages by introducing PC DIY and esports to educational institutions and passionate students who are interested in pursuing STEM degrees and careers.

Most recently, ASUS partnered with the High School Esports League (HSEL)—North America's largest competitive gaming organization for high schools—and the Army National Guard to bring

fully equipped esports labs to 25 schools in North America. These partnerships provide students with a hub to learn and to build their own computers while also receiving college and career advice. ASUS is proud to work alongside a number of organizations that share its passion to build a space in education for gaming and technology. Thanks to its partnership with HSEL and the Army National Guard, ASUS can also offer a world-class gaming ecosystem that allows student esports enthusiasts of all levels to participate and grow within their local esports communities.

PC DIY has grown alongside ASUS over the past three decades, so in honor of ASUS's passionate community of gamers, modders, and PC builders, ASUS introduced the first ever PC DIY Day to celebrate. Don't miss out on the fun, and take the opportunity to learn why building a PC is as easy as 1, 2, 3!

Check out the ASUS PC DIY online hub at <u>us.rog.gg/DIYPCG</u> for more details on what went down during PC DIY Day and upcoming giveaways and contents. And, make sure you also check out the recap of the entire PC DIY Day livestream at <u>twitch.tv/asusrog</u>.



King Arthur: Knight's Tale

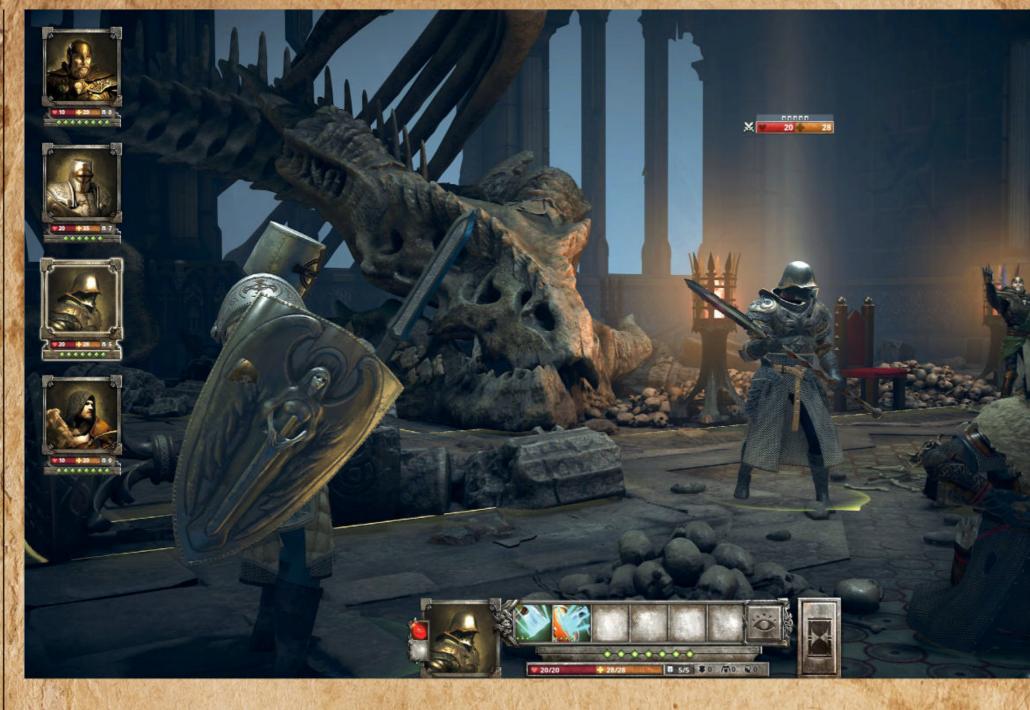


actical RPG King Arthur: Knight's Tale begins with an ending. The legendary monarch's adventures, love triangles, and battles are behind him—we've heard them all before—and the future's looking grim. Because he's dead. His killer, Mordred, is right behind him. A two-for-one deal. But thanks to magic, the rivalry is far from over.

Magic has stopped Arthur from passing on, instead turning him into a source of corruption threatening the misty and mystical isle of Avalon. The Lady of the Lake, not one for original ideas, decides to bring back Mordred, too, tasking him with re-killing his corpse-king, but only after an appropriate series of trials, tribulations, and turn-based scraps.

"King Arthur is an iconic character, familiar to most people, and his whole mythology is a trove of fascinating stories and heroes," says NeocoreGames narrative designer Viktor Juhász. "He also has been subject to numerous interpretations for centuries, and these highly different variations provide an excellent background to create our own mythology that also remains true to the core of the myth."

So the old king is now the Big Bad, with Mordred usurping the role of hero. Kinda. While Neocore cites *XCOM* as the progenitor of its battle system, outside of these fights you'll find moral conundrums and character development that promises to do more than just change your stats. Maybe you'll redeem the blackguard, if you can withstand the seductive lure of being a titanic asshole.



> KINGDOM COME

This isn't the first time the studio has built a game around the Arthurian myths. In 2009, it released *King Arthur—The Role-playing Wargame*, followed by a sequel in 2012. Both tried to capture the dramatic battles of *Total War*, but with magic and roleplaying flung into the mix. While it shares a logo and a setting, *Knight's Tale* isn't a direct continuation of the series—but it does speak to the studio's fascination with these stories.

While Neocore is taking Arthur and Mordred down a new path, naturally there are nods to the classic myths and previous games. While it's all set in Avalon, rather than Britannia, you'll still be able to hang around in Camelot. And to help Mordred with his quest, he'll be able to recruit knights and allies for a new Round Table. The classics don't, apparently, go out of style.

"Camelot will be our main base of operations," Juhász explains. "This will be the place where we go back in-between battles, either to build something, or to manage our heroes. We'll be able to construct various buildings and upgrade them as well. Every building in Camelot will serve



a purpose, from recruiting new heroes to the Round Table, to healing them or removing curses. Some buildings will also grant passive bonuses in battle and outside of it, and players will of course be able to build upgrades to their existing buildings."

Oh yes, it's a management game too. You will be busy. With Arthur

corrupting Avalon, Mordred gets to run his old castle, sitting on the throne and getting up to all that kingly business. Along with all the construction and recruitment efforts, you'll be able to set laws, fill up your treasure room with tributes, and figure out what kind of ruler you want to be. Here, morality once again crops up. You can dabble in tyranny,

KNIGHT SCHOOL

Three of the classes joining the new Round Table



DEFENDERS

Tanky heroes who can take a beating thanks to their armor and shield, but still dish it out with their one-handed weapon.



CHAMPIONS

The damage dealers of the crew, who can carve a path through the battlefield with their deadly two-handed weapons.



ARCANISTS

Offensive magicians who can summon fire and cast curses that infect enemies. Unsurprisingly, this is Merlin's class.

King Arthur: Knight's Tale

squeezing people for all their cash, or you can play the part of a righteous ruler, establishing laws that gives you a slow and steady income without upsetting the people under your care.

PALADIN PALS

LEFT: Typical archer,

slinking off to hide in

RIGHT: I don't know

what this is, but it has

way too many horns.

BELOW: He wears spikes because he's

afraid of intimacy.

a corner.

While videogame morality is usually binary, *Knight's Tale* determines your alignment with two axes. There's the righteousness-tyranny axis, but there's also an Old Faith-Christianity axis, reflecting the battle for souls. The popular Arthurian myths depict

the Knights of the Round Table as Christian, but they are filled to the brim with pagan holdovers. Arthur's exploits are usually placed within the 5th or 6th century AD, at a time when the British Isles contained plenty of Christians, but also plenty of pagans, especially among the Anglo-Saxon invaders. Depending on the myth or retelling, Arthur can be on either side, and it looks like Mordred is

just as flexible. In *Knight's Tale*, this decision determines various things, from who you can recruit, to the tricks you'll use in combat.

"Choices made throughout the campaign will influence your standing on this chart, which will in turn shape the narrative of the playthrough," Juhász says. "Some heroes and abilities may only be available to specific alignments—such as Morgan le Fay, who will only join you if you lean towards Old Faith and her followers trust you enough to offer a quest. Your standing on the Morality Chart will also influence how the game ends, increasing *Knight's Tale's* replayability even more."

To kill Arthur for a second time, you'll need to make a lot of friends.

WITH ARTHUR CORRUPTING AVALON, MORDRED GETS TO RUN HIS OLD CASTLE

More than 30 heroes can be recruited, each of them a unique character, even when they're the same class. You can have tanky Defenders, ranged Marksmen, and multiple magic classes, but the heroes will also have distinct skills, and can then be further enhanced by unique items. These aren't just knights, either. Other familiar faces, like the aforementioned le Fay, will join your crusade, if they like you enough.

Like Mordred, everyone you recruit will have an alignment, as well as a distinct personality, which means that you'll need to keep them placated even after they've joined your crew. If you decide that the only solution to a village cursed with a



King Arthur: Knight's Tale

plague is burning the whole thing down, some of your pals might feel a little bit uncomfortable about that. Others might let you use their matches. Eventually, the ones less enamored with your decisions might

Beyond the stronghold of Camelot is

Avalon, where all your questing will

take place. Quests will send you to

maps both random and bespoke,

battles, NPCs that need your help,

surprise events and points of interest

containing a mix of turn-based

choose to leave your service entirely. You'll have to be a bit diplomatic, then, perhaps curtailing your bloodlust to make sure your favorite warrior doesn't run off in a bad huff.

MONSTER

MASH

MORE THAN 30 HEROES CAN BE OF THEM A **UNIQUE CHARACTER**

RECRUITED, EACH

to explore. The island is looking a bit worse for wear these days, shrouded in mist and covered in rot. There are, as you might expect, plenty of monsters, ranging from zombies that can be dispatched effortlessly, to

powerful Formorians, and less fantastical foes like Picts. They're all part of the game's seven enemy factions, each connected to Arthurian tales and folklore from across the British Isles.

Some enemies can rise from the dead even after they've been put down, others can summon allies, brigands can lay traps—there's around 50 different enemy types that you'll encounter, and then bosses on top of that. You'll have plenty of tricks of your own, too, of course. Charging at an enemy with



WHO'S WHO

Avalon's big names



ARTHUR

Trapped between life and death, he's pissed off and is taking it out on Avalon, spreading a magical corruption.



GUINEVERE

Arthur's ex, who also has a thing for sexy French knights. It looks like she's been dabbling in magic, and is now a sage.



NUADA

A god and first king of the Tuatha Dé Danann, a race of supernatural beings with a long rivalry with the Formorians.



BALOR

Even after you defeat Arthur, you'll still have this dude to deal with. He's the King of the Formorians and a bit of an ass.



ABOVE: I think this is just a round table, not the Round Table. It's a bit small.

LEFT: Think you've got enough skulls there, big fella?



a shield can knock them back, letting you manipulate the battlefield, or you can use a spot of magic to weaken them before you send in your heavy-hitters. And just like some of your foes, some of your pals will be able to lay traps and lure enemies into them.

Exploration happens in real-time, but when you bump into some enemies then the action switches to turn-based. Some take place in more confined grids, where trees and other obstacles force you to get stuck in right away; other fights are spread out and teeming with foes, forcing you to spread your forces more thinly. Thankfully, if you've got a lot of

TOP: You really should clean up the corpse pile before guests arrive.

LEFT: The flora and fauna of Avalon has gotten a bit... weird.

ground to cover, you can use all your action points on movement, rushing across the map, and sacrificing your chance to attack that turn.

DOUBLE DEAD

In a game where both the protagonist and antagonist have been killed but are still hanging around, you might not think death is a big deal, but that would be a fatal mistake. All of your crew can die mid-adventure, including Mordred. And once that happens, they're gone for good. You can recover from losing a knight, but if Mordred dies then you're screwed.

Making sure they're all geared up will help them last longer. "This is

where our experience as an RPG developer comes in," says Juhász. "The gearing and itemization system will be similar to CRPGs, with gear slots on each hero, we'll have different item rarity types, and we'll also have many, many different kinds of artifacts. The stats on them won't be randomized, but instead we'll have literally thousands of them."

Since the last time it hung out with King Arthur, Neocore has made several action-RPGs, including *The Incredible Adventures of Van Helsing* and *Warhammer 40,000: Inquisitor*, so it's got lots of history with conjuring up absolute truckloads of gear. All of your heroes will be able to equip weapons and armor, mostly tied to classes and then enhanced by runes, and then other slots give you a bit more freedom to experiment with items that aren't locked into any specific role.

Knight's Tale was Kickstarted only a few months ago, but Neocore is pretty eager to get people into Avalon, so it's also hosting an Early Access phase. It seems like an ambitiously quick turnaround. Juhász says it will feature the start of the story campaign and a few sidequests, but the main aim is to get feedback on the tactical combat. From there, Neocore will release thematic updates that include things like the Camelot management layer and the full progression system. These should appear "regularly" after it launches in Early Access on January 12.



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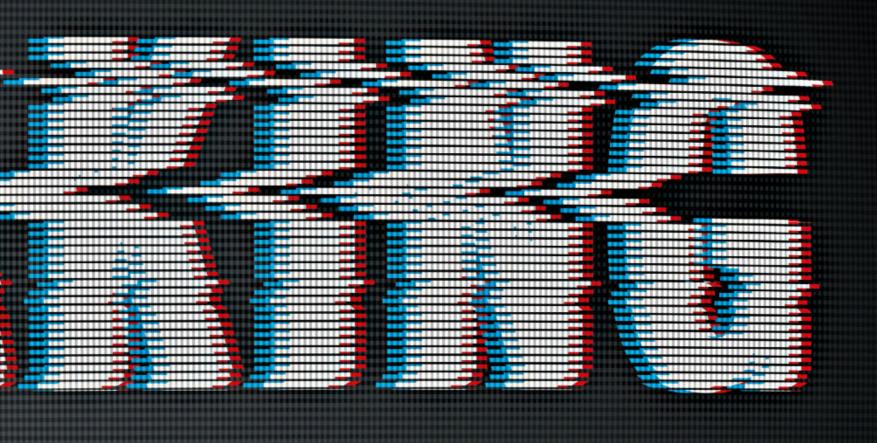
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MEET THE DEVELOPERS MAKING BUGS AND GLITCHES ON PURPOSE

By Edwin Evans-Thirlwell

Breaking Ground



Loosely modelled on the pixel fonts, boot-up noises, and curving low-res monitors of older PCs, Pony Island is a wicked celebration of videogame bugs. The graphics fluctuate wildly between a sugar-pink pastoral backdrop and a glaring bone-white wasteland. Menu options corrupt under your cursor. Swirling artifacts unlock a desktop behind the main menu, where you'll trade messages with other imprisoned souls. To restore certain broken features, you must guide a key around a maze of command line text dotted with

> English words—a representation of how it felt to wade through Grandia 2's innards, deciphering the odd line here and there.

CRASH COURSE

Pony Island is part of a curious tradition of games that build stories, levels, and features around simulated technical problems. These games come in all shapes and sizes. As you'd expect, many are indie experiments—take Metroid homage Axiom Verge, where you can 'glitch through' corrupted

CRASH COURSE Some of the best 'glitch games' can be found on itch.io



F J O R D S

Purely and simply a game about delivering pizza.



DEIOS

By BARCHboi

A 'glitchventure' inspired by lost bulletin boards.



GLITCH DUNGEON

Pixel dungeon crawler in which magic breaks the game.



PROBLEM ATTIC

By Liz Ryerson

"A game about prisons, both real and imaginary."



LABYRINTHOS

Highly WIP glitch RPG comparable to Phantasy Star.

Breaking Ground

terrain, or The Cursed Pickle of Shireton, a raucous faux-MMO that runs in text-based debug mode thanks to a 'malfunctioning' graphics engine. But there are also big-budget titles such as Metal Gear Solid: Ground Zeroes, which may be 'infected' by the fictitious FOXDIE virus, and Eternal Darkness: Sanity's Requiem, where stressing your character out might see the game pretending to delete your save data. These projects give you a glimpse of the artistic potential in the disruption of form and function; they don't just 'turn bugs into features' but suggest that imperfections can be a source of drama.

But what counts as a bug or glitch? These concepts are meaningless in themselves: They are defined with reference to specific technologies and expectations. There are plenty of graphical errors, such as texture-wobbling in 3D PS1

SIMULATING A GLITCH IS THUS A KIND OF SILENT, INVERTED COMMENTARY ON A GAME'S PRODUCTION AND DESIGN CONTEXT

games, that are embraced as hallmarks of a platform rather than slammed as failings. Similarly, lighting issues that are overlooked in lo-fi productions might be perceived as shortcomings in blockbuster shooters with slick aesthetics. Simulating a glitch is thus a kind of silent, inverted commentary on a game's production and design. It reveals the assumptions that surround these games by breaking them.

There's obviously the risk that a pretend error might be interpreted as the real deal. One common way of avoiding this is to frame them as problems with a technology *inside* the game's world. The most famous example is *Assassin's Creed*, in which modern-day protagonists relive the lives of their ancestors care of the Animus, a piece of holographic genetic memory tech.

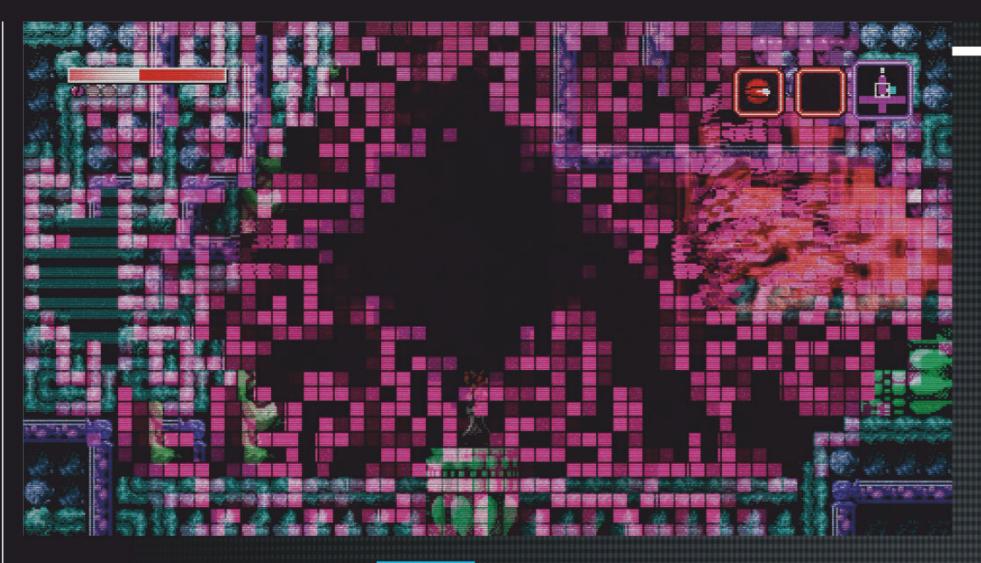
The Animus—or at least, the present-day storyline it connects to—is often reviled by fans as a wonky distraction; Ubisoft's own marketing department was dubious about it back in 2006. But it has proven to be a powerful storytelling framework, allowing Ubisoft to string a dozen games in different eras into one, on-going sci-fantasy intrigue. It allows the developer to explain away contrivances such as the HUD itself as features of the Animus software. And of course, it allows the game to dramatize errors—notably, catastrophic 'desynchronization' resets when you fail to act as your ancestor would have acted.

ALTAÏR EGO

If Assassin's Creed is a potent 'glitch game', however, it is also a game about fixing glitches and reconciling the tension between the Animus UI and the setting. "We didn't want the Animus technology to overwhelm the player or to break the experience by having too much 'data stuff' happening," observes Nicolas Rivart, visual design director on this year's Assassin's Creed *Valhalla*. Rather, the new game's Animus and Norse aesthetics are carefully entwined. "Given that the machine is decoding the memories of a Viking chieftain, we felt that it would be interesting to show the visual elements of the era transferring to the Animus." The Animus of Assassin's Creed Origins, Rivart goes on, had a "goldish, sand-stormy feel" reflecting its Ancient Egyptian timeframe. For *Valhalla*, the developer has based the color scheme on the Northern Lights and incorporated Norse runes into the interface.







This blended aesthetic is governed by a withered grid pattern, redolent of both Norse runes and the Animus UI, which is present everywhere in the game. Besides helping to structure menu screens, it's a way of subtly imposing a role on the player—to "lay a pattern before them, the pattern of the ancestor," as Rivart explains. Desynchronize, and the grid tears itself to pieces. In a way, your objective in Assassin's Creed is simply to maintain that grid—to behave as the simulation requires in order to continue the art direction's efforts at blending the ancient with the modern. In Valhalla, you're literally asked to patch up Animus anomalies, marked by incongruous 3D artefacts that generate wireframe platforming courses.

Horror game developers have proven more willing to embrace the jarring effects of glitches. Like Assassin's Creed, Bloober Team's cybernetic chiller Observer is caught between eras. In the words of creative director Mateusz Lenart, it is "a clash between retro-style design and more typically futuristic technologies, inspired by Blade Runner and Alien," and "filtered through the lens of a Polish communist era aesthetic". The game casts you as a cyborg detective in near-future Krakow, equipped with the ability to hack the brains of the deceased.

POLISHED VISUALS

Observer is also about synchronization—you must take pills to stop your body rejecting your implants, which leads to dizzving effects such as smeared movement, color changes, and compression artefacts. There's only so much 'synchronizing' you can do, however, because the glitches are metaphors for social divisions.

There's no seamless Animus-style blending of the high-tech and antiquated in *Observer*'s capitalist dystopia; instead, flesh and machinery are forever pulling apart, and pristine holograms

ABOVE: Axiom *Verge* turns glitching into a power-up.

BOTTOM: Anodyne 2 houses many styles of videogame.

FAR RIGHT: The Animus checks exploration in older Assassin's Creeds.

float eerily against crumbling, insanitary brickwork. Observer's rickety cyborg HUD alters the appearance and color of pixels according to various open-ended parameters, as game designer Pawel Niezabitowski explains. There's "the 'overdose' effect, with its blurry shaky screen—large delay, fluid dispersal, no color change". And there's "the intensely 'electronic' glitch effect—short, sudden and drastic color changes". Simulating bugs like these can be pretty hardware-intensive. "Optimization proved to be our biggest challenge," Niezabitowski continues. Bloober eventually created a complex managing tool to balance more specific post-processing effects against those resulting from your character's shifting mental state. There were some dramatic setbacks. "At one point during production, one of our designers cranked up the 'glitchy' visual effects to such a level that even his computer couldn't take it any more and shut down, killing the controller in the process," recalls Lenart, adding that "after some intense deliberation, we decided to leave that particular feature out".

Players, of course, may be turned off by simulated glitches long before computers give way. "There's a wide spectrum of how various people react to these sorts of visuals, with some suffering



outside my window.

from motion sickness," Lenart continues. "The effect of our HUD destabilizing wasn't meant to be pleasant, as we wanted the player to feel motivated to take another dose of the synchronizing medicine. Then again, we certainly didn't want the player to become physically ill from the experience. Hence, a lot of the effects we'd tested ultimately didn't make it into the game." Bloober Team also stopped short of portraying the glitches as fundamental problems with the game. "Breaking the fourth wall is always tempting, especially in this genre," Lenart adds. "We certainly played around with some interesting ideas.

Breaking Ground

Ultimately, however, we focused on making the player immersed in what's happening to the protagonist."

Immersion and the fourth wall are key terms in discussion of videogame glitches. They suggest a firm boundary around the illusion—an illusion that must be purged of reminders that you are interacting with a piece of software. This disregards what can be achieved by taking the software's status *as* software as your artistic and narrative premise. Consider last year's indie hit *Anodyne 2*, another work of period-splicing in which you explore an overworld rendered in PS1-grade polygonal 3D, jumping into NPC mindworlds that recall 2D *Zelda* maps.

The game is full of simulated blemishes or shortcomings—among other things, you'll hear characters sneer about the quality of the background art—but these aren't treated purely as disruptions. Rather, they exist "to draw attention to there not being a hard boundary between the game's fiction and, I guess reality," notes Melos Han-Tani, one half of developer Analgesic Productions. "It's not just like 'whoa, meta stuff!' It's tied into the fiction of the game in sort of a blurry way". The game's open world includes 'Unzones' filled with incomplete features that aren't just 'director's cut' additions, but a playful elaboration of the core mythology. There is an isometric horror segment triggered by talking to a placeholder NPC, which continues the protagonist's personal dilemmas into a different genre.

BEHIND THE SCENES

Dismantling that 'hard boundary' is important because so much triple-A videogame production is essentially about hiding the developer's labor from view—strenuously polishing away anything that feels artificial. Analgesic co-founder Marina Kittaka argues that this culture has trained players to be pathological nitpickers, branding developers lazy over the slightest discrepancy, "There has been for a long time a very unhealthy feedback

loop between big game companies and their audiences, where for capitalist reasons, companies are selling a certain fantasy of perfection and ultimate immersion."

Bugs and glitches are maker's marks—they remind you that every game is the result of somebody's sweat and toil. Games that simulate errors are invitations to think about that toil more analytically—they are a kind of irreverent making-of feature, more compelling for being woven into the game's fabric. This is an important theme of *Pony Island*, which invites you to develop a certain sympathy for the devil even as you battle for freedom. If the game within this game is an instrument of torment, the bugs also paint a portrait of an overwhelmed lone developer, struggling to fit in some QA before shipping.

None of which is to suggest that we should tolerate actual errors in our games, but it's worth thinking about both the work that goes into steaming out bugs, and what we lose by insisting on that rigid barrier between an immersive game and a buggy one. As *Pony Island* and its peers reveal, games are seldom more exciting and mysterious than when they start to break down.

BUGS AND
GLITCHES ARE
MAKER'S MARKS
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SWEAT AND TOIL



ERROR MESSAGES How to make your own glitch art pieces



TRY DATA-BENDING
Opening an image in an audio editor like Audacity allows you to glitch it by adding effects such as echo. It doesn't always work but may produce a range of fascinating distortions (you can always cheat by visiting photomosh.com). This is a glitched shot from Yakuza O.



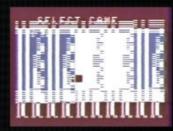
2 BE CREATIVE WITH IN-GAME TOOLS
Videogame designer Gareth Damian Martin created a

Damian Martin created a photographic essay series for *Ghost Recon: Wildlands* by flying a military drone to the edge of its operational range, seeing in the resulting visual noise "a symbol of the violence implicit in its gaze".



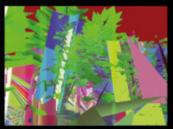
3 TRY ECCENTRIC ART PROGRAMS

Andi McClure and Michael Brough's Become a Great Artist in Just 10 Seconds "is a chaotic paint program, where each key on the keyboard does a different unhelpful thing". Give it a try for yourself and see what you can create at: data.runhello.com/j/artist/3



4 ABUSE THE HARDWARE

One of the best-known glitch artworks, 1978 video piece Digital TV Dinner, was made by punching an unfortunate Bally Astrocade until the cartridge popped out, resulting in patterns born of invalid pointers and broken references in stack frames.



5 REBUILD THE

This piece, Fabricating Elk Meadows, from glitch artist Big Pauper, was created by doing very precise, unspeakable things to a PlayStation 2's CPU, then capturing shots from Cabela's Dangerous Hunts. It's not an approach for newcomers.



By Jeremy Peel & Rick Lane

2021 Preview

DEATHLOOP

RELEASE May 2021 DEV Arkane Studios PUB Bethesda LINK bethesda.net/game/deathloop



eathloop puts you in the role of Colt, an assassin trapped on a giant party island where the main attraction is killing him.

Colt, meanwhile, has eight targets who must all be dead by midnight.

So far, it's a typical premise from Dishonored developer Arkane Studios. But there are a couple of twists. When you die, the whole game resets roguelike style. What's more, another player can invade your game as counter-assassin Julianna Blake, and her job is to prevent you doing yours.

Deathloop is an amalgam of everything Arkane has learned in its 20-year history. It's got the creative play of Dishonored, and the open-ended level design of Prey. But the biggest influence here is *Prey*'s expansion, Mooncrash. Arkane's Games are all about giving players the tools to play as they want. But it's easy to get tunnel vision when playing them, using only the most efficient tools and ignoring everything else. Mooncrash was designed to counter this, to make experimentation as much a part of the game as player choice. Deathloop aims to be a evolution of that idea.

ANOTHER PLAYER CAN INVADE YOUR GAME AS COUNTER ASSASSIN, JULIANNA BLAKE, AND HER JOB IS TO PREVENT YOU DOING YOURS



PRAEY FOR THE GODS

A spiritual successor to Shadow of the Colossus, Praey for the Gods takes the giant-monster battling from that, and adds a wintry landscape where the elements are as much a threat as the game's enormous foes.

RELEASE 2021

GRAVEN

An old-school action RPG set in a dark fantasy realm. With quests that emphasize puzzling out solutions alongside combat and spellcrafting systems, *GRAVEN* puts player choice front and center.

RELEASE 2021



CARIE

You can see Journey in its vast deserts, Breath of the Wild in its shrines, and even The Force Awakens in its hoverbikes. But nothing else looks quite like Sable, thanks to an exquisitely scribbled art style.

RELEASE 2021

DEATH TRASH

The edgy '90s meets the nihilistic now in *Death Trash*, a sweary RPG with its own puking mechanic. For all the wasteland exploration, it's nice to see contemporary touches in there too, like dodge-heavy combat.

RELEASE 2021

2021 Preview





FAR CRY 6

RELEASE May 2021 | DEV Ubisoft Toronto | PUB Ubisoft LINK ubisoft.com/en-gb/game/far-cry/far-cry-6

bisoft has unveiled plenty of information about Far Cry 6's story. It's set on the fictional Caribbean island of Yara, and sees you play as freedom fighter Dani Rojas against the regime of dictator Antón Castillo. By comparison, details on play are sketchy. The most significant new feature appears to be the environment, which strays from the series' historically rural landscapes to a dense urban setting. Verticality is supposedly a big feature, making Far Cry 6 sound like Dying Light without the zombies. Hopefully there's more to be revealed.



HALO INFINITE

RELEASE 2021 | DEV 343 Industries | PUB Microsoft | LINK bit.ly/37u0mry

tecapturing the initial magic of Halo has proven nigh on impossible for 343 Industries, and perhaps it's an unfair ask. Combat Evolved's power came from its mystery, after all, and there's no putting the Flood back in the bottle—we simply know too much about the Halo universe nowadays.

Nonetheless, Halo Infinite finds the studio shooting for nostalgia like never before, its public demo going big on warthog jumps and grand skyboxes. Who knows what the game will look like by launch, though—after a muted fan response, Microsoft brought in Bungie old hand Joseph Staten to rework Infinite's campaign.



CHIVALRY 2

RELEASE 2021 | DEV Torn Banner | PUB Tripwire Interactive | LINK chivalry2.com

'm not sure whether it's intentional, but Chivalry: Medieval Warfare is one of the funniest games I've ever played. There's something about its chaotic, absurdly violent melee combat (complete with the shoutiest, squishiest knights in Christendom) that has me in fits of giggles whenever I play it.

The sequel offers all of the things you'd expect. Shinier visuals, more nuanced melee combat, 64-player battles with working siege engines. But the question I want answered is 'will it make me laugh as hard as the time my cat fell into the toilet?'. Judging by the above screenshot, the answer is yes, it will.

STARFIELD

Little info is available about this, but the most significant factual nugget is Bethesda's claim *Starfield* will feature "a lot of new systems". Good, because fresh ideas are sorely needed from this RPG powerhouse.

RELEASE 2021



OUTRIDERS

Described as a "desperate sci-fi universe," *Outriders* looks like one, but not in a good way—its masks, long pistols and co-op RPG mechanics scream *Destiny*. Let's hope the individualism of People Can Fly shines through.

RELEASE Feb 2021

LITTLE NICHTMADES 2

Imagine if Playdead's Inside was about classic scares rather than... whatever Inside was about. The familiar puzzle-platforming might not shock you, but the creepy residents of the Signal Tower intend to.

RELEASE Feb 2021

GLOOMWOOD

Being a *Thief* fan is the gaming equivalent of being lost in a desert, but *Gloomwood*'s retro-styled sneaking looks to be a rare stealth oasis. Expect late '90s 3D visuals, dazzling level design and, oddly, guns.

RELEASE 2021





BALDUR'S GATE III

RELEASE TBC | DEV Larian Studios | PUB In-house | LINK baldursgate3.game

arian plunged Baldur's Gate III into the cold waters of Early Access back in October. It'll stay there for "at least one year," so a Christmas 2021 release for the full game is feasible—though who can trust the evidence of their eyes when mind flayers are about?

If the current build of the game is anything to go by, Baldur's Gate III will

have not just a branching story, but layers of above-ground and subterranean world to explore. I don't know how many dimensions that is, but if Larian wants to stick 'the first 4D role-playing game' on the side of a bus, I'll put my name to it.

What we don't have a sense of yet is how the titular city will feature. Personally, I'm up for shoving enemies from rooftops in the spirit of original series villain Sarevok.

IF LARIAN WANTS
TO STICK 'THE FIRST 4D ROLE PLAYING GAME' ON THE SIDE OF A BUS, I'LL PUT MY NAME TO IT

KENA: BRIDGE OF SPIRITS
'Ghibli-esque' is thrown around a
lot, so let's get specific. Kena evokes the vibe of Princess Mononoke, both in its forest spirits and the sense of danger beyond the treeline. Swing your staff and transform the land.

RELEASE Q1 2021



JETT: THE FAR SHORE The maker of Sword and Sorcery wants us to fly a rocket low over the choppy waves of an uncharted planet? Go on, then. They've brought in Randy Smith to create a world where systems bounce off each other.

RELEASE 2021

Flying Wild Hog has turned to id Software for inspiration with Shadow Warrior 3. The third game combines the series' wild weaponry and scatological humor with glory kills and arena-based fights.

ELEASE 2021





HUMANKIND

RELEASE April 2021 | DEV Amplitude Studios | PUB Sega | LINK humankind.game

f you come for the king, you better not missespecially when the arena is turn-based. They'll have plenty of time to clobber you in the next round.

The king Humankind is coming for is Civ, and its weapon is a simple observation. Countries aren't single. solid blocks that upgrade over timethey're amalgams of cultures that

together form a civilization. You'll see that represented in the mechanics, which ask you to pick a people to begin with, then merge them with another every time you enter a new age. Victory isn't a matter of conquering, necessarily, but of being remembered performing the most striking acts throughout history, so that even if your territory shrinks, the species will still speak your name. It's a novel take that we're hoping pays off.

VICTORY ISN'T A MATTER OF CONQUERING, NECESSARILY, BUT OF BEING REMEMBERED

WARHAMMER: AGE OF SIGMAR: STORM GROUND

One of the first videogame adaptations of Warhammer's Age of Sigmar universe, this turn-based strategy game promises to offer "dynamic and spectacular combat".

RELEASE 2021



DISTANT KINGDOMSThis management sim tasks players not only with establishing a sprawling city, but the infrastructure of an entire fantasy realm. You'll also need to dispatch adventuring parties to deal with dragons.

LEASE 2021

PRODEUSA retro-FPS that combines 2.5D geometry and sprites with modern lighting and pixel shaders, *Prodeus* looks like no other shooter you've played. It's fast, it's furious, and it has buckets of gore. Squelch.

RELEASE 2021

NEBUCHADNEZZAR

A 'classic' isometric city-builder.
Barring expected features like population management, it includes a 'Monument Editor', letting you personalize your megalithic wonder to your exact specifications.

RELEASE Feb 17, 2021

2021 Preview



EVIL GENIUS 2

RELEASE 2021 | DEV Rebellion | PUB In-house LINK evilgeniusgame.com

ike the greatest criminal masterminds, Evil Genius has arisen from seemingly certain defeat. The sequel to the 2004 management sim sees you striving once more to take over the world, like a James Bond villain.

Alongside familiar mechanics like building your island base and stopping enemy agents with elaborate traps, Evil Genius 2 adds more detail to minion management and mission types, while introducing new features like the 'front', a legitimate casino you also need to manage as cover for your evil schemes.

KING'S BOUNTY II

RELEASE 2021 DEV 1C Entertainment PUB In-house | LINK kingsbounty2.com

third-person exploration with hex-based tactical combat. The game involves building a motley army of humans, elves, trolls etc, as your hero seeks to end a terrible blight afflicting the Kingdom of Antara. While the tactical combat is the main draw, the sequel also has ambitious plans for its story, offering a non-linear narrative in which player choices will affect both the character you interact with and the broader world. The fantasy world of King's Bounty isn't exactly radical, so a good story with memorable characters will be crucial to make it stand out.

sequel 30 years in the making, King's

Bounty II is a fantasy RPG that blends





BLOOD BOWL III

RELEASE Early 2021 | DEV Cyanide Studio | PUB Nacon | LINK bit.ly/33Al2vH

hen Cyanide first resurrected Blood Bowl, it was from a dusty box on the top shelf the Warhammer tabletop game hadn't had a new edition for two of its three decades of existence. Nevertheless, the studio stuck meticulously to murder football's beloved ancient ruleset and helped revitalize

the physical game as a result. Now Games Workshop has released a rebooted tabletop version, and its new teams will be folded back into Blood Bowl III. Cyanide's last sequel finally captured the crunch of Blood Bowl in the imagination; a little extra fidelity won't hurt the next entry in that regard.



NEW WORLD

RELEASE 2021 | DEV Amazon Games | PUB In-house | LINK newworld.com

mazon's plans to break into gaming haven't gone swimmingly, what with the dismal failure of Crucible last year. New World looks more promising. It's a fantasy MMO that includes all the features you'd expect: Fighting monsters, looting and crafting gear, and unlocking new skills.

So far, so generic. What makes New World different is its social element. Players can band together to form companies, which can stake claims on land, upgrade settlements, and even conquer other territories. It does mean, however, that New World's success will hinge upon attracting a decent player-base.

SPACEBASE STARTOPIA

17 years after it was abandoned, the Spacebase Startopia is back online. This faithful sequel sees you once again balancing the needs and desires of various alien species in order to turn intergalactic profits.

RELEASE Spring 2021



GLOOMHAVEN
This virtual adaptation of the board game ventures from Early Access later this year. Colorfully reimagined, it sees you gathering a party and embarking on sharp and ferociously challenging quests.

ELEASE 2021

INDUSTRIES OF TITAN

This dystopian city-builder involves establishing an industrial metropolis within the atmosphere of Saturn's largest moon. Depressingly, it lets you transform unreliable human workers into obedient robots.

RELEASE 2021



2021 Preview





THE DARK PICTURES ANTHOLOGY: HOUSE OF ASHES

RELEASE 2021 | DEV Supermassive Games PUB Bandai Namco | LINK bit.ly/3msWqxx

he Dark Pictures Anthology is a Creepshow-style collection of narrative-driven horror stories. While the tales themselves are not that original, what makes them interesting is the multiplayer, which lets two players share a story where their individual decisions influence the final outcome.

House of Ashes is the third entry in the series. Taking place at the end of the Iraq War, a team of American soldiers stumble upon a Sumerian temple home to creatures far more dangerous than the enemies they're supposed to fight.



GHOSTWIRE TOKYO

RELEASE 2021 | DEV Tango Gameworks | PUB In-house | LINK beth.games/3qlP3dy

he new game from the studio of *Resident Evil* creator Shinji Mikami puts you in Japan's capital after a supernatural event disappears most of the population. Meanwhile, an army of spirits invades the city, ranging from demonic monsters to a creepy little girl wearing a yellow raincoat.

Despite the spooky ongoings, *Ghostwire* isn't strictly survival horror. Instead, it's more actionoriented, with intense magical melee combat that revolves around handgestures known as Kuji-Kiri. Tango has hired Shinchiro Haro, who helped build the combat of *Doom* (2016) to work on *Ghostwire*.



BLOODLINES 2

RELEASE 2021 | DEV Hardsuit Labs | PUB Paradox Interactive | LINK bit.ly/3qnb7Er

sequel nobody expected, this is the follow-up to the critically acclaimed (and critically broken) Vampire: The Masquerade Bloodlines. You play as a neophyte vampire prowling the moonlit streets of Seattle, doing jobs for the city's vampiric factions while hiding from general society according to

the code of conduct called The Masquerade.

Delayed from last year, change is afoot at developer Hardsuit Labs, having fired both creative director Ka'i Cluney and lead writer Brian Mitsoda. Trouble on the project, or the cogs of the game industry turning? Let's hope it isn't a repeat performance of 2004.

DECIDENT EVIL VIIIAGE

Where Resident Evil 7 was a first-person reimagining of the 1996 original, Village looks set to do the same with Resident Evil 4. It takes place in a European-looking hamlet with enemies that look like ganados.

RELEASE 2021



DYING LIGHT 2

Combines the free-running zombie-bashing of the original with a narrative structure that sees your decisions affect the city you're in. The latest reports suggest development is progressing smoothly.

RELEASE 2021

CACLEM CHUCK

The eternally in-development remake released a demo earlier this year. It was fantastic, with updated environments and tweaks that made it easier to comprehend without sacrificing the atmosphere.

RELEASE 2021

THE OUTLAST TRIALS

"It's always better to s**t your pants in good company," claims the developer. I'd argue this is the worst place to s**t your pants, but I'm intrigued by the shift toward multiplayer for this *Outlast* spin-off.

RELEASE 2021



WARHAMMER 40,000 DARKTIDE

RELEASE 2021 | DEV Fatshark | PUB In-house | LINK playdarktide.com

atshark is adapting its rat-tastic multiplayer action into the 40k universe. Expect more of the meaty firstperson melee combat of Vermintide,

but with sci-fi guns in the mix, there's more ranged action as well.

While Fatshark have been cagey about some of the finer details of what we can expect, early footage suggests we'll be

able to play as various servants of the Inquisition, including loyal guardsmen, a fanatical priest, and even a hulking Ogryn—an ogre-like warrior far larger than any character from Vermintide.

Instead of Skaven and northmen, the enemy is a Chaos cult infesting a towering hive city. These heretics worship the plague god Nurgle meaning we'll be up against shambling mutant zombies and disgusting demonic monstrosities.

THESE HERETICS WORSHIP NURGLE—WE'LL BE UP AGAINST SHAMBLING MUTANT ZOMBIES AND DISGUSTING DEMONIC MONSTROSITIES

launches this year I will eat my gasmask, but it's slated for 2021 so I'm including it. Details are slim, but GSC Game World promises "one of the biggest open worlds to date".

SE 2021



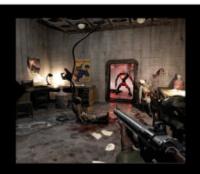
CHERNOBYLITE

Chernobylite promises S.T.A.L.K.E.R.-like exploration and weird horror, but with a stronger narrative. While promising, the Early Access version is rough, so hopefully the devs can tighten things up.

RELEASE 2021

ATOMIC HEARTYou could describe *Atomic* Heart as 'Russian BioShock', but that wouldn't do justice to how downright bizarre it is. Set in 1955, you must investigate a Soviet facility filled with weird robots and terrifying mutants.

ELEASE 2021

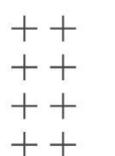




GOTHAM KNIGHTS

aking a Batman game

RELEASE 2021 | DEV WB Games Montral | PUB Warner Bros | LINK gothamknightsgame.com



without Batman is certainly a bold move, but when you replace one hero with four, suddenly it doesn't seem like such a rough deal. That's the premise of Gotham Knights, which sees Batgirl, Robin, Nightwing, and Red Hood team-up to rid Gotham's streets of

crime after Bruce Wayne is apparently

killed in an explosion.

Despite not sharing the name, Gotham Knights remains firmly of the Arkham mould, featuring a big open world in which you'll glide and drive around, get into fisticuffs with thugs, and have dramatic encounters with villains such as Mr Freeze. As well as those four characters, Gotham Knights features drop-in co-op, although for some reason this is limited to two players. Still, the ability to fight crime as a dynamic duo might catch on.

AS WELL AS LETTING YOU PLAY AS ONE OF FOUR CHARACTERS, GOTHAM KNIGHTS **ALSO FEATURES DROP-IN CO-OP**

LANDLORD'S SUPER

From Jalopy's developer comes an equally unglamorous simulator set in Thatcher's Britain. Your job is to renovate a house while assailing the moral and practical problems of being dirt poor. So much for escapism.

RELEASE 2021



There are lots of games that sort of resemble *XCOM*, but only one that puts you in charge of protecting the rhinos in a sci-fi Africa. Assemble squads to protect and conserve. Sounds like a lot of fun so far.

ELEASE Q1 2021

GARDEN STORY

Cute enough to make you sick, Garden Story sees you play as a grape called Concord, tasked with protecting the grove that serves as his home. You'll solve puzzles, chat with fruity friends, and care for your garden.

RELEASE 2021

THE WILD AT HEART Harvest Moon meets Pikmin in in this cute top-down adventure. Set in a magical kingdom populated by 'spritelings,' you can use these helpful critters to build structures, collect loot, and fight enemies.

RELEASE 2021

2021 Preview



PSYCHONAUTS 2

RELEASE 2021 | DEV Double Fine | PUB Xbox Game Studios | LINK fig.co/campaigns/psychonauts-2

he idea of diving into the brains of the broken to see things from their perspective—an act of empathy—certainly feels like it belongs more in 2021 than 2005. The question is whether Psychonauts 2 will stand out in an era of oddball indie games. But footage of its platforming headscapes bodes well—even after the departure of project lead Zak McClendon, leaving Tim Schafer with "twice as much work to do" as both writer and director. The extra time and funding of Xbox, which recently bought Double Fine, won't hurt in that department.

GRIFTLANDS

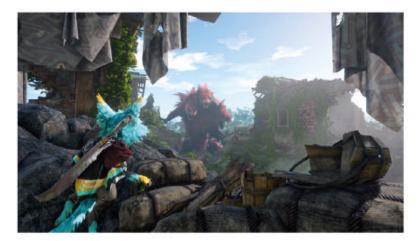
RELEASE Jun 2021 | DEV Klei Entertainment PUB In-house | LINK klei.com/games/griftlands

not for three important factors. First, that its developer Klei, creator of Mark of the Ninja, Invisible Inc. and Don't Starve, has reshaped three genres and counting. Second, that Griftlands isn't just about combat but turn-based negotiations, in which you play cards to threaten or fast talk, bringing opponents in sci-fi bars around to your point of view. And third, the sheer number of 'Overwhelmingly Positive' user reviews plastered all over the game's Steam Early Access page. Klei has already persuaded its current playerbase; can it win you over too?

et another deck-building roguelike wouldn't

necessarily get the blood pumping, were it





BIOMUTANT

RELEASE 2021 | DEV Experiment 101 | PUB THQ Nordic | LINK biomutant.com

'm gonna say it. Furry Zelda. That's the easiest way to summarize Biomutant. This ambitious open-world RPG puts you in the role of an anthropomorphic animal fellow in a land that blends fantasy with junkyard sci-fi.

Biomutant's story sounds like typical 'save the world' guff, but what makes the

game interesting is its character customization. Alongside a nuanced crafting system and martial-artsbased combat, your character can mutate. changing both how it looks and available abilities. You could evolve claws or a barbed tail, both of which can be used in combat. It sounds pretty intriguing.



RUINED KING

RELEASE Early 2021 DEV Airship Syndicate PUB Riot Forge LINK ruinedking.com

uined King sees several of League of Legends' most popular heroes step out of their MOBA lanes and into a single-player RPG.

Developed by Airship Syndicate, players assume control of Miss Fortune, Illaoi, Braum, Yasuo, Ahri, or Pyke, as they explore the city of Bilgewater and the Shadow

Isles on a quest to stop a mysterious force known as the Black Mist.

Early footage shows turn-based combat that looks very much in the vein of one of the developer's previous games, Battle Chasers: Nightwar, so expect creative strategy and charmingly chunky animation.

BOOK OF ALIENS

Fancy playing XCOM but don't have a spare 40 hours? Book of Aliens might be you. This compact tactics game aims to offer all the thrills and tension of Firaxis' sci-fi strategy, but in a much more digestible package.

RELEASE 2021



SUPER MEAT BOY FOREVER The steak-based platformer has had an oddly protracted cooking time, starting as a mobile game and without the involvement of original designer and artist Edmund McMillen. It's got more than 7,000 levels!

RELEASE 2021

SHADOWS OF DOUBT

A detective game taking place in a city where every building is accessible. Solve dynamic crimes ranging from stolen baseball cards to serial murders through conversations, collecting evidence, and stealth.

RELEASE 2021



NEUROJANK

CYBERPUNK 2077 delivers an incredible setting undermined by an onslaught of bugs. By James Davenport

'm on an aimless walking tour of Night City. Somehow I've ended up in the Japantown neighborhood's Arasaka-financed streets, where animated billboards for 'Sweet Clean Speed' and pornographic braindances climb the flanks of utilitarian skyscrapers, blotting out the stars with a rainbow of neon. I pass a ramen shop, a hot dog stand, and a man selling spice, piles of garbage tucked beneath the offramp behind him. A mob of Christians gather at a nearby intersection, screaming "Blasphemers!" at the cops.

There won't

be another

open world

like this for a

long time

A voice makes booming proclamations in Japanese from loudspeakers overhead, flying cars crisscross the invisible roads between buildings. The sky glows with light pollution, but the moon

is full and clear. It's a beautiful night.

I just left Judy Alvarez's place. My friend's been through a lot lately. Someone close to her has been victim to a string of horrors. We had a big

heart-to-heart, undermined by the presence of arm-knife crosshairs fixed on her forehead even though I put my arm-knives away earlier (I'm polite like that). There was also the notification from that fancy sniper rifle I picked up 20 minutes ago somehow still hanging around.

But hey, Judy's not perfect either. I've seen her clip through chairs and float across the room while confessing something deeply personal. And yet, I am duty bound to stick through the bugs for my friend. I genuinely care for her.

She's on my mind while I continue my walk. A streetlamp floats in the air, its base failing to load. A

busker plays an invisible guitar. The facade of a skyscraper flickers. I call my car and it arrives, clipping through a barrier. Should I call Judy, see if she's hanging in there?

It's just another day in *Cyberpunk 2077*, a pretty good RPG in an amazing setting totally sick with bugs.

GLITCH HUNT

There won't be another open world like this for a long time. I love

wandering the mountains of trash on the outskirts of town, cutting pretty silhouettes from a distance. Sometimes the smog gets so thick around the old Arasaka memorial downtown you can't see the tops of buildings, everything washed in dirty orange light. I watched traffic here for quite some time.

Take a microscope to it and you'll see the seams instantly. NPCs are aimless automatons or carefully posed puppets. I've seen the same guy splayed out on a couch playing guitar all over the city. I made the mistake of stopping to inspect a roadside rave in the Badlands, only to realize there were three sets of

NEED TO KNOW

WHAT IS IT? An open world action RPG set in the

near future

EXPECT TO PAY \$60

DEVELOPER CD Projekt Red

PUBLISHER In-house

REVIEWED ON i9-9900k, RTX 2080, 16GB RAM, installed on

> MULTIPLAYER No

LINK cyberpunk.net

triplets in attendance. Sometimes far off textures load in a touch too late, or the five o'clock rush hour snaps into existence in front of your eyes. Night City is a stage, not a simulation.

But if you keep your eyes trained ahead, every frame is a striking, lively scene. Night City is nearly unparalleled among other open worlds at middle to long distances. In fact, I'd pay full price just to walk around and take photos. It's an incredible work that the stories within never quite measure up to.

HEAD CASE

Cyberpunk's main quest is full of interesting ideas, but marred by inconsistent characterization and focus. Johnny Sliverhand, played by a grumpy Keanu Reeves, and you, a merc for hire named V, are centerstage. As V, you witness a top level corporate assassination and are forced to work with Johnny to expose the truth and save V's life. Early on a backup of Johnny Silverhand's consciousness ends up in V's head and begins to take over his mind, effectively overwriting V.

The effect Johnny has on V, and the equal and potentially opposite or compounding effect V has on Johnny, is the heart of the RPG decision-making here. Johnny is a repulsive, crude misogynist. And you can change that, assuming he doesn't swing you his way first. I had no clue whether to take my pills to suppress the maniac in my head or to try and change him—the ambiguous and agonizing choice I want in an RPG.

I just wish Johnny's characterization stayed on track. While I'd make major progressions in our relationship in the main quest, he'd regularly revert to the same old dickhead Johnny in sidequests. I loved where our relationship eventually ended up, but *Cyberpunk 2077* didn't really show me the work it took to get there.

As a basic, adaptable foil for V, Johnny is a nice engine for introspection. Capitalism is bad, for

V WHO YOU WANNA V Five looks from rad to bad



COLONEL BITCH At ease, baby. Take in the gloriousness of my hat.



DISCO V I've sadly long out-levelled these booty shorts.



MASTERMIND V My hair disappears in the mirror. It's a dark portent.



WASHED UP PI V There are crumbs in the beard in my head canon.



TURBO COP Halt! In the name of the look! Fashion police at it again.

Cyberpunk 2077









Cyberpunk 2077 is a surprisingly hopeful game.



Cyberpunk 2077















sure, but *Cyberpunk* isn't interested in solving that problem. The focus is on people and how they persist (or don't) in the muck.

Yeah, the story is wrapped up in espionage, sabotage, and conspiracy at the highest order. But it's driven by V's basic human motivations. He doesn't want to die (I played as a man), he doesn't want to lose his consciousness to Johnny, and he wants to make something of himself. Depending on your decisions the stakes change in major ways.

Me? I took on the personal mission to become a reformed Corpo dorko, dreaming of getting out of the city and living a simpler life. And, to my surprise, *Cyberpunk* supported an eerily appropriate arc for me, a testament to the sprawling narrative choices laid out under the skin.

And I wouldn't have seen any of it if I skipped the side missions. While entirely optional, seeing through every side character's story to the end can fundamentally change how the larger story wraps. I spent a long time with Panam, a perky, stubborn nomad vying for respect among her peers, and days deeply investigating Johnny's tragic past. I befriended a beat cop hunting down a serial killer using surreal, invasive means in what might be my favorite quest.

SIDE HUSTLE

The deeper sidequests are infrequent, too difficult to separate from the endless warehouse infiltrations, but they're all good to great, and some are up there with CD Projects' best even if they's no elements.

best, even if there's no clear Bloody Baron standout.

Too bad almost every serious dramatic beat was undercut by some kind of bug, ranging from a UI crowded by notifications and crosshairs failing to disappear, to full-on scripting errors. Most are audiovisual tics, like the sound of a car loudly peeling out wailing on during a long drive as a passenger with an NPC, a character passing through solid elevator doors, or random objects floating mid-air. They're the kind of thing I can squint through on occasion, but there wasn't a single quest in which something wacky didn't happen. The good news is that all this stuff can be fixed, but it also means the ideal *Cyberpunk 2077* is delayed again, in spirit.

OUT AND ABOUT

Night City sightseeing



1 BIOTECHNICA Check out this lovely hive of protein farmers.



2 CORPO PLAZA
Goldfish made of light?
Maybe capitalism is good.





3 VIEWPOINT
You can see it all from up here.



4 NORTH OAK SHRINE A nice historical contrast, the shrine set against the city.



5 TRASH MOUNTAIN Looks bad and good all at the same time!

The action holds together well enough. Weapons and armor have unique stats, though it's all pretty easily reduced to how much damage you can do and withstand versus the level of the enemies you're facing. It's exciting stuff in the early hours, all those stats and weapons laid out before you, but the bottom drops out

pretty quickly.

Almost every

dramatic beat

was undercut

by some kind

of bug

Night City is stuffed with warehouses, armories, and secret labs, but the objectives bleed together quickly because the means tend to repeat too. I wanted to be a cyber ninja at first, using

quickhacks to turn off cameras, destroy turrets, and blind my enemies before moving in with my katana and hacking them to bits. Things went well for a while, but pouring all my experience and perk points into blades made me nearly unkillable within a few hours.

Enemy AI is rote. Stealth is a game of vision cones and patrol routes, with nearly no meaningful distinctions between gangs and corporations. Now I slide into the room in slow motion and headshot a few grunts before I even come to a stop. I clean up with my arm knives, snipping limbs off like paper dolls. But I'm showing off for the sake of it, not because

Cyberpunk is encouraging me to use every tool in the box.

The gunplay feels great though: Heads pop and limbs dissolve, shotguns knock enemies on their cyberbutts. For the quieter players, there's always a hidden sewer grate or balcony door to discover. But without any meaningful variations on enemy or level design after the first few hours, *Cyberpunk* is missing the incentive to experiment with it all.

Sure, *The Witcher 3* was funnier and more subversive, but I'm taken by how hopeful *Cyberpunk* is. Its exploration of the future relies heavily on genre tropes, with everyone from punks to dirty cops playing the parts established back in William Gibson's Neuromancer. But *Cyberpunk 2077* remains a faithful treatment of the genre.

I found it life-affirming in the final moments, even in the face of certain death and an onslaught of bugs. I suppose it's an appropriate thematic throughline: *Cyberpunk*

2077 is a game about V coming apart at the seams, in a city coming apart at the seams, in a game coming apart at the seams. Play it after a few months of patches.

PC GAMER

VERDICT

Some nice stories nested in an astounding open world, undercut by jarring bugs and shallow progression.



DEVIL'S ADVOCATE

The questing is tedious, but **WORLD OF WARCRAFT: SHADOWLANDS** is another great *WoW* expansion. By Steven Messner

hadowlands is one of World of Warcraft's most ambitious expansions yet. There are times where I feel a little overwhelmed by all of its complex progression systems. When I'm not chipping away at expanding my Covenant's Sanctum, I'm exploring its dark and dangerous new endgame zone or climbing the endless floors of Torghast. And then there's the familiar grind of world quests, dungeons, and chasing down hidden treasures like new mounts.

It's one of

the biggest

decisions I've

made since my

race and class

It's a lot to stay on top of, and at times a little too familiar, but much of *Shadowlands*' endgame is varied and inventive enough to keep things fun. It might not win over jaded players who drifted away over the years, but

Shadowlands is the best World of Warcraft has been in a long while.

The new expansion makes some huge improvements over the previous pack, *Battle for Azeroth*. There's no more infinite grind to breathlessly chase.

There's no opaque armor system like Azerite Armor to suck the joy out of getting that coveted loot drop from a dungeon boss. And, best of all, a lot of randomness has been dialled back in favor of player choice. Instead of spending weeks praying for a specific, all-powerful Legendary item to drop, only to get one that's useless to me, I can farm the materials for the one I want, and build it myself. It's empowering to be the one calling the shots instead of

feeling beholden to the fickle gods of randomness.

This emphasis on player choice is most evident in Covenants, which are basically Hogwarts' houses if each was a distinct afterlife where

> souls are sent to live for all eternity. So instead of Slytherin you get Maldraxxus, a hellscape of green where Necrolord armies battle in the Theater of Pain. Or Ardenweald, a cosmic forest where spirits

are nurtured in ghost gardens.

THE LOST AND DAMNED

All these new factions are introduced through a 15-hour story campaign, but I found it really difficult to care. The quest design is varied, but there's no challenge to it, which sucks all the tension out of the story when I melt a big boss in seconds without getting so much as a scratch.

Once players wrap up the story and reach level 60, they'll have to

NEED TO KNOW

WHAT IS IT?
An expansion that takes players to WoW's afterlife

EXPECT TO PAY \$35

DEVELOPERBlizzard Entertainment

PUBLISHER In-house

REVIEWED ON i7 8700, RTX 2070, 16GB RAM

MULTIPLAYER MMO

LINK worldofwarcraft.com choose one of the four Covenants to join up with. Each one not only offers a different endgame story campaign, but two unique (and very powerful) abilities, armor sets, mounts, and even fun side activities like a soul garden to tend or a forge where you can assemble your own Frankenstein-esque Abominations. It's one of the biggest decisions I've made in *WoW* since choosing my race and class, and I love how much weight it carries.

As a Venthyr, I'm chilling out in my vampire lair, using blood mirrors to travel around the ruinous castles of Revendreth. If I had gone with Maldraxxus, though, my sanctum would be inside a colossal statue of their god. World of Warcraft's story might fizzle more than it pops, but its worldbuilding is still cool as hell.

And then there's the crowning achievement of *Shadowlands*: Torghast. It's a roguelike dungeon that changes each time you enter it. Like any good roguelike, the real joy comes from slowly acquiring ridiculous powers that warp my character into a killing machine. There's hundreds to find, but I've found powers that transform me into a giant, make me temporarily blind in exchange for vastly increasing my damage, and one that turns me into a tiny rat so I can sneak past enemies.

Unlike Battle for Azeroth, a lot of Shadowlands' new features are fun and rewarding. The four new zones are dense with surprises and treasures, Covenants are an exciting way to customize my character, and I'm enjoying the worldbuilding now that the campaign is over. It may not rekindle a second World of Warcraft renaissance, but it's a confident step back in the right direction.

PC GAMER

VERDICT

Ambitious and grand, if a little uneven, Shadowlands is an exciting new step for World of Warcraft.



LIFE AFTER DEATH Shadowlands' four Covenants



KYRIANS Main ability: Summon an owl butler Likes: Quiet contemplation Dislikes:

Disobedience



Main ability: Use nearby corpses to make a shield

Likes: Killing stuff, the color green

Dislikes: Kyrians,

life itself

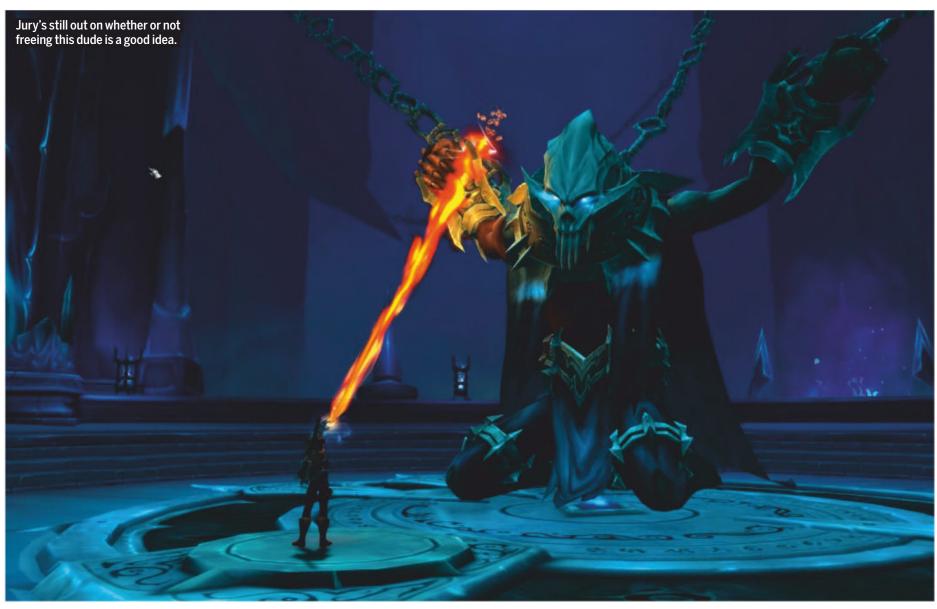


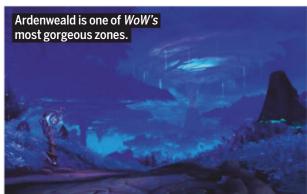
Main ability:
Transform into a fast spirit fox
Likes: Spirit horticulture
Dislikes: Climate change



VENTHYR
Main ability:
Teleport 35 yards in any direction
Likes: Throwing posh vampire parties
Dislikes: Humility

World of Warcraft: Shadowlands













COLD CASE

TWIN MIRROR is a psychological mystery game that fails to go deeper than the surface. By Rachel Watts

eaving time travel, telekinesis, and mind reading to the wayside, Dontnod has stepped away from the supernatural themes of its previous games for *Twin Mirror*, a psychological-drama of mystery and conspiracy. This genre of game should be well within the studio's wheelhouse, but unfortunately, Dontnod's first self-published game is a little underwhelming. It has the set up of a great detective mystery, but its unwillingness to explore difficult topics with depth leaves it feeling shallow and half-baked.

Dingy dive

bars, and cheap

hotel rooms

packed with information

Twin Mirror follows Sam Higgs, a former investigative journalist returning to his home town following the death of his best friend and fellow reporter, Nick. It isn't long before Sam gets caught.

before Sam gets caught up in a larger conspiracy involving the mining town's community, and he decides to follow the case until the end, which leads him deeper into the underlying secrets of

his childhood home. To make matters worse, before he left town two years ago, Sam wrote an article exposing the lack of safety measures in the local mine which led to it being shut down, leaving many people jobless and angry.

There's bad blood brewing and after Sam arrives at the wake, Nick's daughter, and Sam's own goddaughter, confides in him that she thinks something about her father's death feels off. Presented with the possibility that his friend's death may have had a sinister dimension, Sam agrees to investigate.

Detective work plays out similarly to exploration in Dontnod's previous games. You're dropped into a new area and need to walk around examining objects and finding clues. The mining town has an unglamorous West Virginian charm that makes everywhere a joy to explore. Its dingy dive bars, mountain viewpoints, and cheap hotel rooms are packed with information about Basswood's residents and the tough times they've been through.

The process of gathering clues is far from streamlined, however. You always have to find evidence in a certain order, meaning that you'll be doing multiple laps of a scene until you discover things at the right time.

u discover things at the right time. After gathering enough evidence,

> Sam will enter his mind palace (closing his eyes and thinking really, really hard) and these sequences are a highlight of the game. Using the information you've found, Sam will begin to recreate a timeline of events in

the surreal and beautiful broken-glass world in his head. Mechanics similar tot his are now standard in many detective games, but Sam's analytical mind stands above the rest of them.

HEAD SCRATCHER

Even though the evidence gathering is flakey, I went into the rest of the

NEED TO KNOW

WHAT IS IT?
A psychological
mystery set in a small
West Virginian town

EXPECT TO PAY \$30

DEVELOPERDontnod

PUBLISHER In-house

REVIEWED ON i5-2500K, 8GB RAM, GTX 670

> MULTIPLAYER No

> > LINK

dont-nod.com/en/ projects game excited to uncover the secrets of the sleepy town of Basswood, but unfortunately the investigation never really cranks into gear—it barely gets going at all.

Even after Sam is confronted by angry townsfolk who are suffering because of his mine safety article, he never really engages with it head-on. Was it right to publish the truth at the cost of people losing their jobs? It's a tough question that the game sidesteps.

Never exploring these themes beyond the surface pretty much sums up Twin Mirror. From its vapid minigames to lacklustre dialogue, it never delves that deep into the topics it attempts to grapple with, and this includes Sam's 'double', a character who lives in his mind. Throughout the game, Dontnod makes multiple hints that Sam is on the autistic spectrum, and that his 'alter ego' is supposed to be some guardian angel figure who offers him advice in tricky social situations, but it's an idea that's handled too incompetently to resonate.

Dontnod might not have fallen into the condescending and misinformed tropes found in other media when representing autistic people, but there are certain story decisions that make Sam feel like a ghost of that portrayal. There's a total absence of commitment to this representation, and a complete lack of insight and understanding.

Twin Mirror feels like a string of scenes sewn together with thin narrative threads, and is a game that says nothing, lacking any sort of engagement to subjects that it alludes to. For a studio that is celebrated for being loud and clear about improving representation in games, Twin Mirror is a real misstep.

PC GAMER

VERDICT

Twin Mirror kicks things off with an intriguing setup but, disappointingly, ends up going absolutely nowhere with it.



COMPANION CLUB

Every detective needs a Watson, and luckily for Sam he has three sidekicks helping him



ANNA
A fellow
investigative
journalist who
helps track down
leads, and as a
bonus she doesn't
write articles that
upset whole towns.



THE DOUBLE
Who better to help
you than yourself?
The double helps
navigate tricky
conversations and
can aid in getting
information out
of people.



JOAN
The plucky young girl who first asks for Sam's help after she catches on that there could be more to her father's death than it first seems.

Twin Mirror















CRIME DOESN'T PAY

EMPIRE OF SIN is ambitious, but undermined by a mountain of issues. By Fraser Brown

've got Feds breathing down my neck, a friend I need to betray, employees getting into love triangles, and rivals making big plays—no wonder mob bosses end up a bit high-strung. There are times when *Empire of Sin*'s missions and emergent chaos collide to create a cyclone of compelling mobster drama full of intrigue, booze and bullets. Unfortunately, it mostly just gets in its own way, with systems tripping over each other or bugs dragging them down.

Fights can break out

inside

businesses or

on the streets

My attempts to become the biggest mob boss in 1920s Chicago haven't been foiled by the cops or my rivals, but by corrupt saves, broken missions, and vanishing employees. Two campaigns ended up in the bin

because of two entirely separate game-breaking issues. Even with access to the day one patch, I've encountered some significant problems, and they go a lot deeper than bugs.

Empire of Sin makes a good first impression,

though. It's clearly born out of a fascination with the prohibition era, and as a management game it tries to capture the breadth of the illegal businesses and shady deals that kept these underground empires going—but it's even more interested in the people that join and run them. It's as much an RPG, and each boss has their own storyline and missions that lets you shape the kind of crook you want them to become.

Sit-downs are where *Empire of Sin*'s criminal cast really gets to shine, letting you meet rival bosses to shoot

the shit and make deals. They're hammy and immensely fun conversations, taking advantage of each gangster's personality and history to create memorable verbal sparring matches. The

illusion is shattered, unfortunately, when they offer completely random deals with terms that contradict each other, or when you realize that every deal is just a straightforward buff that costs you nothing.

BOSS FIGHTS

Developing your boss and making deals is still a lot more entertaining than sitting at a desk, staring at messy art deco menus and stark maps. The day-to-day management of even the most crooked of casinos is not particularly scintillating, and while there are a few different ways to ensure your businesses flourish, like matching the booze to the affluence of the area, success mostly amounts to hostile takeovers and pouring excess cash into upgrades. Constant,

NEED TO KNOW

WHAT IS IT? Character-driven mob management in 1920s Chicago

> EXPECT TO PAY \$40

DEVELOPER Romero Games

PUBLISHERParadox Interactive

REVIEWED ON GTX 1080 Ti, Intel i7-8086K, 16GB RAM

> MULTIPLAYER No

LINK empireofsingame.com

unrelenting expansion is what wins the day, not business smarts. You're pushed to play aggressively, but doing so effectively neuters the entire management layer. Instead of supporting each other, the systems end up fighting for attention and pushing others out of the way.

A boss is nothing without goons. Here, you can create a criminal army, bung them into squads, and tailor each of them for specific situations. It's light-years ahead of what you'd expect from a management game, until you get into the actual fights.

Fights can break out inside businesses or on the streets, and the most interesting thing about these impromptu battle arenas is that there's cover. It's just an endless parade of plain bars, warehouses, and depressing brothels, where you'll mostly fight faceless enemies who go down in a couple of shots. Some abilities are so powerful that you can end a battle in one attack, and you'll quickly get unique weapons that eradicate any remaining challenge.

When you declare war on another boss, they immediately send their goons after your businesses. Usually that means controlling your unnamed guards—basically cannon fodder. Even the quick fights drag. The stakes couldn't be lower, either, because you can end a war and steal every business simply by sauntering into a safehouse and killing the boss in a slightly tougher but still pretty effortless battle. And that's the most effective way to win.

Empire of Sin is an ambitious management game that never manages to tie together its big ideas. There's a version of it in there somewhere that's good, but this one is just a bit of a mess. The potential is obvious, but it hasn't been realized.

VICE CITY Your gangsters will develop lots of habits, not all good



B00ZEA barroom brawler can get an edge when boozed up, an alcoholic can become sober, and an angry person might become more aggressive.



STDs
Let your henchmen hang around in brothels too much, and they'll catch STDs. In one unfortunate event, my gang got pubic lice, reducing their health.



MURDER

If you order your crew to execute a lot of injured enemies, their hearts will harden and they'll become cruel, making them more vicious in fights.



ROMANCE
It's all kisses and skipping
through meadows until a
partner is injured, at
which point they might
become enraged, or
depressed if they're killed.

PC GAMER

VERDICT

Empire of Sin's many bugs and competing systems undermine what could have been a novel mob management game.



Empire of Sin











THE EXPANDS

Terraforming Mars and making friends in PER ASPERA.

By Jon Bolding

ere on Earth, they tell me we have too much carbon in the atmosphere. So, I figure, as I work to terraform Mars in *Per Aspera*, I am unlikely to run out of CO2, so I just start seeding the surface with genetically engineered lichen. Lichen turns CO2 to O2, great! I assume it'll keep itself in check well enough. This assumption is wrong. The rapidly rising oxygen percentage caused fires started to break out in every factory and mine across the planet. Perhaps terraforming is more complex than I thought.

One of the most

demanding

games I've

played in a long time

Per Aspera is a novel combination of planetary science simulator, hardcore management game, and dynamic narrative experience. You play as a newly awakened artificial consciousness, AMI, whose job is to establish an

autonomous colony on Mars, and ultimately terraform the planet to make it suitable for 'Earthian' life longterm. AMI's story plays out in audio transmissions voiced by

a star-studded cast, with standout performances by the likes of Laila Berzins, Troy Baker, and Phil LaMarr. It's a series of moral choices that lead to one of several different game endings.

Most of *Per Aspera* is about panning around a beautifully rendered topographical globe of Mars and listening to a chill ambient and upbeat techno soundtrack. Your

view is AMI's, a vector interface with lots of soft edges and sans-serif fonts.

You survey for minerals and establish mines to retrieve resources like aluminium, carbon, silicon, or buried water. You build factories to

> transform these resources into finished materials like electronic components, and then into further buildings and equipment like worker or repair drones, or space projects like reflective mirrors.

Scarcity is concern number one in *Per Aspera*. Build in the wrong order? That might well be game over.

You might realize that you've only got a few dozen tons of aluminium, and a mere 700 still in the ground. To get more you expand the base. That means adding new electrical grid elements, new maintenance hubs, and worker control stations. It's a

NEED TO KNOW

WHAT IS IT?
Grand-scale Mars
colonization and
terraforming
management sim with a
novel narrative element

EXPECT TO PAY \$30

DEVELOPER Tlön Industries

> PUBLISHER Raw Fury

REVIEWED ON AMD FX-8350, Nvidia GeForce GTX 1070 Ti, 32GB RAM

MULTIPLAYER

No

LINK per-aspera.vg sometimes-tedious process, though some things like laying roads are auto-optimized with a slick animation. All of that city-building barely mentions the novel terraforming gameplay, which has you balance adding elements to Mars' atmosphere and terrain in order to get specific effects.

It's one of the most demanding games I've played in a long time, not just in its complexity, but in its mental and reaction time demands on you as a player. Playing, my fingers constantly slid between WASD for the camera, the numbers for game speed, and the function key overlays for power, maintenance, drone traffic, or survey results. *Per Aspera* is a 'blink and it's 3.00am' game.

DO AS AI DO

It's not only a detailed strategic simulation, but also a sweeping sci-fi tale that fits the massive nature of the job you do in it. It's got some technothriller intrigue, but it also takes big idea sci-fi seriously, grappling with the nature of artificial consciousness and the ethics of terraforming a new world.

The shock and delight of seeing a dynamic narrative in a strategy game can't be overstated. It's an imperfect story, the writing can be obtuse, but it's a genuine experiment. Bits of the narrative are nonlinear too—they happen in different orders—so moments can feel disjointed.

In between the chunks of story and decision-making you're thrust back into city building. Back into the intensity of choices and strategy action until someone bothers to call up the AI consciousness for a consult again. Combined with terraforming, slick aesthetics and classic genre gameplay, this is worth the time.

PC GAMER

VERDICT

Hard science, harder simulation, and narrative innovation make Tlön Industries' *Per Aspera* an absolute gem.

85

1 COMETSFind large things and throw them at the ice caps. Kinetic energy becomes

thermal energy.

Cathartic and

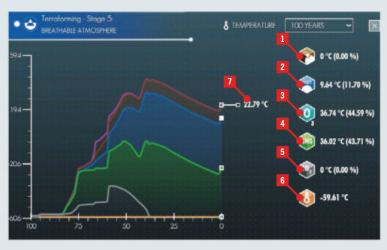
productive!

2 MIRRORS
Put giant mirrors
in space to point
sunlight straight at
the ice caps.

3 OZONE LAYER Lots of oxygen also means lots of ozone, the most famous of the...

GLOBAL WARMING

But it's on purpose this time!



4 GREENHOUSE We're great at making

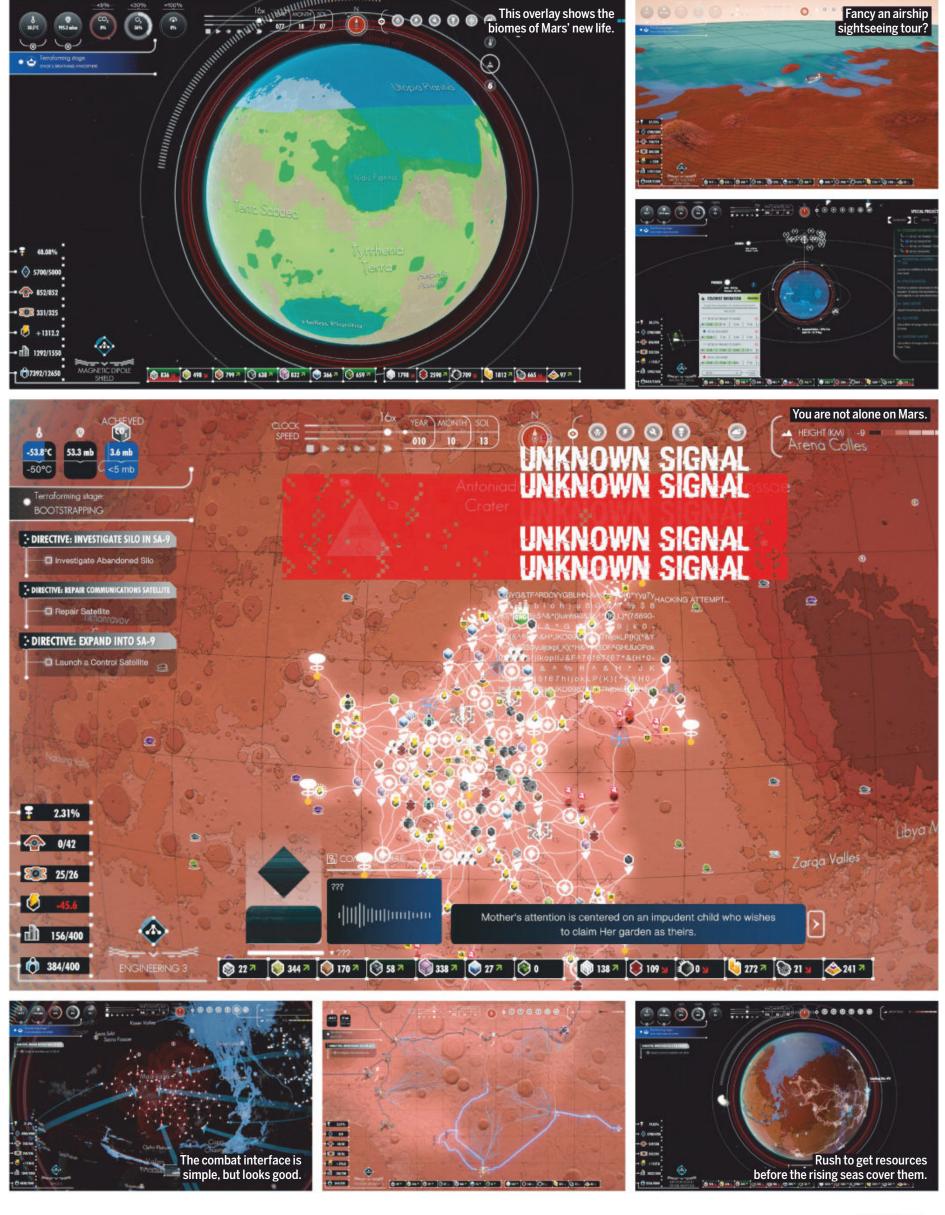
We're great at making these by accident.

5 CARBON DIOXIDE Not a lot left here because I turned it all into oxygen, whoops.

6 TEMPERATURE
How cold it would be if
I hadn't polluted Mars?

7 AVERAGE TEMPERATURE For reference, Earth's average is 14°C.

Per Aspera



GREEK CHIC

A puny mortal embarks on a quest to save the gods in **IMMORTALS FENYX RISING**, and finds yet another massive Ubisoft open world game. By Andy Kelly

hen Zeus banished the evil titan Typhon to Tartaros, an infinite abyss of torture and suffering, he thought that would be the end of it. But Typhon has escaped, stripping the gods who imprisoned him of their powers and wreaking havoc on their home, the Golden Isle. And so it falls to Fenyx, a lowly Greek soldier, to save them. Why? Because it's a good story. Fenyx is a normal person suddenly thrust into an outrageous world of gods and monsters. This grounds things nicely and makes for an enjoyable, and extreme, fish out of water story.

It's bright and striking, like a

Saturday

morning

cartoon

Immortals tells a big story with big stakes, but it's no Greek tragedy. It's a comedy, taking well-worn elements of Greek mythology and giving them a light-hearted, self-aware spin. The dialogue pokes fun at the legends, repaints familiar characters in amusing ways, and throws in anachronistic pop

culture references. It's charming and often funny, if occasionally a little grating.

Prometheus narrates as

you play, with a goofy Zeus rudely butting in to mock his storytelling ability or demand he

make things more exciting. This frequently results in things changing around Fenyx, like a cyclops suddenly doubling in size.

The mythical Golden Isle is a vivid, beautifully realized setting, with each region reflecting the god who lives there. Love goddess Aphrodite's corner of the island, the Valley of Eternal Spring, is an idyllic

paradise of sparkling rivers, gleaming temples, frolicking animals, and colorful flora. The Forgelands, home to metalworking god Hephaestus, is a mountainous, autumnal landscape littered with crumbling ruins, workshops, and rusted automata. And at the heart of the island are the

Gates of Tartaros, a lava-spewing volcanic fissure where, once you've rescued all four gods, you'll confront Typhon for a final showdown.

This is one of Ubisoft's prettiest open worlds, and a nice

alternative to the subdued realism of *Assassin's Creed Valhalla*. It's bright and striking, like a Saturday-morning cartoon, and the swaying grass and petals blowing in the wind have a real Studio Ghibli feel. Climb to the top of one of the many colossal statues on the island, and the sense of scale is impressive. The breezy art style is a perfect fit for the game's

NEED TO KNOW

WHAT IS IT? An open-world game based on Greek mythology

> **EXPECT TO PAY** \$60

DEVELOPER Ubisoft Quebec

> PUBLISHER Ubisoft

REVIEWED ON RTX 2080 Super, Intel i7-9700K, 16GB RAM

> MULTIPLAYER No

LINK immortalsfenyxrising.

light-hearted tone, and there's something really inviting about the world. You just want to dive in and explore every inch of it.

There are a few ways to get around the Golden Isle, all governed by a stamina system. You can climb on pretty much any surface for as long as your stamina meter holds out. If it gets dangerously low, drinking a potion will let you keep going a little while longer. You can creep up on animals—including a blue unicorn and a horse made of solid gold-and tame them, turning them into mounts. They have their own stamina meter, which varies in size from beast to beast. And when you discover the wings of Icarus early in the game, you can glide for long distances—again, for as long as you have stamina left.

But my biggest problem with *Immortals* is that none of these modes of navigation feel particularly good. The jumping is some of the worst I've experienced in a thirdperson game. It's frustratingly floaty and imprecise, making leaping between small platforms a chore. Gliding with the wings doesn't feel as graceful and smooth as it should. And when you gallop on a mount, the screen is smeared with way too much motion blur, and you feel like you have to fight the controls to take a turn. It just never felt nice in my hands, even with a gamepad.

ARTEFACT FINDING

While we're on the subject of things I don't like, there are way too many collectibles. As you sprint around the Golden Isle you're constantly picking things up, including Ambrosia, Zeus' Lightning, Coins of Charon, Golden Amber, blue, yellow, red, and purple Adamantine, flower nectar, Olympian figs, blue mushrooms, and pomegranates. There are also four kinds of potion to craft, several large skill trees to work through, and an avalanche of loot, including weapons, armor, and skins for Phosphor, your bird companion. It's an overwhelming amount of



GODS AND MONSTERS How Immortals riffs on famous Greek myths



CYCLOPS
These creatures were unafraid of the gods—and they aren't afraid of Fenyx either, hurling huge boulders at her.



ZEUSThe thunder god looks badass in this art, but in the game he's a bit of a goofball, narrating Fenyx's adventure.



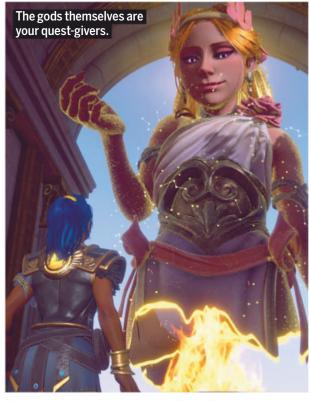
ICARUS
Early in the game Fenyx
finds the wings Icarus
flew too close to the sun
with. Luckily that's not a
problem in the game.

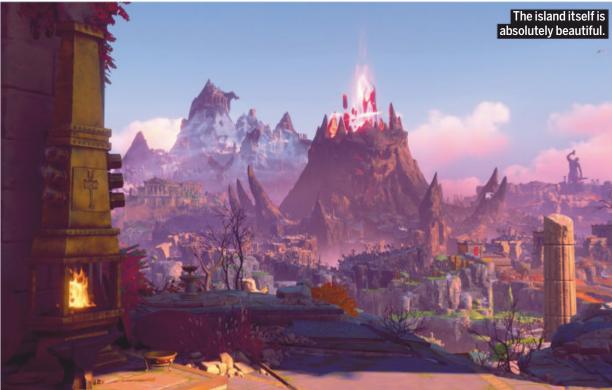


MINOTAUR
The bull-headed beast is an aggressive enemy, charging you with its horns, but also leaving itself open to attack.

Immortals Fenyx Rising





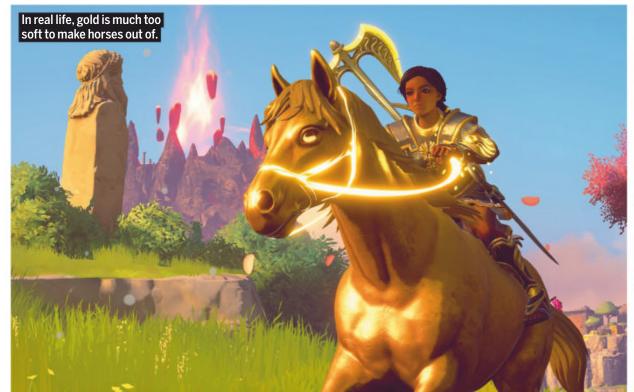




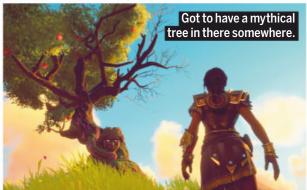




Immortals Fenyx Rising

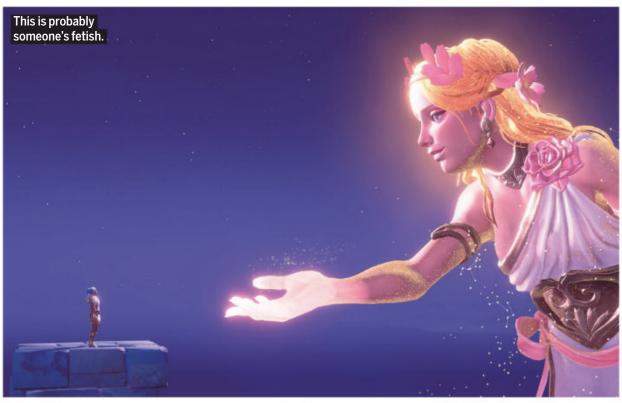


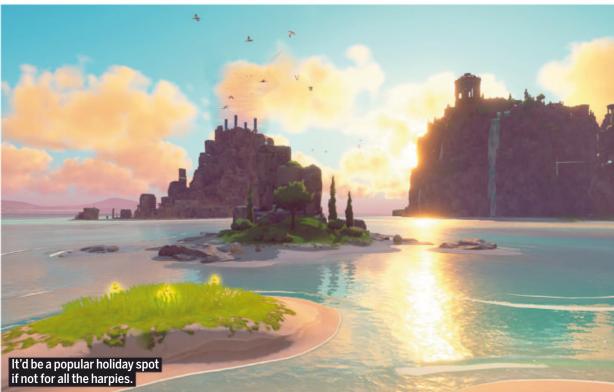




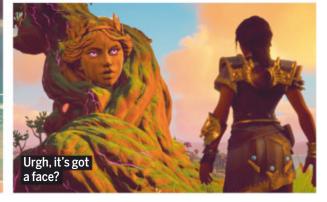












stuff, and feels like a step backwards for Ubisoft in terms of open world design.

All of these objects serve a purpose, at least. Zeus' lightning increases your stamina, which is something worth investing in, as it lets you run, glide, and climb for longer. The figs, mushrooms, nectar, and pomegranates can be brewed into potions that grant you handy buffs, including increasing your defense and boosting your attacks.

If you need a particular item, you can climb up somewhere high and enable farsight, a mode that lets you scan the horizon and tag things, which then appear on your map. The downside of this is that it doesn't take long for your map to become comically loaded with icons as you tag stuff, but that's always the way with Ubisoft games.

Immortals is at its best when you're pursuing the story, getting tangled up in the neuroses of the fallen gods. It's a nice touch that almost every deity and mythical figure you meet is troubled, eccentric, or just plain weird. This is a very human pantheon of gods, and the writers really have fun with them. However, many of the jokes will land harder if you have even a passing knowledge of the mythology

it's based on, which does limit its appeal a little. There's actually a good variety of quests in the game, a lot of which are heavily skewed towards solving puzzles.

I was actually surprised by how much of a puzzle game Immortals is. Sprinkled across the map are self-contained challenges called Vaults of Tartaros, which appear as volcanic openings in the ground and contain elaborate physics and environmental puzzles. Some of them are brilliantly designed, some are forgettable, but they hit more than they miss. Several important story moments also involve puzzles, including big, intricate dungeons at the end of each god's quest chain. Also, props to Ubisoft for the broad range of accessibility options on offer, which extends to making puzzles easier if you don't especially enjoy trying to do them.

Many of the game's puzzles involve the Bracers of Herakles, which let Fenyx grab and throw

NATURE'S BOUNTY Flora you can forage for useful buffs



POMEGRANATE
Found growing on trees
or placed in baskets as
tributes to the gods, these
juicy orbs will restore
Fenyx's health.



BLUE MUSHROOM Eating these glowing fungi will restore your stamina, even mid-climb. Find them in rocky areas and caves.



OLYMPIAN FIG You'll find these near houses and temples, and turning them into a potion will give your defence a nice boost.



FLOWER NECTAR
You can also boost your
attack by turning these
glowing buds into potions.
Usually found near rivers
and by the ocean.

heavy objects. Dropping boxes on pressure plates is a common occurrence, as is firing arrows through braziers to set things on fire, and rolling giant balls around. The puzzles draw from a relatively shallow pool of interactions, but they combine, remix and reappropriate them in some pretty clever ways. Vaults are made up of multiple sections, linked by checkpoints, and the game is particularly good at escalating the challenge. The first puzzle will teach you the basics, culminating in a more significant test of skill at the end.

You'll do a fair amount of fighting too. Combat in *Immortals* is dramatic

I was actually

surprised by

how much of a

puzzle game

Immortals is

and fast-paced, mixing melee weapons and bows. Fenyx can perform slow, heavy attacks with a hammer, fast attacks with a sword, and switch instantly to a bow when required to pepper enemies with

arrows. Dodge or block just as an enemy attacks and time will slow, leaving them open to attack. You can also unlock a bunch of special abilities, including pounding enemies with a giant hammer. It's enjoyable enough and simple to get to grips with, if ultimately pretty uninteresting. I found that I rarely looked forward to combat and much preferred working out the puzzles.

WILD AT HEART

If a lot of what you've read here sounds familiar, you've probably played *The Legend of Zelda: Breath of the Wild. Immortals* is heavily inspired by Nintendo's critically acclaimed Switch game, with an emphasis on *heavily*. But considering *BotW* will almost certainly never be

released on PC, that's a good thing. The puzzles in *Immortals* aren't nearly as smart, the art isn't as refined, and the world isn't as beguiling. But it's still a strong attempt at making a game in the same vein—and probably the closest thing we have to a *Legend of Zelda* game on PC at the moment.

Don't be fooled by the art style, however. Despite having simpler, more stylized textures than the likes of Watch Dogs and Assassin's Creed, *Immortals* is quite demanding. There are some nice shader effects, reflections, and other high-end details you might not expect from a game with this kind of vibrant cartoon aesthetic. I managed to maintain a steady 60fps at 1440p with an Intel i7-9700K and an RTX 2080 Super, but even with this setup I did experience some distracting stutter on-screen when I was looking at a really dense vista.

Immortals is easy to like. It has an infectious energy, a great sense of humor, and a world that is full of color and life. I just wish the mechanical stuff underpinning everything was more fine-tuned. The unsatisfying, weightless character movement is a real letdown, because there's no getting away from it. This is a game where you're constantly running, flying, climbing and riding on horseback. But its unique take on Greek mythology, memorable characters, and fun, lively quests do their best to make up for it, even if it doesn't always pull it off.

PC GAMER

VERDICT

This is a fun, vibrant open world game with a great sense of humor. I just wish it felt nicer to play.



LIGHTWEIGHT

Players turn to the dark side in **DESTINY 2: BEYOND LIGHT.** By Phil Savage

n many ways, *Beyond Light* is a classic *Destiny* expansion. There's a new destination to explore, a new campaign to complete and a new raid to overcome. There's also a new elemental damage type, Stasis, which is a big deal, but not so much that it feels like you're playing a radically different game. But as traditional as *Beyond Light* itself may be, it arrives alongside a more dramatic shift in how *Destiny 2* works.

The Beyond

Light campaign

itself is

something of a

return to form

Two new schemes—gear sunsetting and the *Destiny* Content Vault—work to deprecate much of what came before, removing whole areas and activities from the game, and ensuring players can't bring many of their favorite older weapons into

the endgame. This isn't the first time *Destiny 2* has undergone a major overhaul, but where *Forsaken*'s sandbox changes were a successful attempt to bring a maligned sequel closer to its more beloved predecessor,

Beyond Light looks towards a sustainable vision of what Destiny can be for the next three years.

The Beyond Light campaign itself is something of a return to form after Shadowkeep's muddle of vague Hive rituals and tedious armor crafting. Europa is a joy to explore with its wide open surfaces, frequently obscured by heavy snowstorms. The campaign quickly settles into a nice rhythm of open-world encounters, story beats, and missions—where Guardians explore industrial mazes,

Vex constructs and the eerily sterile laboratories of the Clovis Bray facility.

The story is notable for tackling some of the *Destiny* universe's bigger mysteries, too, although the drama doesn't always land. In particular, the underwhelming way you acquire

Darkness powers. Your morally ambiguous pals show up, pull off some cool moves, and encourage you to start honking on their Darkness pipe—which you do. I am digging what the Darkness brings to the table, as

Stasis is an interesting ability within the sandbox. Where previous powers focused on damage dealing, with a handful of subclass-specific options for support or crowd control, Stasis doesn't hit hard, but provides a powerful way to put your enemies at a disadvantage—useful in PvE and PvP, where oppressive playstyles are now more easily punished.

TRAVELING LIGHT

I've played over 60 hours across the last couple of weeks, all on one

NEED TO KNOW

WHAT IS IT? Another expansion for Destiny 2

> **EXPECT TO PAY** \$30

> > **DEVELOPER**Bungie

PUBLISHER In-house

REVIEWED ON GTX 1080 Ti, Intel i7-8086K, 16GB RAM

MULTIPLAYER

Yes

LINK bungie.net/7/en/ Destiny/BeyondLight character, and between the postcampaign and launch of the new season, I've never felt at a loss for things to do. Whether that will remain the case across the next few months remains an open question.

Gear sunsetting puts a heightened importance on the new loot, but *Beyond Light*'s first season is currently looking pretty light. The Season of the Hunt event puts a renewed focus on *Destiny 2*'s core activities, by making players complete Strikes, Crucible, or Gambit matches to charge the lure used to embark on its titular hunts.

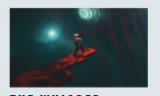
It's disappointing, then, that even beside the loot there's so little in those playlists that's new. The expansion launched with two new Strikes—one on Europa, one a repurposed *Destiny 1* Strike set on the returning Cosmodrome destination on Earth.

For Crucible and Gambit, though, there are no new maps at all. It means that, for the first season of a new expansion, I'm spending a lot of time retreading the same old ground. There's value in giving players a reason to keep engaged with these playlists, but that only works if effort has been put into keeping them feeling fresh. Exodus Crash with Stasis powers and a handful of new guns is still Exodus Crash.

Destiny 2 always feels like it's just a few tweaks away from being truly brilliant, but rarely is it able to quite get there. In that sense, too, Beyond Light is a classic Destiny expansion. I'm enjoying it a lot, and have already had many hours of fun exploring Europa. But there's also plenty that needs improving. Yes, there's hope for the future, but Destiny relies a little too heavily on that motto. ■

NOT FORGOTTEN

Thanks to the 'Content Vault', these ace activities are no longer in the game



THE WHISPER A timed mission t

A timed mission that is mostly a jumping puzzle through a giant underground labyrinth. Atmospheric as hell.



SCOURGE OF THE PAST

One of *Destiny*'s best raids, not least thanks to a chaotic Sparrow section that had you running from a big angry ball.



MENAGERIE

The decaying opulence of the Leviathan was on full display in this knockabout game show, but with lots more murder.



ZERO HOUR

Another timed mission, this one touring *Destiny I*'s abandoned Tower. Fear the unstoppable might of TR3-VR.

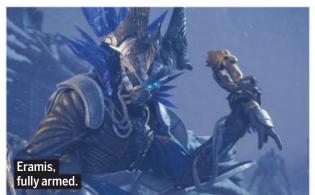


VERDICT

Offers a strong campaign on an expansive new destination, but there's plenty about *Destiny 2* that still needs work.



Destiny 2: Beyond Light















MY OLD MAN

Death's part of growing up in **CHRONOS: BEFORE THE ASHES**. By Luke Kemp

ou'd be forgiven for being sick of the phrase 'it's like *Dark Souls*', but... it is. A bit. You see, this influence has been used as a starting point, rather than as a central design philosophy. The similarities are clear in combat and audio design, but the likelihood of death is harnessed to feed into a new mechanic; not to alienate a large portion of the audience. Indeed, this is much friendlier than any *Souls* game. Gitting gud is optional.

Combat strikes

a balance

between skill

Of the three difficulty options (*definitely not* a *Souls* game), the lowest allows you to cruise through with relative ease. It's not the way the game is meant to be played, but opening the experience up to a wider

range of people is very much a good thing. Difficulty is locked in once you've started your game though, so choose wisely.

On anything but the lowest difficulty, you can expect to die dozens of times before the credits roll. The *Souls*-like combat, which varies depending on the weapon and shield combo you use, leaves little room for error. What this also means is that working out a technique to cut through an enemy type that previously flattened you is immensely satisfying.

Each time you die, you respawn at a World Stone, which doubles as a fast travel point. You come back a year older, something that pays off every 10 years starting at age 20 (you begin at the disgustingly youthful age of 18). At these times, you get to choose a trait such as increased health, defence, or parrying window. There's still a traditional system of XP and attribute points, the success of which is mixed.

The idea is that this ties into the ageing mechanic, so that in your twilight years, magic becomes much more important to your character than strength and agility. Playing on the middle difficulty, I finished the game in

my early 50s, and saw no signs of this in my character. The effects that age has on your character is a great idea, but I imagine only a minority of players will get to experience it.

Combat strikes an excellent balance between skill and punishment. Slipping up doesn't mean you'll immediately be destroyed, but if you get sloppy, you certainly won't last long. There's a decent range of enemies, too, most of which require slightly different tactics to get through. Like *Dark*

NEED TO KNOW

WHAT IS IT?

Dark Souls, but less so

EXPECT TO PAY

DEVELOPERGunfire Games,
THO Nordic

PUBLISHER THQ Nordic

REVIEWED ON GeForce GTX 1650, AMD Ryzen 5 3550H, 8 GB RAM

> MULTIPLAYER No

LINK gunfiregames.com/ chronos-bta Souls, you'll be opening up shortcuts as you go to minimize backtracking. Unlike *Dark Souls*, these shortcuts are generously placed, which helps ensure the experience never feels repetitive or unfair. Death is less of a punishment, too. You lose nothing on respawn, and although health items are rare, any you've used will be refilled.

CLOCK AND ROLL

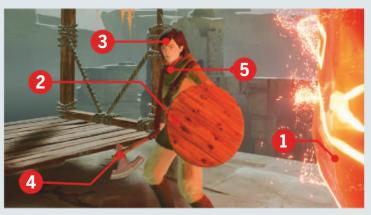
At times, *Chronos* can feel like an interactive fairytale. I won't soon forget being shrunk to the size of an ant, battling clockwork enemies against a soundtrack of booming footsteps from the enemy outside the bookcase we were fighting in. Traveling through mirrors and stepping into a painting? I love it. But these are standout moments in a game that spends most of its time pulling you through dull corridors.

There are puzzles sprinkled throughout the experience, though they aren't really the game's strong point. Many are pleasingly simple, some are a little *too* simple. One I've solved twice without understanding precisely how, and one is a sliding tile puzzle. A sliding tile puzzle? What is this, a 21st century videogame, or a Christmas cracker prize?

It's a slightly shaky project, then, as hinted at by the fact that it's not the prettiest PC game you'll ever play. Credit to Gunfire Games, though, for deciding to build on the *Dark Souls* template rather than just steal it. The result is a game with a strong identity of its own, which works hard to please more people than its biggest influence. It's a shame the ageing mechanic doesn't kick in earlier but, with a playtime that won't hit ten hours for many, at least it won't demand too much of your life.

TO BE THIS GOOD... Chronos: The Early Years

- 1 A World Stone and not, as you may have thought, a giant boiled sweet.
- This shield looks like, but *probably* isn't, a coffee table.
- Irritatingly smooth complexion, signs of optimism... yup, still young.



- There's still enough youthful curiosity to axe important questions.
- 5 Young enough for this scarf to look fashionable rather than 'eccentric'

PC GAMER

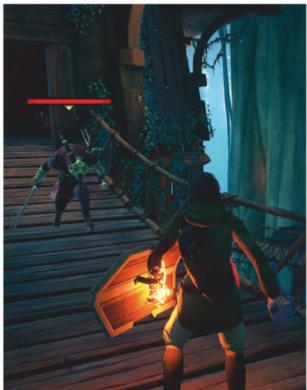
VERDICT

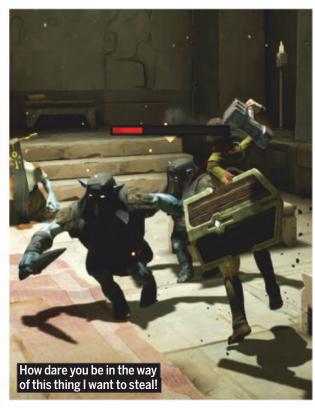
Gunfire Games' *Chronos* is a great example of how to craft a new game from an existing idea. Not much else, though.



Chronos: Before the Ashes















HEX EDUCATION

MÖBIUS FRONT '83 makes hardcore wargames accessible, but not exciting. By Tom Hatfield

ow this is a surprise. Developer Zachtronics is known for its puzzles games, but in *Möbius Front* '83 it serves up something very different: a new take on the niche genre of hex-based strategy wargames. Even more intriguingly, *Möbius Front* pits the United States against its worst enemy yet: The United States. No, this isn't a fifth column uprising, but a sci-fi tale of the US being invaded by an alternate reality version of itself.

What's

impressive is

just how

approachable

all this is

At least that's the elevator pitch. Unfortunately, *Möbius Front* takes its sweet time to engage with this novel premise, taking hours to even acknowledge that the alternate universe exists. The first thing you'll

notice is that the opening chapter is achingly slow, doling out miserly scraps of story in the form of an interrogation of an alt-USA prisoner, alongside fun banter between grunts who rejoice in delightful

names like Pvt Nathan Trucks and Sgt Benjamin Dancer. Things get more interesting in subsequent chapters as more explicitly sci-fi elements are introduced, but that whole first chapter is several hours long, and I can imagine a lot of players are going to drop out before things get truly interesting.

These story beats are a sprinkling of salt over the meat of the tactical combat. Think of *Möbius Front* '83 as an attempt to make a modernized, more mainstream version of niche hex-based wargames like *Panzer* Corps. There's no base-building here—instead, units are selected from

a pool and deployed in waves of reinforcements. One mission might start you out with a small troop of infantry, who have to hold out long enough for a tank column to relieve them. Another might give you a big

> force up front, but no backup to speak of. It adds some much needed variation to battles, especially as the maps they take place on are incredibly bland and samey (another thing that improves in later

chapters as things get weirder).

Let's talk about those units. Fans of World War II wargames might expect their tanks to be mobile fortresses, but *Möbius Front* is set in the '80s, a period when the proliferation of anti-tank weaponry made armour far more vulnerable than before. Even the basic squad has a rocket launcher capable of taking out most vehicles in a single lucky shot, and you learn how quickly your tanks can go down to a squad hiding out in the woods. By introducing a symmetrical conflict that the real '80s never really experienced, *Möbius Front* gently guides players down this

NEED TO KNOW

WHAT IS IT? Indie spin on hex-based wargaming

EXPECT TO PAY \$20

DEVELOPER Zachtronics

PUBLISHER In-house

REVIEWED ON Intel i5, 16gb RAM, Nvidia GTX 1660

MULTIPLAYER

LINK zachtronics.com/

realization, and towards the power of cheap anti-tank weapons like the fearsome TOW Jeep.

TREAD CAREFULLY

Tanks still have a use, not because of their toughness, but because of their mobility. They can both shoot and move, which gives them a huge advantage. Units that can't do this, which is most of them, risk accidentally revealing an enemy that shoots them to pieces before they get their own turn. In contrast, infantry are slow moving, short ranged, but surprisingly durable, especially when they hide in a forest (which protects them from attacks from non-adjacent units). Some of my greatest victories came from high risk helicopter insertions, dropping a squad off in hostile territory, forcing the enemy to take several turns clearing them out while the rest of my army caught up.

What's impressive is just how approachable all this is. Everything I've described here is incredibly easy to grasp, bar a little early confusion over which units can shoot and move. But if Zachtronics has managed to eliminate most of the potential lows, there also aren't a lot of highs.

There's a nice mental chess to working your way through each level, and plenty of challenge, but there's a real lack of 'I'm a genius!' moments or desperate comebacks, as combat plays out more or less as you'd expect. I can't think of a single anecdote where a heroic unit won me the day, or a last desperate shot turned things around. The emphasis on grinding out wins, coupled with the generic and disposable nature of the units, can make missions feel interchangeable. This, coupled with slow pacing, makes for a game that can please, but never truly excites.

ADIOS MON ARMOUR Five ways to kill a tank



INFANTRY SQUAD Hide in a tree, shoot it with a rocket.



ANTI-TANK SQUAD Hide in a tree, shoot it with a rocket from far away.



OTHER TANK
Perfectly
symmetrical
violence never
solves anything.



TOW JEEP
A rocket strapped
to a car. Probably
safe if you keep
your head down.



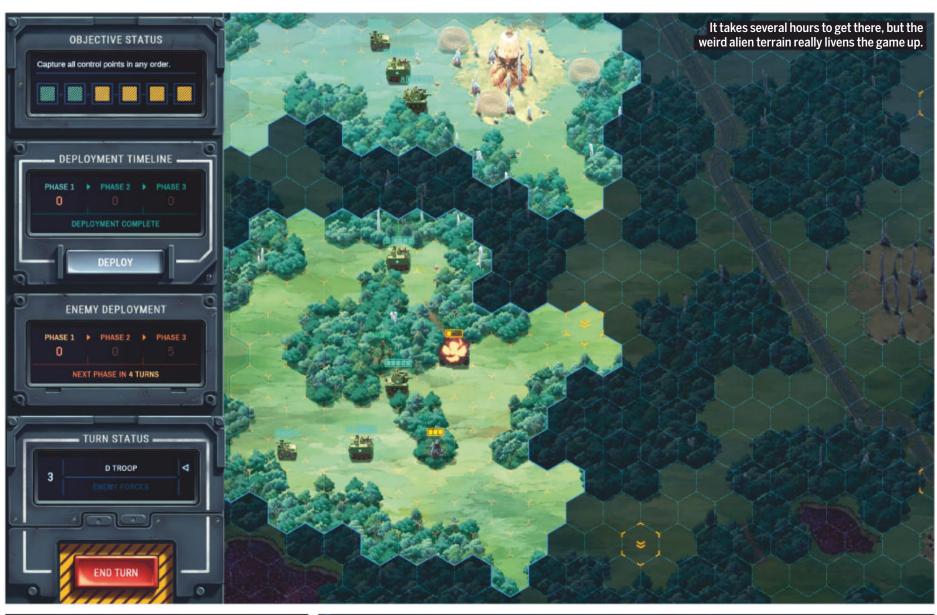
ATTACK HELICOPTER Invincible and unstoppable, until the anti-air arrives.

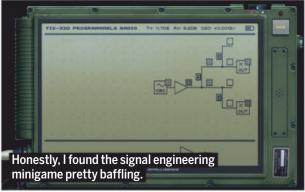
PC GAMER

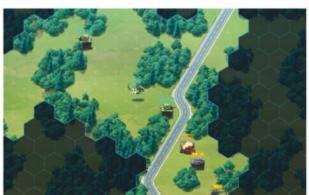
Möbius Front '83 certainly makes a difficult genre easy to understand, but it does lacks some thrills.



Möbius Front '83















OLD GAMES REVISITED by Matthew Elliott







MYTH CONGENIALITY

Battering ancient beastaries in CASTLEVANIA: LORDS OF SHADOW

reckon that Lords of Shadow is that school pal whose company you enjoy, but you never get around to calling. Brooding. Bit intense. Always killing magical beasts. You know the one. Being reunited with them feels natural and immediate, but there's always a danger of them completely losing it. "Gabriel! Great to hear from you. Sorry it's been so lon... yep, no, I'll hold while you kick the ass of a satyr. How's Marie? Oh."

Who wouldn't

want to

kill monsters

with an

oxymoron?

Even so, it's nice to be back together. There's something about the presentation in *Lords of Shadow* that's like rewatching a Jim Henson movie from your childhood, albeit one with more strangulation and

weeping. You can feel and see the age of it, especially compared to what we're used to now, but there's a solid honesty to it that's rewarding. The fixed camera angles would be an outrage in a modern 3D action

game, but here they impart a sense of craft. It's an opportunity to show off some of the game's spectacular vistas, or, in the case of Pan's level, a reason to make every opening look like a vagina. To keep the Henson analogy: You can see the puppet strings, but you're happy to ignore them.

It's also achingly sincere. There are no winks to the audience. There's

little in the way of comedy relief. And while Gabriel might share some of his acrobatic prowess, he's the antithesis of Nathan Drake.

That leads neatly to the Combat Cross. Let's say that again, just

because it's intensely pleasing. Combat Cross. Who wouldn't want to kill monsters with an oxymoron? It's like the Leatherman multitool of murdering cryptids. It stabs! It strangles! It flays! It could probably even

be used as a normal cross for Jesus things if you washed off the werewolf gristle. It's also a joy to use. There's one move I love so much—a somersaulting ground attack with a delicious indifference to both whip physics and gravity—that I rush to unlock it at the expense of any sort of scaled progression. And if you needed another reason to love it—and you

NEED TO KNOW

WHAT IS IT? Kill Magical Beasts To Sad Music: The Game

> EXPECT TO PAY \$30

DEVELOPER MercurySteam

PUBLISHER Konami

REVIEWED ON Intel Core i7-7700 CUP @ 3.60GHz, 16 GB RAM, NVIDIA GeForce GTX 1070, Windows 10

> MULTIPLAYER No

LINK bit.ly/37vgB7w don't, you wretched pig—it's motivation to sit and think about which other peace symbols could be weaponized. Napalm Rainbow, Chainsaw Dove, and so on.

I'm also a fan of how little effort has been made to hide the game's influences, whether it's Unchartedstyle traversal, puzzles from *Professor* Layton, or a boss fight that's brazenly borrowed from Shadow of the Colossus. It's like a meal plan designed by a child, in the best way. Who says you can't have Swiss roll with your baked beans? Follow your bliss, Castlevania. It makes for lurching, revelatory experience, that retains the power to surprise even on a second playthrough. This 'selection box' approach to game design should feel like a tonal rollercoaster, but the previously mentioned sincerity helps things stay consistent. Because whether he's riding a spirit horse or saving his ghost wife from a swinging pendulum, you can bet Gabriel is definitely miserable.

PC GAMER

VERDICT

Lords of Shadow is big, sad, brilliant, and silly, but a clumsy sequel means we'll likely never see its like again.



RUNE PLANNER

Scenes unfurling in THE BANNER SAGA

he Banner Saga is a throwback to a time when it felt like Kickstarter would change game development. A time when developers would come to us, like a cursed genie in a Blumhouse movie, and promise scandalous things we'd barely dared dream of.

I'm extremely glad Banner Saga exists. I'd probably have backed it just to get the interactive map—a sprawl of glowing mountains and detailed descriptions which feels like the natural extension of the fantasy worlds every child with an imagination draws. But the game itself is lovely: Snippets of sharp, tactical fighting surrounded by a warm blanket of Norse storytelling, stirring music and plodding animations of people walking through striking mountainscapes. I like how stern it is-mistakes feel costly, and you have to think deeply

about every decision. The character classes, too, are a pleasure to slowly uncover. For a game with 12-foot horned giants, it's surprisingly effective at making me want to use other units. Why would I pick someone the size of a shipping container when I can select a fighter who can attack *diagonally*? The way the skills all chain together is a delight—perhaps more so because there's a sense that you've uncovered something mystical and hidden, thanks to the slightly opaque systems. This is probably the biggest

This is probably the biggest criticism. *The Banner Saga* is bad at establishing its rules, but I'm far more into the setting: a place of roaring hearths, pine forests, and ripe meats. In this respect it's like the turn-based equivalent of a getting runic tattoo: Occasionally hard to read, but it looks uncommonly handsome and pleasingly intricate.





NEED TO KNOW EXPECT TO PAY

DEVELOPER Stoic

PUBLISHER Versus Evil



WARHAMMER 40,000: SPACE MARINE

his month's theme, apparently, is 'games that could be '90s thrash bands'. And Warhammer 40,000: Space Marine could only be more metal if it swapped out the Ultramarines—the Adeptus Astartes equivalent of stonewashed jeans-for the Dark Angels, a chapter that's so metal it's screamwanking to Obituary in a coffin. But really: Who cares? This is still a game where you control a seven-foot, xenophobic anvil voiced by Mark Strong, as you stamp, cut, smash, crush, and chainsword your way through legions of expendable orks. It's also something of an anomaly, because it's a 40K game that's actually good.



GRAVEYARD KEEPER

I t feels like running a cemetery should neither be that difficult or that exciting. Wait till people die. Dig hole. Fill hole with body. But Graveyard Keeper manages to find a surprising degree of complexity in what's essentially a capitalist corpse-management game in a dead skin mask. And, in fact, that complexity can sometimes feel like corpse bloat, with multi-step quests that belie the game's apparent simplicity. It's also exceedingly grindy—perhaps, if we're being charitable, in a way that recalls the endless wheel of life that will eventually grind us to dust. 70 Hooray! And sigh.

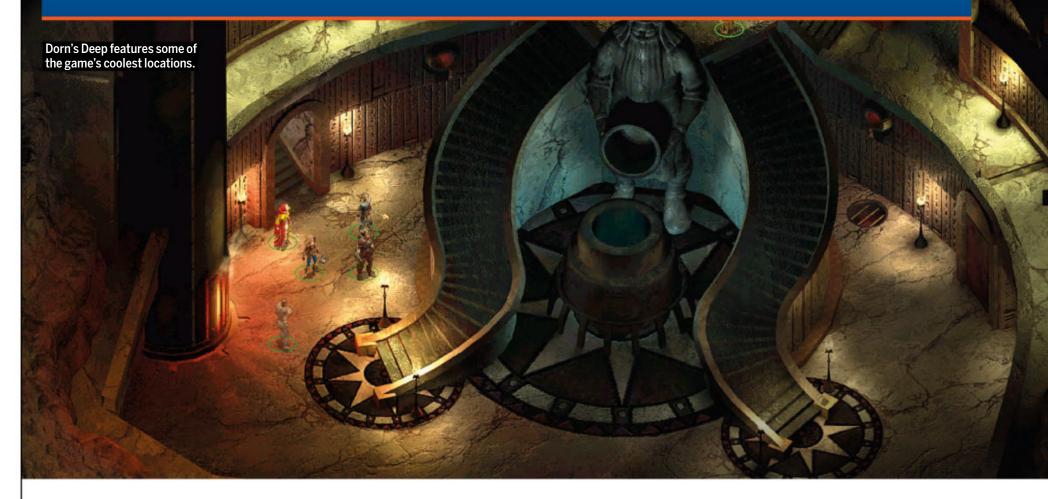


BRÜTAL LEGEND

dmittedly, this one is a cop-out. ${
m A}$ It's the obvious encore; Metallica coming back on stage to play Enter Sandman. Yes, there's something not-very-metal about a game that's actually about rock music, but Brütal Legend is an enjoyably free spirited anomaly. In the socially-awkward high school of game design, if Jonathan Blow is allowed to make a game about thinking then Tim Schafer can make one about guitar solos and umlauts. And he did, and it 69 rocks pretty hard.

EXTRADE

CONTINUED ADVENTURES IN GAMING



"Nowhere near as devoid of storytelling as I'd been led to believe"

Feeling the chill in ICEWIND DALE—and discovering it's still worth playing today



hen the weather gets colder and the days grow shorter, I find myself longing to play a cosy Infinity Engine

RPG. Usually it's my old favorite, Baldur's Gate, but this time I wanted to try something different. For years I'd heard Icewind Dale is like Baldur's Gate but with most of the dialogue, quests, and storytelling stripped out, which always put me off. I love talking to people in these games, more than dungeon crawling, so I never dreamed it would be for me. But I thought I'd drape myself in furs and head to Faerûn's frozen north anyway, if only to reassure myself that I wasn't missing out on something great.

NANDY KELLY



THIS MONTH
Discovered an overlooked
gem in the snow.

ALSO PLAYED Neo Cab

Turns out I was. *Icewind Dale* is a really great RPG, and nowhere near as devoid of storytelling as I'd been led to believe. It still tells a great fantasy story; it just does it in a much more streamlined, efficient way. There's no long, elaborate intro sequence to plod through here. You and your party, or a lone hero if you've bravely decided to solo the game, start the adventure throwing back mead in a tavern with a

crackling fire. Within ten minutes you've accepted a quest to venture into the snowy wilds of *Icewind Dale* and begin your adventure in earnest. No nonsense.

Most of the story in *Baldur's Gate* happens in its many towns. You spend a lot of time wandering around settlements having conversations with people, but *Icewind Dale* is positively antisocial in comparison.

There are just two towns in the game—Easthaven and Kuldahar—and you only visit them fleetingly. Mostly

WITHIN TEN MINUTES YOU'VE ACCEPTED A QUEST TO VENTURE INTO THE WILDS

THE GAMES WE LOVE RIGHT NOW



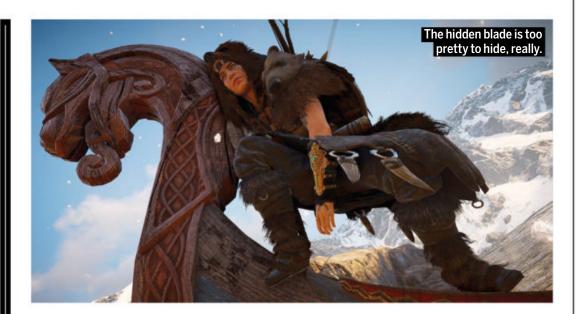


it's just you and your party traipsing through catacombs, caves, and crumbling temples, with only the phase spiders and goblins for company. But what sets *Icewind Dale* apart from other IE games is how much of the narrative is relayed through the dungeons themselves.

GOTTA HAND IT TO THEM

The Severed Hand is a great example. Long ago, this elven fortress was a bustling, thriving place, home to thousands. But after a run-in with some suspiciously powerful orcs, it fell into ruin. When you arrive, you find the place destroyed, teeming with creatures, and haunted by the ghosts of the elves who didn't make it out. And through them you learn about the Hand's past glories, and the truth behind the orc invasion. It's as rich a piece of storytelling as anything in *Baldur's Gate*, and I can't believe I almost missed out on it.

The problem with *Icewind Dale* is that it's monster hard. You really have to dig into the intricacies of the D&D-based real-time-with-pause combat, making clever use of everything in your magic users' spellbooks. Some battles seem impossible at first, but luckily this game has been around for decades, and there are endless forum threads stuffed with strategies to get past them. But get past the occasional brutal difficulty spike, and you'll find an RPG that tells a great story, just in a different way from the other games it shares an engine with.



"One horned helmet away from cliché"

ASSASSIN'S CREED VALHALLA's furry fun

IAN EVENDEN



THIS MONTH
Dropped to 150th in the queue for an RTX 3080.

ALSO PLAYED Watch Dogs Legion, The Falconeer



alhalla sees Assassin's Creed give up on the stealth gameplay it championed when Altaïr went crusading

way back in 2006. These Vikings are not subtle people. For all the beauty of their woodcarving, smithery, and tattooing, their willingness to charge headlong into battle, marks them out as decidedly non-stealthy.

It probably doesn't help that my Eivor is dressed like a bear. When enraged, a bear is nine feet of ferocity. My presence in the cloudberry bushes is obvious even before you see the bow sticking up.

The bear armor is a berserker set, which gives combat bonuses including faster healing and increased attack power on the unlikely occasion, ahem, that I get knocked down. I've socketed it with rage runes too, and am just one horned helmet away from ahistorical cliché. Even in the deepest snow, Eivor keeps her

midriff bared, forever a slave to game devs' idea of appropriate cold climate wear.

BEAR IN THE WOODS

Eivor's decision to wear the hidden blade on the outside of her wrist is a statement on behalf of the game as a whole, that these are now overt ops. I've not yet come across a situation that mandated stealth beyond getting up high to air-assassinate a lone figure, or climbing a wall to pull some unfortunate over the rampart. Beginning in Assassin's Creed III, the technique of hiding in the long grass and whistling to lure a single bad guy over, before reaching out for a one-hit kill became so embedded in the series it began to leak out into others, such as Horizon Zero Dawn. Circling the bandit camp or British fort like a tiger/puma/geographically accurate predator of choice gave a mighty sense of power, especially once you could call on Far Cry Primal's owl binoculars to fill in the gaps you couldn't see.

The furry costume probably has another drawback too. The only wash Eivor has had recently is when I dived into a lake to retrieve a comb for a nice lady. Since then she's not stopped raiding, carousing, hunting, looking annoyed in cutscenes, and mining iron ore. Put bluntly, as is the Viking way, you can probably smell her a mile off.

THE GAMES WE LOVE RIGHT NOW







"It brings a horrifying new meaning to 'you are what you eat"

BUGSNAX is the perfect combination of cute adventure and food-infused body horror



his looks exactly like the kind of adventure game I like. I went into it thinking along the lines of *Slime*

Rancher or Ooblets, quirky games where you can run around catching cute critters alongside a breezy story. I was ready to greet Snaktooth Island's creepy-crawly residents with open arms. Little did I know that this whimsical world has a sinister underbelly.

For a species that is pretty creepy in concept, the half-bug, half-snack creatures radiate adorable energy. The bugsnax have giant eyes, cute voices, and little emojis pop up above their heads to show how they're feeling. They've been designed to radiate maximum cuteness (as cute as snack food can get). Who knew that adding a pair of googly eyes to snack foods would make them instantly charming?

Most bugsnax will scuttle away into a nearby bush for safety when you approach, while others will charge towards you in a fit of anger. Even in the times when I'm running away from what is essentially a tin-foil potato with pincers, each bugsnak manages to melt my heart.

PRACHEL WATTS



THIS MONTH
Fed a sentient Oreo to a furry bean.

ALSO PLAYED
Carto, Sakuna: Of Rice
and Ruin

My first task after I arrive on the island is to catch a strabby for Filbo, the mayor of Snaktooth Island, to eat. I return to the grumpus ready to give him the little strawberry creature, but as I attempt to hand it to him, he opens his mouth expectantly. I pause for a moment, confused, as he stands there with his giant maw agape in anticipation. I hold the strabby suspended above him and nervously bring it down into his mouth, and the grumpus snaps it up. Down the gullet the strabby goes.

As the strabby gets digested, part of Filbo's forearm gets transformed into a strawberry. He seems perfectly happy with this transformation, even

MY FIRST TASK AFTER I ARRIVE ON THE ISLAND IS TO CATCH A STRABBY FOR FILBO

if it means he now doesn't have any fingers on one of his hands. It's one thing to have creepy lust for sentient foods, but it's another to shrug off their body-altering side effects. It brings a horrifying new meaning to 'you are what you eat'. I don't think the developer was necessarily going for a cute-but-creepy style of terror, but it's hard to ignore the body-horror elements in *Bugsnax*.

FIFTEENS

Another grumpus, Floofty, is a scientist who is obsessed with the transformational powers of the bugsnax, and asks you to change every part of their body completely into snacks. After many sacrificed bugsnax, the experiment is done. Floofty is now a mix of cakes, crisps, kiwis, taco shells, weenies, popsicle sticks, and who knows what else. The transformation was a complete success. They are now 100% snack.

My time on Snagtooth Island has been a strange one. I love anything that walks the fine line between cute and creepy and *Bugsnax* does exactly that. I do actually remember seeing the credits roll, so I must have finished the game, although I'm not sure if what I saw was the ending or a food-infused fever dream.

"This time it's just me, two jugs of coffee, and a sausage dog on my lap"

Making Rambo look like Columbo, in **OPERATION FLASHPOINT**



t's been 20 years since I first played Operation Flashpoint on PC Gamer's demo disk, and now here I

am back on the islands of Malden, Everon, and Kolguchev.

I've returned in pursuit of nostalgia. The clan and friends I made (and even met) are now long-lost family men like myself, and its once bustling wider community of modders has all but evaporated, many pledging their skills to *ArmA 3*.

For everything it's lost, going back to this old game feels like a breath of fresh air. There's a pleasing simplicity to its approach—devoid of all of the more exhausting trappings of modern gaming, it's a doorway to pure shooter escapism.

Although browsing servers in *Flashpoint* was retired with Gamespy, I can still go Rambo and play its greatest co-ops alone as a local host.

The mission I choose is called 'Lost Squad', and it's *Flashpoint* at its finest. I'm part of a detachment of US troops in a town that has just survived a Russian onslaught, and it's my job to hold off another attack, then find transport to another town,

JOHN STRIKE



THIS MONTH
Got told off in a pub for talking to another table.

ALSO PLAYED Half-Life 2, Dirt 2

steal a helicopter, and escape. It's strategically senseless, but great fun.

The sheer scale of these islands (some are as big as 100km²) is what really helps magnify the feeling of isolation in missions like this. With my team long gone, this time it's just me, two jugs of coffee, and a sausage dog on my lap.

FLAKES AND LADDERS

First I gear up with mines and satchel charges, then run to the nearest working truck and rush it round to the front of the village. I lay a line of remote charges to soften up the tanks, and then mines to finish

ONCE THE TRAPS ARE SET I'VE GOT SECONDS BEFORE RUSSIANS START ARRIVING

them off. The satchels are ten steps apart, just like in the old days.

Once the traps are set, I know I've got seconds before those dastardly Russians start arriving, so swing my truck down to an abandoned enemy tank. Its tracks are out, but the cannon still works a treat. The graphics are so bad it looks like it's made out of those green paper towels you had at school.

As the horizon begins to brim with enemies, I blast off a few anti-infantry shells, sending bodies skimming across the floor in comedy fashion. An overhead shell has wrecked my truck, so I run back to the village on foot and take cover in my favorite Alamo house.

As the four heavy tanks roll down towards my charges, I peek at them through the window, and decide to climb a ladder to the top storey for a better view. Sadly, *Flashpoint*'s cumbersome menu system interchanges the 'climb ladder' and 'detonate charges' options, so as four massive explosions prematurely go off outside the house, a flurry of gunfire kills me while I stand staring at a pixelated ladder.

It's an undignified end in an otherwise ugly but dignified game. ■









LEAGUE OF LEGENDS

Item overhaul makes LoL much more approachable. By Steven Messner



othing is more daunting about League of Legends than its item system. As if it isn't bad

enough that new players have to step into an arena with over 150 unique champions—each with their own abilities, strengths, and weaknesses to memorize—they also have to know what equipment to build in order to make their champion viable. It's already fatal to step into a lane against an enemy Darius not knowing that he can pull you in and lacerate you several times so you slowly bleed out. But doing it with the wrong gear is a surefire way to lose the game for your entire team (and really make them hate you a lot).

It's a hopelessly complex system, but massive changes in *League of Legends*' 10.24 patch have made it much easier to grasp. If you've ever toyed with the idea of playing *League* but felt intimidated, its overhaul of items and the in-game shop where they are purchased makes the game much more approachable.

Since *League of Legends*' launch all the way back in 2009, players have had to sink or swim when it comes to understanding how items work. Considering this is what ultimately turns your champion from a wet napkin to a murder machine, it's frustrating how little guidance the system provides. There used to be 175 of them, each affecting your stats in subtle ways or giving you powerful new abilities.

It gets even more complicated:
Items are also used to craft more
powerful items. Before these changes,
that Longsword you bought at the
beginning of the match might be
needed to eventually build Phage,
which gives you a nice boost to attack
damage. Later on, Phage becomes an
ingredient needed to build Trinity
Force, a powerful but complex item
that gives you HP, mana, attack
damage, attack speed, cooldown



reduction, movement speed, and comes with two passive abilities.

SHOPPING SPREE

Much of the reason why this was so complicated was due to the in-game shop and how it was organized. Players could make custom shopping lists (or use addons that did that automatically), but you were still staring at a grid of icons that meant nothing unless you understood what each of those items did. More advanced players would also need to know when certain gear was actually

SHOPPING SPREE

An overview of the new interface

This sidebar expands when you mouse over it, showing you fewer essential items like potions, wards, and boots.

2 'Suggested items' displays what you should be building along with descriptions that explain the playstyle that item enables.

The build tree shows you how items combine to build into more powerful items for later in the game.



This shows you which enemy champions an item is good against. Great for shutting down an enemy's best player.

5 A quick description panel that covers the stat boosts and abilities of a given item in easily digestible form.

You can sort by 'all items', which filters based on champ type and class, or access pre-made item sets.

useful, because there's no point in building equipment that boosts your armor if the enemy team is only dishing out magic damage.

Patch 10.24 reinvents the item shop in many crucial ways. A new Recommended section doesn't just list the kit common for that champion, but also dynamically suggests items based on the enemy team. If I'm a melee character facing off against a ranged character in the top lane, it might suggest a Doran's Shield to help me better survive all the cheap shots the enemy will take at range before I can really do anything to fight back. I don't have to stick with the Doran's Shield, though, because the shop always gives you three viable options to choose from and shows you which enemy champions each item is best against.

Instead of needing to memorize complicated build guides for their chosen champion, the new item shop

PATCH 10.24 REINVENTS THE ITEM SHOP IN MANY CRUCIAL WAYS

does much of this heavy lifting for you. Once you've completed your first big piece of gear, it'll suggest you start working on a second item that makes sense for your champion. While advanced players might prefer to make their own choices, it's easy to follow these recommendations and succeed. It's fantastic for new players.

Patch 10.24 turns one of *League of* Legends' most obtuse systems into one of its most intuitive. I love how often the Recommended section points out an item that I never would have considered but, in the moment, is clearly the right choice. The only big issue is that, initially, many of these items were woefully balanced, but hotfixes have helped. It's to be expected, though. With the World Finals wrapped up and a new competitive season looming in 2021, now's the time to experiment and make mistakes. But League of Legends' new item shop is no mistake. It's one of my favorite new features added to the game in a long time. Once the meta settles after some much-needed balance changes, I can't wait to dive into a new year of competitive *League*. ■

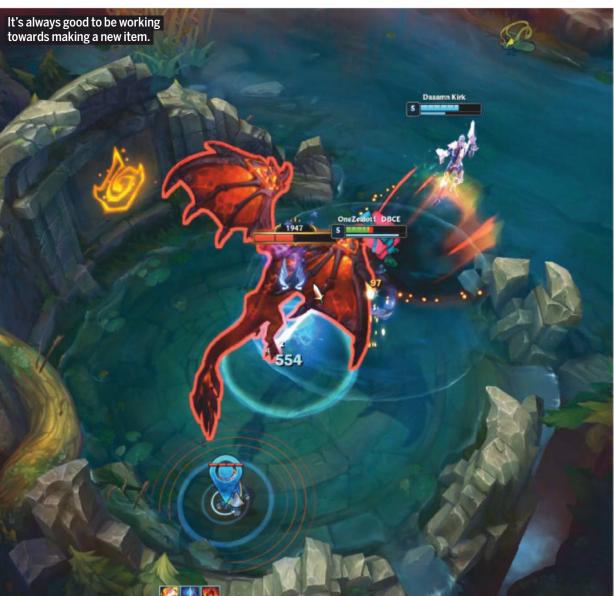
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MOD SPOTLIGHT

MAJOR MODS, ANALYZED









SIM SETTLEMENTS 2

Tune up Fallout 4's settlement system. By Chris Livingston



aiders attack my settlements in *Fallout* 4 pretty often, but they've never taken hostages before.

And now I have to go out into the woods, where the raiders have guns trained at my settlers' heads, to save them. Dialogue options give me the choice of trying to pay the raiders off with caps or trying to talk my way out of it. Since my silver tongue has gotten me out of plenty of jams in the past, I tell the raider in charge that I'm sure we can come to a peaceful resolution.

"Nope," the lead raider says. "They die." And he immediately shoots one of my settlers in the head, point blank. A proper bloodbath follows.

All of this—raiders capturing my people, offering me a chance to talk things over, and then ignoring me—is a big shock, and that's just a few of the surprises in the *Sim Settlements 2* mod. Like the original *Sim Settlements* mod, it overhauls the settlement creation and management system in *Fallout 4*. But *Sim Settlements 2* also adds a helping of something else *Fallout 4*'s settlement system has always lacked. Drama! Yes, it's got lots of great new building systems, but it's also packed with new characters, stories and quests.

After first installing the mod, I head to my Sanctuary Hills

settlement. I've got beds scattered here and there, some defenses strewn around, and enough food and water sources to keep the population satisfied. But it's never felt like a real settlement where people live. I've only done the minimum to keep the numbers in the green.

But with the mod running, a rather handsome stranger suddenly arrives, offering me a new piece of equipment called an ASAM sensor. The sensor allows me to zone areas on my settlements for construction—residential zones, industrial areas, farming plots, and so on. This is the major underlying system of Sim Settlements 2 (and the original mod). You don't have to build the settlements all by yourself. You mark areas for development, and the settlers do the actual building all by themselves. Very handy.

YOU MARK AREAS FOR DEVELOPMENT, AND THE SETTLERS DO THE ACTUAL BUILDING

Settlements make a great deal more sense this way. Why wouldn't the people joining your settlement build their own homes, place their own furniture, and hang their own decorations? It's honestly a smarter, more interesting, and much more immersive settlement system than the unmodded version. But another nice thing is you can still build as much as you want by yourself. The mod adds new options without overwriting the existing system. Whether you like doing the bulk of the work yourself, or you don't care about settlements so you're happy to leave it all to the settlers, or you're somewhere in between, the mod will meet your needs. You can use as much or as little of it as you want. It's all your choice.

SETTLE DOWN The best settlement sites to plant your roots



STARLIGHT DRIVE-IN It's big, it's flat, and you only need to kill some molerats to claim it. The movie screen makes an ideal sniper spot.



GRAYGARDEN
There's already a
bunch of robots
there to handle
your gardening
needs, plus you can
build on the
overpass above it!



An extremely small footprint doesn't allow for much, but you get to live in a lighthouse and the view is spectacular.



THE CASTLE
It's a real fort, with
protective walls
and existing
rooms meaning
you won't have to
build everything
yourself.



Located in downtown Boston, there's not much room to build, but the location just

can't be beat.

MAJOR MODS, ANALYZED

The ASAM sensor is cool, too, popping up and scanning the surrounding area with a laser, and giving a tinny little corporate speech about its own usefulness. Once I've zoned out a few areas for housing, farming and industrial work, a new settler arrives, some guy named Paul.

Paul is sort of an old coot: Bald, weathered, white-haired, and with friendly muttonchops. I figured he'd just hang around my settlement, do some farming and essentially just be another dude I sprint past without even looking up, just like the rest of those nameless settlers who mill around all day trying to look busy.

But Paul isn't just some randomly generated NPC with a few lines of dialogue and animations. He's a new character, with custom dialogue and, just like the stranger who gave me the ASAM, some really impressive and professional-sounding voice acting. And he's just one of many new characters added by the mod, with more to come as *Sim Settlements 2* releases its episodic content.

Paul has quests for me, too. Once he's settled in Sanctuary, he tells me about a friend of his who's been living in a little shack out in the Commonwealth. Paul asks if I can go find his friend, who he hasn't heard from in a while, to see if he'd like to move into my settlement, too. It's not a major quest, but it cements Paul in my mind as an actual person with a life and history before he suddenly arrived in my game. Plus, I return from the quest with a new pet, a French bulldog, who follows Paul around my settlement from then on.

The stranger has quests for me, too. After showing me how the ASAM works, he heads off to Concord, where he inhabits a hardware store. From time to time he

contacts me with a radio signal I can pick up on my Pipboy, and I can visit him if I want to continue his quest, which is to use the ASAM units to help rebuild the Commonwealth. Sometimes these quests take me to established locations, but some take place in new areas. And new events occur as well. In fact, I'm in Concord talking to the stranger when old coot Paul suddenly shows up, telling me about that raider hostage situation. I had no idea Paul could even leave my settlement. Yet another surprise, and yet another element that sets Paul apart from every other generic settler I've ever met in Fallout 4.

IT PULLS FROM A POOL OF ASSETS, SO EACH BUILDING ERECTED BY SETTLERS WILL BE DIFFERENT

NEW HOMES

There are dialogue options in most of your conversations, so you can roleplay in your chats with the modded characters. And these unique and named settlers even have their own stats, which you can increase by building special structures for them. There's actually a reason to care about your settlement's citizens now, and as your settlements grow, more new characters will arrive. One day I spotted an Assaultron robot hanging around Sanctuary Hills, and it turns out it was not only one of my new settlers but it also had a backstory of its own, revolving around it being haunted by memories of all the people it killed in the Great War.

And the settlement quests aren't just dumped on you in a big pile. The

stranger only makes contact from time to time with new developments and missions, and other settler quests and events are spread out, too. The slow growth of your settlements, and the intermittent nature of the new quests, means *Sim Settlements 2* slots in perfectly with a new playthrough of *Fallout 4*—you won't be constantly distracted or pulled away from the main game by the mod's quests. You can tackle them in your spare time.

The voice work and quests in Sim Settlements 2 have all been great so far, and so is the building system. It pulls from a pool of assets, so each building erected by settlers will be a little different, have a different layout and decorations, or be made out of different materials. While you're running around the world, the buildings will grow and change over time. It gives your settlements a dynamic, living quality, and gives you a reason to spend some extra time there. Just checking to see what new structures have sprouted up, or how existing buildings have changed while you've been away, is a fun activity in itself. And like I said, there's nothing stopping you from building your own stuff just like in the vanilla game. It's up to you how hands-on you really want to be. Some of your settlers' buildings might even give you some new ideas about what you'd like to build on your own.

And as if it couldn't get even better, the mod itself is moddable, which means members of the *Sim Settlements 2* community has already created a ton of add-ons for it. There are dozens of new building plots, new parts that make the asset pool even bigger, and an assortment of other mod-of-a-mod features that expand the amount of content available.

So far, I'm absolutely charmed and extremely impressed with the Sim Settlements 2. More stories and quests will be added in an episodic fashion, but there's plenty to get started with in the first chapter right now, whether you're starting a brand new playthrough or using a save that you've already spent dozens of hours on. Fallout 4 recently turned five years old, so if you're thinking about jumping in and starting over, do yourself a favor and install Sim Settlements 2 first. At the very least, you'll meet some interesting new characters, and at least one French bulldog. Don't you want a bulldog running around in your settlement? I assume you do.

${f DOGMODS}$ Give your favorite canine some love with these Dogmeat mods



MINUTEMAN ARMOR Fur doesn't cut it in the Commonwealth. Armor up your pal, it even has his name

printed on it.



PROJECT CYBERDOG Half dog, half robot, all good boy. And he's still happy as hell to see you. Look as his wee robot legs, aww.



EVERYONE'S BEST FRIEND Turns Dogmeat into a pet, meaning he can accompany you even when you've got another follower.



VAULT SUIT
It's fun to dress up
your dog in the
same outfit you're
wearing. Comes
with optional
sunglasses too.



DOGMEAT REPLACER What if Dogmeat was half snake, half coyote? Well then you'd get this horrendous thing.

NOW PLAYING | UPDATE | MOD SPOTLIGHT | HOW TO | DIARY | WHY I LOVE | REINSTALL | MUST PLAY









GET MORE FROM YOUR GAMES

How to get into WORLD OF WARCRAFT

New and returning players, prepare to brave the Shadowlands. By Sarah James

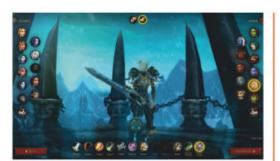
NEED TO KNOW

DIFFICULTY Easy

Ongoing

VITAL LINKS WoW class guide: bit.ly/35xLnNh WoW beginner's guide: bit.ly/2UzPBxy

The best WoW addons: bit.ly/32MSlwn



CLASS DIVIDE

You might find classes feel and play very differently in Shadowlands if you've been away from Azeroth for a while. It's worth trying a few classes and specs using the 'class trial' option before choosing one to level up.



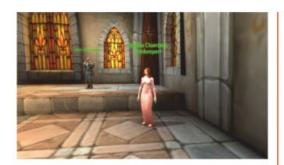
GET AHEAD

If you played through any of the Legion or BFA content, you may have unlocked one or more of the Allied races. These start at level 10, so you can shave off some levelling time by choosing to play one. It's like a boost start, kinda.



BACK IN TIME

Chromie is a new NPC that can be found in both factions' capital cities. Speaking with her once you reach level 10 allows you to choose the expansion you want to level through, up to level 50. And that really helps.



INN THE KNOW

When it's time to log out, ensure you're doing so at an inn or capital city. You gain more Rested XP this way which increases your XP gains from killing enemies when you log in the next day. And you will log in the next day...



SET BONUS

Heirlooms had a rework for Shadowlands and no longer give an XP percentage boost. Instead, they have 'tier set bonuses' which increase the duration of your Rested XP.

WORK IT

You don't need to craft stuff to benefit from professions. Gathering professions grant you XP whenever you interact with a node. Most mats sell well on the Auction House too.





A CUT ABOVE

Even if you're happy with your character's appearance, a visit to the revamped barbershop gives you more options than are available when creating your character. Druids can customize their forms, and all races can now change gender.

WOW YOUR FRIENDS Group up for more fun in Azeroth





ROOM TO GROW

Bag space is in incredibly short supply when you're levelling, so it's worthwhile either buying or crafting some bigger bags to hold all your stuff in. Bag vendors sell them in capital cities, and they can drop randomly from enemies.



FOR THE HOARD

You'll pick up a lot of useless items along the way, but it can all be sold to a vendor for some gold to help you out. If you're just starting out, any source of gold isn't something you should ignore. The flying skill isn't cheap!



KEY TO SUCCESS

The default keybinds are fine, but some adjustment can make things feel more natural. Consider moving the strafe keys to A + D, and hold right-click on your mouse to move the camera. This also frees up Q + E for extra abilities.



MAKE IT PERSONAL

You don't need addons to play WoW, but they can make certain aspects of the game much more user-friendly. Some can also transform the default UI to give it a sleek, modern appearance that you can tailor to your taste.



SLOW DOWN

It's not a race to get to max level and 16 years of content means Azeroth has so much to discover. If you're not in a big hurry, take in the story and explore everything that WoWhas to offer.



NOW PLAYING | UPDATE | MOD SPOTLIGHT | HOW TO | DIARY | WHY I LOVE | REINSTALL | MUST PLAY

THE RULES

Use the Peasant Militia origin.

Never work with nobles, and never buy from them.

3 No looking stuff up on the wiki—we're uneducated peasants. he Darklands. A war-scarred waste where everything preys upon the people: Orcs, goblins, bandits, corpse-eaters, barbarians, giants, great beasts from direwolf to lindwurm, hell, even the dead

come back for us. But the worst monster? The predator that kills more of the peasants than any other? It's a vast parasite, a swollen tick growing fatter off the backsweat of the common man: The nobility.

They raised us up for one of their wars, their endless wars, and they said it was to protect our town. Thirty of us volunteered, but they fed us into the maw of battle, and

only twelve came out alive. The worst part? There were just as many scared, unhappy peasants on the other side. The only people who wanted to be there were the nobles.

Me and these 12 men aren't living by their rules anymore. We're northerners, people of the town of Bokenberg. A

speck on the rolling tundra. Our forefathers labored in the salt pits before the nobles were here, and we'll be here long after the entire House of Rumholt is moldering in their, admittedly expensive, tombs.

We're a peasant militia now, but we'll soon be mercenaries. Eventually the Darklands Peoples' Front will put terror in the hearts of the nobility. Common people fighting for the common people. We'll have no more trade with the nobles, and no nobles among us. And if we get strong enough to take from the nobles, hell, we'll do that too. We may be uneducated, we might not have tomes of lore about the world and how it works, but that won't hinder us. Actually, that probably will hinder us a lot.

I draw up our charter, and we agree on everything in Bokenberg. I'm in charge because I'm smartest, and I do everything that isn't fighting. There are 12 others. The farmhands Thilmann, and Wolfgang, who is good with his war fork. Leonhard, the local poacher, armed with a sling-staff for throwing stones. Walram the Lucky, a

gambler forced to fight. Niels and Ruthard, both day laborers. Sorrel the miller, who was a bad miller, but he brought his own weapon, so we're not kicking him out. Alfred, a fisherman from god knows where—the nobles press-ganged him and brought him north. Fritz the butcher, who we let in for obvious reasons. Then there's the last two members: Alwin the axeman, strong as a horse, and Gebhard, a good spearman. Oh, and Reinhold, the town minstrel. We all thought he was a coward, but he didn't run away in the war. Good enough for us.

PROLE CALL

The laborers and the minstrel and the fisherman don't

even have weapons, so we spend some of what little money we have on a few bludgeons at the market. We make Reinhold sling a bow across his back along with his lute. Bjarne, the town's elected steward, asks us to do our first job, protecting the trade caravan heading a day's travel south. I ask for a bit

of extra money in advance so we can make payroll on the trip down.

After a long, uneventful march we make it to Waidtal, a town across mountains from the northern tundra, between the temple forest and the brittle branch woods. It's in the territory of other nobles, House Rosenving. Their soldiers wear shiny armor and colorful uniforms, but there are beggars in the streets.

We ask one of them, a maimed unfortunate called Leif, if he'd like 30 coins and a wage to become a mercenary. Leif has two lazy eyes and about half his teeth, and the worst white-guy dreadlocks I've ever seen, but he says his mother was a barbarian, so he should be a natural. We give him a metal-shod club, and stick him on the flank.

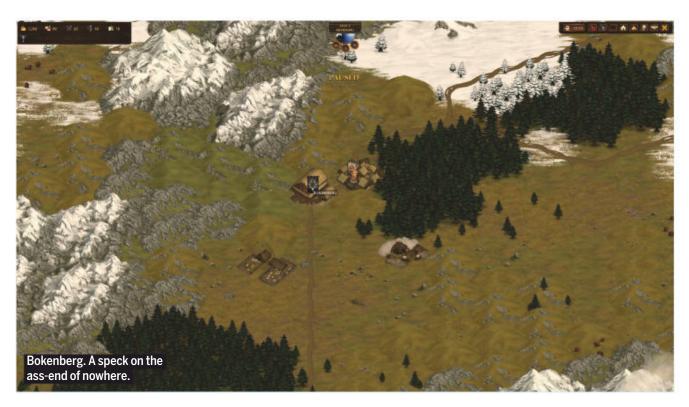
The next job is retrieving a stolen lockbox from some petty thieves. Leonhard the poacher tracks them into the woods, northeast, for a half-day before catching up. There are seven of them spread out among some pretty thick woods. I forget to keep a real battle line together.

Reinhold fires off arrows and Leonhard tosses stones, but they somehow miss every shot.

Neils, Leif, and Fritz are wounded pretty quickly—but not before Fritz takes an arm off a thief with his butcher's cleaver. One of the bandits—who has a real sword, shield, armor—steps up to Alwin the axeman, and takes his head off in a stroke. Ruthard tries to help, and another bandit disembowels him. Alwin's friend Gehbard, roaring, puts both bandits down one after the other with some deft spear-thrusts to the neck and chest.

After the fight, we realize that we could have taken weapons and shields off the enemy dead midbattle. Probably would have helped those of us fighting with farm implements and naught much else.

WE'RE A PEASANT MILITIA NOW, BUT SOON WE'LL BE MERCENARIES



PERSONAL ADVENTURES IN GAMES

PEASANT GEAR Here's what we're using instead of real weapons



PITCHFORK Tossing guts and tossing hay are pretty similar when it comes down to it.



SLING-STAFF A strip of leather on a stick—good for hurling stones.



BUTCHER'S CLEAVER At least one of these is designed to split meat and bone.



NET
Deceptively
powerful—hit
an enemy
with one, and
they're
immobilized!



LUTE
Has a 75%
chance to
stun the
target, but it
breaks after
one hit.

We trek back to Waidtal and collect our reward. None of us can read, but a few can count to a thousand. We count every coin twice.

A trader is headed back north, stopping at the big city of Bolasted, just a half-day from home in Bokenberg. We'd like to see family again. We sign up to guard him. It's a suspicious job though. He's self-assured and offering too little money. He wants to leave town before dawn.

Before we leave, we tell Leif he's a real blooded mercenary now. We give him Alwin's two-handed axe and make him shave his godawful head. We hire an impoverished tailor named Reimar to join the company. He has soft hands, but brought his own dagger. He's still the butt of most of the jokes at the night's campfire.

PEASANTVILLE

The caravan gets ambushed the second we leave sight of town. Like I said, suspicious deal. It's a night attack and we've got no idea who's coming or how many. Reinhold steps forward to get a good look at the enemy's disposition and is rapidly engaged. It's at this point that we realize Reinhold isn't carrying anything but his bow, his quiver, and his lute. He's got no way to defend himself. He manages to slip out of melee and Niels rushes between him and two bandits. It's the last thing Niels ever does.

In the center Sorrel the miller, freshly armed with an axe we took off the other bandits, manages to cut down two enemies in quick succession with strikes to the head.

Lop, lop, two dead bandits. The tailor jumps on another, and like threading a needle, slips his dagger right into the bandit's heart. We will not laugh at the Reimar the Tailor anymore, he's earned our respect.

Meanwhile, Gebhard and Wolfgang manage to peel a bandit off of Reinhold. That leaves just one bandit with a shield and club. In the dark we can't tell if he's wearing a helmet or is just a mass of beard and filthy hair. Desperate, Reinhold pulls his lute and takes a swing: He brains the bandit, stunning him. There's a snap and crack. The stunned bandit drops dead with a fractured skull. Leonhard has hit something for the first time anyone can remember. He seems just as surprised as everyone else.

We make it back north without further incident, but it's starting to feel like the peasants have so many problems that we'll never get around to solving them all. An odd man who makes maps hires us to go scout the temple forest for a place called 'The Grim Tombs'. We find them, observe from a safe distance, and move on. It's a bad looking place, an ancient ruin and a tomb to boot. Leonhard says he's seen places like it before. His father said they're ruins from the old empire 500 years ago. Anyway, easiest 500 crowns we've ever made. We put it behind us. If only we'd known not to go back there. But I get far, far ahead of myself.

Flush with wealth we make Fritz the Butcher give up his cleaver for a proper heavy falchion. He says it's lucky and pouts, but gives in. Later he gets drunk and 'loses' the

new sword, and we give him a month of latrine duty for it.



HOMEWARD BOUND

Making our way back home to Bokenberg, we spot smoke in the distance. Some barbarian reavers burned a goat farm and the headman offers us coin to go burn down their camp in return. East across the tundra we find their camp, guarded by their thralls. They look absurd charging at us, hats made from bear heads, club-cleavers made of sharpened antler. It's not funny when one takes Sorrel the miller's head clean off his shoulders, or when another puts a spear straight through Reimar. So much for the promising tailor, we'd just started liking him!

Leonhard does manage to land a few stones during the battle, which we later joke makes sense since he's used to shooting at animals. For all that the barbarians looked absurd, they do have a good bit of worthwhile loot. Leonhard trades in his sling for



a bundle of javelins. After these last few fights, a lot of the men have gotten experience and new skills, and the income means nobody has an improvised weapon anymore. No more bucklers, no more pitchforks. Real spears, real shields. Gods, this stuff is expensive. Who can pay for these weapons? Oh, right. Those sodding nobles.

By the time we're back, Bokenberg has another problem: Monsters. Something grabbed the sheep and one

of the shepherds. Could be bandits, could be a mountain giant. But we hire some new kids before we leave. Farmhands, all. They look so young.

After a day's trek into the mountains, the monsters turn out to be direwolves. They're huge, but there are only four of them. How bad could it be?

Really bad, it turns out. Leif goes down immediately, his long axe-shaft proving to be little protection against 400 pounds of muscle, fur, and razor-sharp claws. One of the new kids, Gero, takes a look at that and runs. Leonhard the poacher, in his element fighting beasts, hits every javelin shot, taking down two wolves while the others

THEY'RE HUGE, BUT
THERE ARE ONLY FOUR
OF THEM. HOW BAD
COULD IT BE?

distract them. Thilmann, stolid and quiet in his broadbrimmed farmhand's hat, keeps his shield up as a wolf slams into it again and again. Leonhard flanks around and puts two javelins into first one wolf, then another.

As the new kids are stripping the hides from the wolf corpses, we realize that Leif is still alive. The beast ripped his nose clean off. His gut is punctured with a neat arc of claw-holes. He's uglier now, but alive. We have just

enough medicine to keep there until we get back to Bokenberg.

We collect our coins, though it's not enough to make up for what we spent. When you only work for the lowborn, you get paid lowborn wages.

We decide to head back south before winter sets in. The further we get from

our home turf, the better chance we have of finding nobles to loot who can't burn Bokenberg in return. We barter the wolf meat for a sack of grain, buy a couple sacks of salt for trading, and hit the tavern before we leave. Rumour has it that Waidtal has a giant spider problem. We'll stop there on our way to sunnier climes...











Battle for Azeroth.



s I am writing these words World of Warcraft:
Shadowlands, its eighth expansion, is ust a few hours from its official

just a few hours from its official launch. I'll soon embark on a new adventure to entirely new realms filled with entirely new enemies, characters to meet and bosses to grind for loot. It is, without a doubt, the most excited I've felt about World of Warcraft in a long time, and a feeling I've come to cherish over the 16 years I've been playing.

It's easy to see why the launch of any new MMO expansion would be exciting, but there's something extra special about World of Warcraft's modern approach to it. Sure, there's new zones and story quests to explore, but I'm far more enticed by Shadowlands' new progression systems and endgame structure. A lot of MMO expansions go for the more is better approach—*Final Fantasy* XIV, for example, sticks to a template that rarely changes between expansions. The story might be different, but I know that eventually I'll hit the new level cap and start grinding dungeons for a currency that I'll exchange for gear. It works, but it's predictable.

World of Warcraft, on the other hand, takes a riskier approach. Though Blizzard iterates on features and systems, only a few survive the launch of the expansion intact. Most are diced up and blended together with new inspirations to create something new. Sometimes the results sucks, as with Battle for Azeroth's lackluster Warfronts that tried to capture the strategy of Warcraft III battles, but ended up feeling repetitive. But sometimes this

NEED TO KNOW

RELEASED November 23, 2004

OUR REVIEW 94% **EXPECT TO PAY** \$35

LINK

worldofwarcraft.com

TL;DR

If you didn't play them, here's a quick summary of each WoW expansion



THE BURNING
CRUSADE
Go back through the Dark
Portal because demons.



WRATH OF THE LICH KING Remember Arthas? We should finish him off.



CATACLYS M Someone woke up a dragon, and now everything is on fire.



MISTS OF PANDARIA A continent of pandas floating on a giant turtle.



WARLORDS OF DRAENOR The Dark Portal now becomes a time portal.



LEGIONHey wow, we found a lost island, and it's full of demons, obviously.



BATTLE FOR AZEROTH Horde vs Alliance and, oh wait, demons are back.

approach yields awesome ideas. And having spent a little time playing the expansion on the beta servers, I can safely say *Shadowlands* has more than a few of these.

Torghast, for example, is an entirely new type of dungeon that is basically a roguelike built into *Warcraft*. Floors are randomly generated assortments of puzzles and combat encounters, and players frequently earn wild, new powers as they climb to more dangerous levels. And that's just one of half a dozen new features coming in *Shadowlands*.

ZONING OUT

To be fair, this kind of evolution also happens during an expansion's lifetime. Battle for Azeroth also added new zones and ways to power up or individualize my character, but all those were also bound to the overarching themes of Battle for Azeroth's story. Shadowlands, though, is a different story in a different corner of Warcraft's universe. Instead of dinosaurs and pirates, I get to play a World of Warcraft flavored by its different shades of heaven and hell.

In a few hours, *World of Warcraft* will feel like a different game. That's a very welcome change considering

I've spent over two years playing with the same systems.

It's difficult to overstate how important that novelty is. For the first time in several years, I won't have the layout of the new main city memorized. I won't have every

FOR A BRIEF COUPLE OF WEEKS SHADOWLANDS WILL FEEL ALIEN TO ME

dungeon and their associated boss fights memorized so thoroughly I could probably run them blindfolded. I won't know where to get the best loot, or how to quickly travel from one area to the next. For a brief couple of weeks *Shadowlands* will feel alien to me.

It's incredible to feel this way about a game that's this old, but World of Warcraft has a knack for building distinct worlds while still feeling coherent. Coupled with Blizzard's risky decision to reinvent the wheel with each expansion makes the launch of a new one incredibly exciting, and liberating. Out with the old, in with the new.

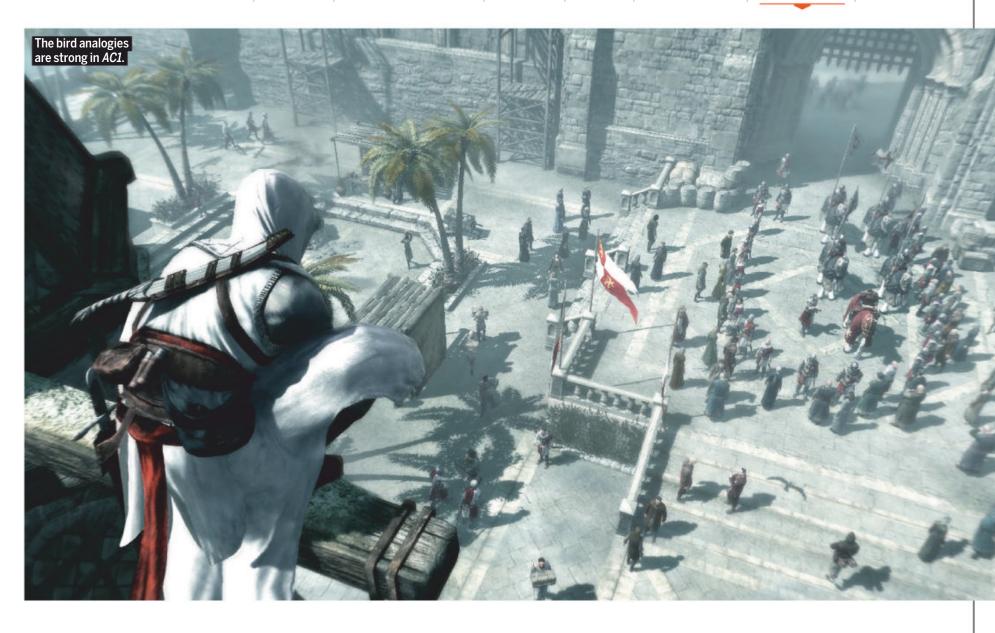


LEFT: Shadowlands has some really gorgeous vistas.









ASSASSIN'S CREED

Novel ideas save Altaïr from falling on his face. By Joseph Knoop

ccording to Assassin's Creed, the fine people of Damascus, Jerusalem and Acre only had about three

lines of employment: Carrying breakable vases on their heads, accosting citizens accused of petty crimes, or just getting 30 miles a day in on their medieval Fitbits. It's a far cry from the endless realms of Valhalla, Odyssey, and Origins.

The original Assassin's Creed cares not for your RPG mechanics, however, fixating almost solely on exploring the world of the Crusades, collecting intel, and assassinating nine Templar leaders. I've contended for years that its brand of social stealth was where the franchise ought to have focused, rather than going bigger and bigger with each

successive entry. I may have been wrong, though.

From the get-go, it's shocking to see an Assassin's Creed game where the protagonist is an unlikable dick. Future entries lived and died by how popular the player character was, and Altaïr is nothing short of a murderous bad boy. Within minutes of knowing him, he stabs an innocent old man in the back, gets one accomplice killed and the other dismembered, and mouths off to his elder like a teething child. When one of Altaïr's fellow assassins chides him for an unnecessary murder, saying "this is not the way," Altaïr responds with "my way is better," which sounds like a phrase you'd see on your 12-yearold cousin's T-shirt.

It doesn't help that Altaïr's voice actor could still land a Razzie by most modern standards. For a game that starts off with the trademark disclaimer about the team's multicultural makeup, hearing a distinctly American voice come out of an ancient Syrian feels like a weird betrayal of that commitment. To be fair, actor Philip Shahbaz is Iranian-American, but little of that identity seems to come through in Altaïr's progression as a character, which unconvincingly transitions from sour grape to remorseful curmudgeon with all the grace of a dead Templar.

Midway through his redemption, Altaïr's leader asks him how he knew he wouldn't kill him as punishment for screwing up. Altaïr's answer is simply, "I took a leap of faith". Woof. To its credit, the ultimate twist of Assassin's Creed's plot (Altaïr's mentor is corrupted by the mystical Apple of Eden, throwing the implied benevolence of the assassin brotherhood into disarray) massively pays off throughout the rest of the

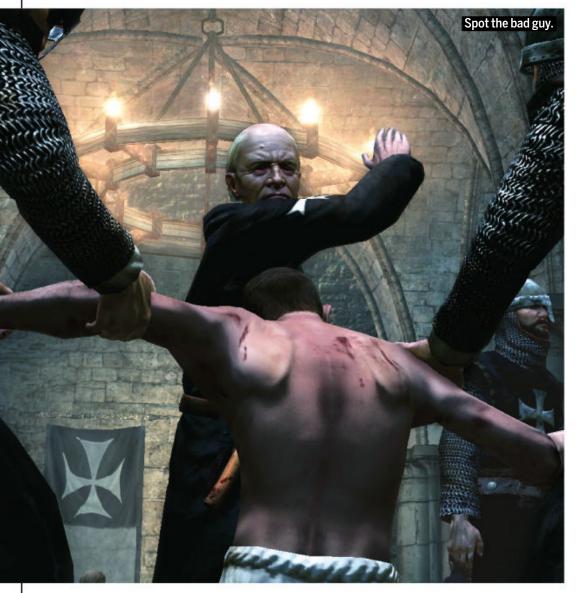
NEED TO KNOW

RELEASED November 13, 2007 **DEVELOPER**Ubisoft Montreal

PUBLISHER Ubisoft LINK bit.ly/3o8MYzE



OLD GAMES, NEW PERSPECTIVES







series. We like to harp on Ubisoft for being 'apolitical' with its storytelling, but the historical fiction of the Assassin vs Templar wars has provided for plenty of multilayered characters and motivations without it feeling like 'both sides' stupidity. Knowing the Brotherhood is fallible, makes its victories and failures that much more meaningful.

SIDE DISHES

Assassin's Creed's strongest portions to this day remain the assassinations themselves. To get to them, though, you have to slog through a city's side missions, which include identical tasks like pickpocketing, beating up rabble rousers in alleys, or rooftop running time trials. That's it for variety, and the inclusion of hundreds of collectible flags doesn't help, but I did appreciate that reconnaissance missions actually gave me a small piece of intel that could, in theory, play into my final assassination.

An early bit of investigation led me to discover that my target, a Templar surgeon in charge of a ward full of mentally ill people, often focuses on his patients to the detriment of his immediate

BEHIND THE HOOD

Assassin's Creed's surprisingly notable actors



KRISTEN BELL

Voices: Lucy Stillman Seen in: Frozen, The Good Place, Veronica Mars



NOLAN NORTH Voices: Desmond

Seen in: *Uncharted, Destiny, The Last Of Us*



PHIL PROCTOR

Voices: Warren Vidic

Seen in: Monsters Inc, Tarzan, Rugrats

surroundings, making him an easier target. It's nowhere near the depth of more immersive games, like stumbling upon some casual cannibalism in a *Fallout 3* town, but it does give you a little more familiarity with your target. Not enough to feel anything terribly personal towards them, but that's where another part of *Assassin's Creed* comes in to play.

Though these days it feels like Ubisoft is more known for huge open worlds, it's impossible to miss how Assassin's Creed influenced the arc of post-2007 storytelling. Each assassination mission kicks off with a cinematic introduction to your target just as you walk up, almost never ripping away from your perspective. When Altair finally plunges the good ol' wrist-blade into his back, players are treated to a sort of side-stage conversation between the two. Each victim gets their monologue, ripping into Altaïr with the bravado you'd expect of a villain, but also with the genuine grief that he could not see the world the way they did.

Though future entries did it with more flair, it's striking that *Assassin's Creed* was confident enough in its storytelling to sow seeds of doubt in



UBISOFT ASSIGNED EACH SIDE OF YOUR BODY TO YOUR CONTROLLER'S FACE BUTTONS

its player. But what is a narrative without a world to tell it in? It's crazy to think that Ubisoft believed it could get away with designing three major cities, an assassin village and a sizeable overworld connecting it all.

CITY SLICKER

And you know, Ubisoft didn't get away with it. Despite Jerusalem, Damascus and Acre being very different regions, each city feels bereft of cultural signifiers besides one or two notable landmarks, like the Dome of the Rock in Jerusalem or the port in Acre. Even worse, each city was seemingly built by the same architect, each building a basic square or triangle as if shunted into place like a Lego block rather than naturally layered over the years. This makes each place feel far too similar to the last.

I wonder too how confident Ubisoft was in its climbing tech at the



time, considering Altaïr gets tripped by anything other than a 90-degree angle. There's nothing quite like leaping over three support beams, swinging through a merchant's stand with some impeccable animation, and eagle-diving into some hay.

Consider me still very impressed by the controls, where Ubisoft assigned each side of your body to your controller's face buttons. It forces you to be conscious of how you're using your body in the moment, be it to shove a man out of the way or sidle around his guard. Nowadays, even *Valhalla* relies on a fairly standard light and heavy attack system that only considers your body when it's time to dual-wield shields.

Then there's the overworld that connects the cities, a large yet surprisingly linear procession of huts and military camps bookmarked only by more towers to climb. It's weird because it shows the scope of Ubisoft's ambition years before it would really nail it. I'd wager it was meant to house much more to do, but instead we just get some innocuous horseback riding.

There's also a number of NPCs that haven't aged well, including the

homeless people exhibiting signs of mental illness who violently shove you, or the small army of beggars that always happen to be women. To Ubisoft's credit, the cast is wellrounded with (mostly male) actors representative of each region.

The crowd loves a show

I realize I've spent much of this ragging on Assassin's Creed, but it's easy to see why this franchise took off the way it did, save for a few resets. Hitman was already on the scene as a sort of social stealth experience, but Assassin's Creed was truly a next-gen horsepower showcase, and it wasn't afraid to show that off. The camera is closer to the player, more intimate, and not so much the typical third person of recent tries. The pacing is nowhere near the breakneck speed of Valhalla, but to see Middle Eastern cities realized so expansively was groundbreaking for the time.

Assassin's Creed is a testament to Ubisoft's strengths as a studio, where scope was just a word and every gamer's natural instinct for historical murder tourism can be explored with some genuine zeal. Altaïr may be a fumbling mess at many times, but he walked so we could run.

NOW PLAYING | UPDATE | MOD SPOTLIGHT | HOW TO | DIARY | WHY I LOVE | REINSTALL | MUST PLAY

FRASER BROWN



Eight games, Robin? And I definitely can't just put World of Warcraft eight times? Seems a bit unfair, but alright...



GROUNDED

grounded.obsidian.net

Obsidian's Honey I Shrunk the Kids homage has reawakened my love for survival games. Its garden is an alien wilderness that hosts a mountain of surprises and tense encounters with creepy crawlies, and it's exciting to venture beyond the safety of my base, beginning yet another perilous expedition.



STAR WARS: SQUADRONS

ea.com/games/starwars/squadrons

A short but thrilling singleplayer campaign and no-nonsense multiplayer makes Squadrons a treasured oddity. Dogfighting feels like magic, and I challenge you not to cheer when you pull off wild stunts from the movies. It's adding B-wings soon, so there's another reason to jump into the cockpit.



TABLETOP SIMULATOR

tabletopsimulator.com

I've not been able to play any tabletop games in person lately, so Tabletop Simulator has really saved the day. It's the next best thing to the real deal, and lots of tabletop developers use it, letting you play their games on the platform guilt-free and for no extra cost. And yes, you can flip tables if you want.



ANNO 1800

anno-union.com

Lots of DLC has appeared since I last played, so I'm once again building a trade empire in Anno, and it's good to be back. It's the best of the series, probably, and the best looking, and I find few things as comforting as sorting out production chains, setting up trade routes, and keeping my citizens chipper.





METRO EXODUS

metrothegame.com

→ I initially thought I didn't like *Metro* Exodus as much as its predecessors, but I recently picked it up again and found myself ploughing through half of it in one sitting. The atmosphere is thick with dread, the guns are wonderful pieces of junk, and, despite the voice acting, I've grown very fond of my train family.



WARHAMMER: VERMINTIDE II

vermintide.com

> Vermintide keeps giving me reasons to return, the latest being a new role for Bardin. The bouncy dwarf can now wield an actual minigun as the Outcast Engineer, which is obviously the perfect weapon for taking out big shrieking waves of rats. Swords and axes seem a bit silly by comparison.



THE SURGE 2

bit.ly/3od1l6f

> I don't have much time for hards-as-nails Souls-likes these days, but I'll tell you what I do have a lot of time for: Games that let me chop off and steal mechanical limbs. If I see someone with a cool blade arm, why shouldn't I take it, and then honor my fallen enemy by using it to kill all of their mates?

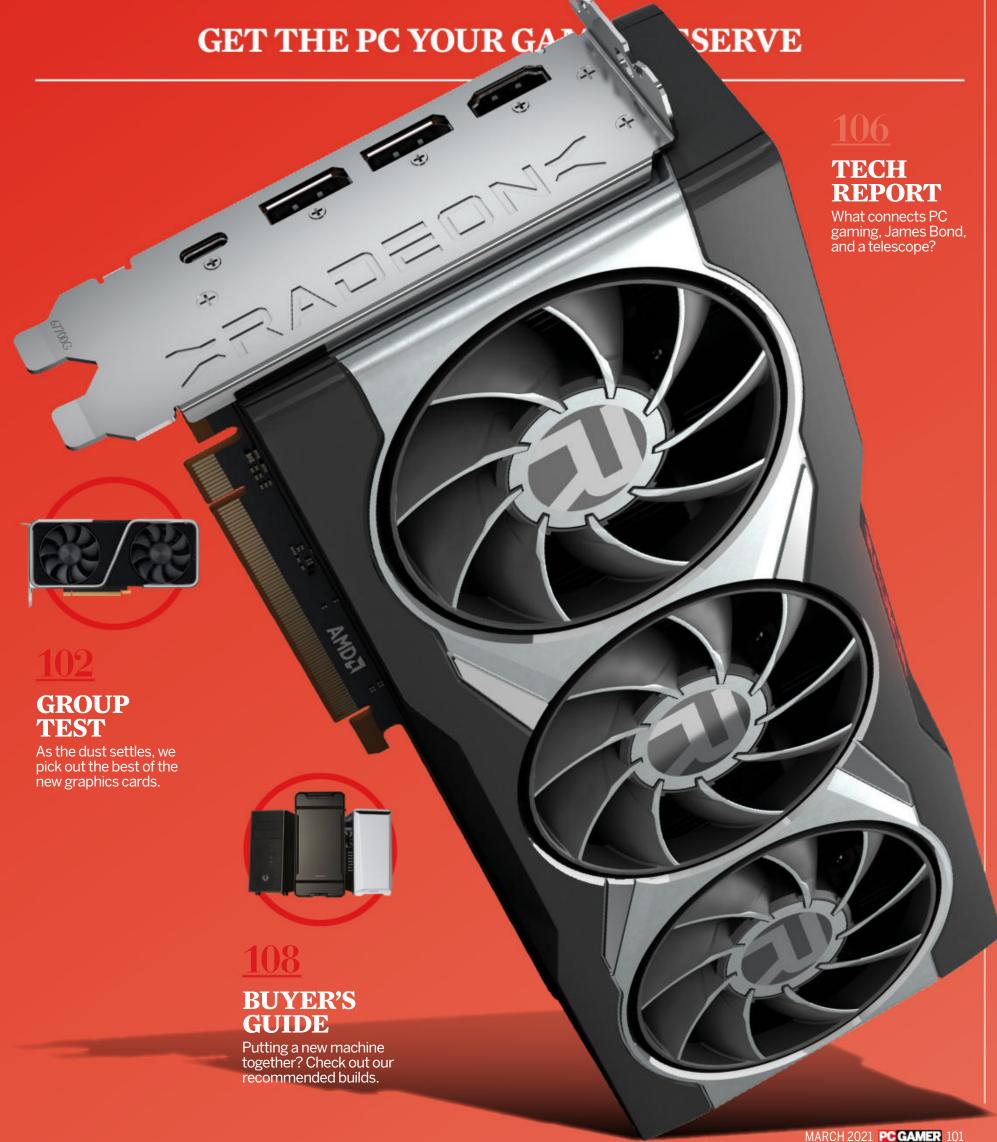


LUCIFER WITHIN US

kitfoxgames.com

A brisk murder mystery that's perfect for detectives with little free time, Lucifer Within Us tasks you with solving a series of deaths by replaying past events, poking holes in testimony, and analyzing evidence. The setting and presence of digital demons aside, it's a surprisingly grounded investigative game.

HARDWARE



GROUP TEST

GRAPHICS CARDS

Out with the old and in with the new.

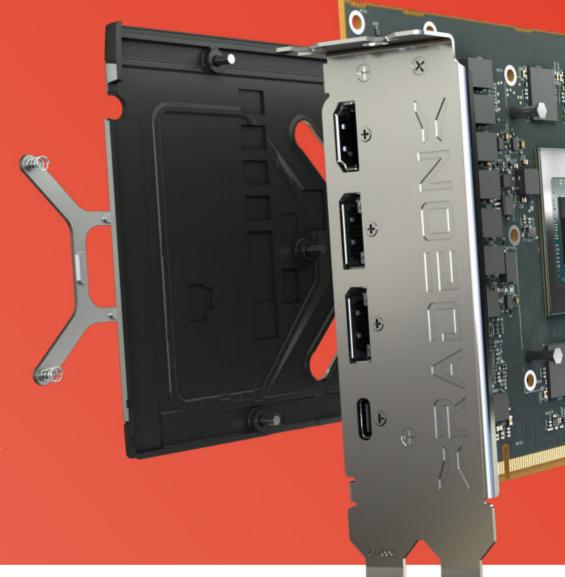
By Jacob Ridley

ith the arrival of AMD's RX 6000 series, we now know how the high-end of graphics cards looks for this GPU generation. At the pinnacle of performance, you've got Nvidia's RTX 3090 sparring off with the RX 6900 XT. That's a fierce match, but the Nvidia card takes the win.

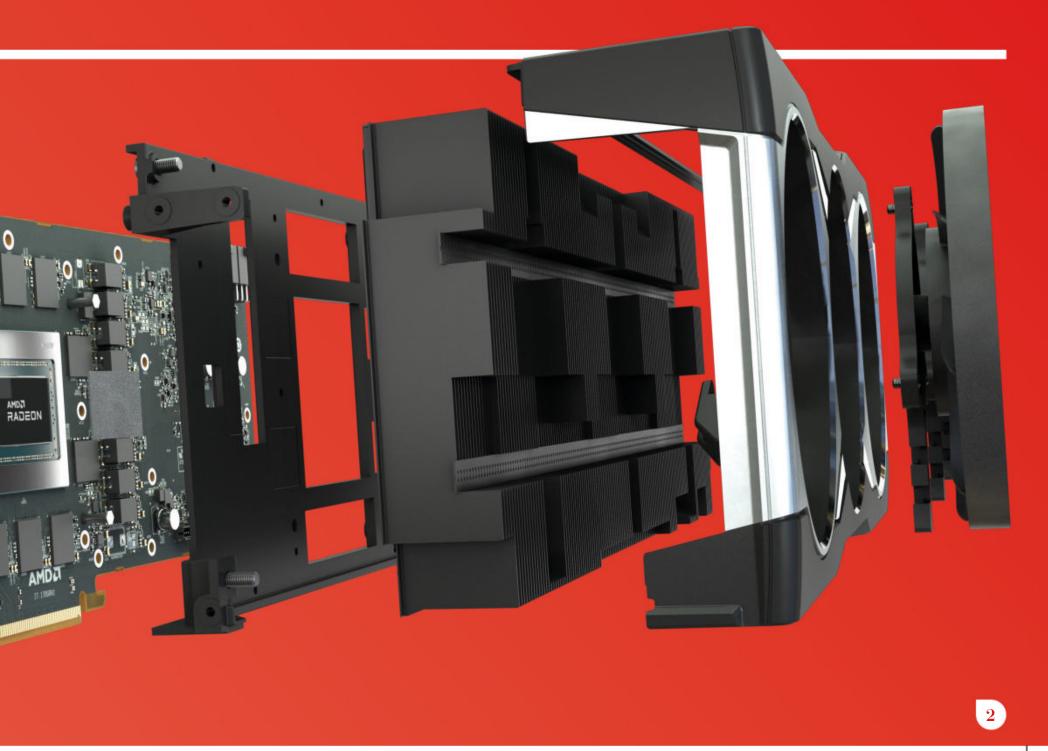
Performance doesn't come cheap—the RTX 3090 will set

you back \$1,499, somehow making the \$999 RX 6900 XT look cheap. Well, definitely cheaper. As ever it's the more affordable cards that have the biggest impact on PC gaming as whole. Or they would, if it were possible to find any of them in stock.

It's important to know exactly what you're after before attempting any risque back alley purchases. And that's where I come in, PC Gamer's resident graphics card fixer.







GeForce RTX 3080

NVIDIA \$669

The graphics card to beat

The RTX 3080 houses a monster of a GPU in the 8nm GA102. With 8,704 CUDA cores, 68 RT cores, and 272 Tensor cores, it breezes past the Turing generation and makes ray tracing look easy. It's an ultra enthusiast card, and as such it often makes the RTX 3090 and RX 6900 XT look a little silly.

It's hardly a cheap graphics, card though, starting out at \$699, but it swiftly despatches both the RTX 3090 and RX 6900 XT in terms of performance per penny. It's also more than a match for AMD's RX 6800 XT, which is a little cheaper at \$649. On top of that you've got the best of the

RTX feature set that Nvidia has been building brick-by-brick over the past few years. Reflex, ray tracing, DLSS, and Broadcast all sweeten the deal for our favorite graphics card today.

The RTX 3080 sets the standard for ray tracing performance. While the 'holy grail' of rendering is still a detriment to overall framerates, the RTX 3080 makes swift work of it, especially with Nvidia's Al supersampling, DLSS, turned on.

PCGAMER VERDICT

- → Incredible gen-on-gen FPS boost
- → Makes 2080 Ti look mid-range
- → Ray tracing isn't a sacrifice

Radeon RX 6800 XT

AMD \$649

RDNA 2 at its best

There are few finer alternatives to Nvidia than the RX 6800 XT.

A highly competitive card that comes so close to its rival, with a nominal performance differential to the RTX 3080, it is truly an enthusiast card worth consideration for any PC gamer with 4K in their sights.

It's a tough call between it and the RTX 3080, but the latter just pips AMD to the post with the final touches à la RTX. The RX 6800 XT delivers high 4K performance and a hefty VRAM increase over the RTX 3080 while being \$20 cheaper. However, it's easy to argue that an extra \$20

dropped on the RTX 3080 is a small price to pay for greater 4K performance, much improved ray tracing, and DLSS. All available today, and with two years' worth of developer support in the bank.

Yet we're still big fans of what AMD has managed to accomplish with the RX 6800 XT, a return to form that injects some much needed competition into the GPU market, and offers a worthy red team alternative for any high-end gaming PC build.

PC GAMER VERDICT

- → 4K excellence
- → Cheaper than an RTX 3080
- → Mediocre ray tracing performance

SPECS CUDA CORES: 4,608 / BOOST CLOCK: 2,250MHZ / MEMORY: 16GB GDDR6 / MEMORY BUS: 256-BIT / MEMORY BANDWIDTH: 512GB/S / TGP: 300W



GeForce RTX 3070

NVIDIA \$499

4K on a slightly slimmer budget

Perhaps the only high-end Ampere that's anything close to reasonably affordable, the RTX 3070 is also impressive for its ability to match the Turing graphics card, the RTX 2080 Ti, for less than half of its price tag.

At \$499 it's still a significant sum—we're talking next-gen console equivalent pricing here—but it's hardly exorbitant when compared to PC gaming's top graphics silicon today. In return, you're gifted a 4K-capable graphics card which doesn't require too much fiddling to reach playable, if not high, framerates. And it'll absolutely

smash it at 1440p, no question about that.

Its gaming performance credentials are undoubtedly impressive, but what makes the RTX 3070 our pick for the sensible PC gaming connoisseur is the entire Nvidia ecosystem underlying the RTX stack today. DLSS is a neat trick for improving performance, with only a nominal loss in clarity, and other features such as Broadcast and Reflex go a long way to sweetening the deal.

PC GAMER VERDICT

- → On par with the RTX 2080 Ti
- → Second-gen RT cores
- → Less power hungry than others

GeForce RTX 3060 Ti

NVIDIA \$399

More affordable Ampere

The cheapest Ampere to date, the RTX 3060 Ti is a close relation to the RTX 3070. While both utilize the same GA104 GPU, the RTX 3060 Ti has fewer SMs enabled. Memory capacity and capability remain the same at 8GB GDDR6 across a 256-bit bus.

While 17% less capable in core count, the RTX 3060 Ti makes up for it with some judicious GPU Boost frequencies. That partially explains why the RTX 3060 Ti can be within 17% to just single digits off the pace of the RTX 3070, despite operating at a silicon disadvantage. Not bad for a \$399 card.

If you haven't already done the maths, the RTX 3060 Ti is 20% cheaper than the RTX 3070, and so performance per pound is on the up with the diminutive graphics card. That's why we love it so; it's a great GPU for the full stack of resolutions, and has decent ray tracing capability to boot, courtesy of its second-generation RT cores.

If the RTX 3080 or RTX 3070 seem out of reach, the RTX 3060 Ti makes for a decent stand-in.

PC GAMER VERDICT

- → A little more affordable
- →2080 Super performance
- →Under £400

SPECS CUDA CORES: 4,864 / BOOST CLOCK: 1,665MHZ / MEMORY: 8GB GDDR6 / MEMORY BUS: 256-BIT / MEMORY BANDWIDTH: 448GB/S / TGP: 200W

SPECS CUDA CORES: 5,888 / BOOST CLOCK: 1,725MHZ / MEMORY: 8GB GDDR6 / MEMORY BUS: 8GB GDDR6 / MEMORY BANDWIDTH: 448GB/S / TGP: 220W

Group Test







4K PERFORMANCE

Back with the introduction of the GTX 1080 Ti, gaming at over 60Hz frame rates while at a 4K resolution has been a possibility with Nvidia's high-end kit. With the introduction of the RTX 30-series, we're looking at 4K performance right the way down to the RTX 3060 Ti.

Not only is it cheaper than ever to buy a 4K-capable graphics card, it's possible to pick up a decent 4K gaming monitor for less. The entire ecosystem for high-fidelity gaming is getting cheaper by the day.

But Nvidia is only one side of the coin. AMD went from zero to hero in the high-end, and its latest RX 6000-series graphics cards are more than a match for those pesky eight million or so pixels required every frame at 4K.

Radeon RX 6900 XT

AMD \$999

If you've money to burn

The RTX 3090 may have sat unchallenged at the top of graphics performance at launch, but we knew it wouldn't be long until AMD rustled together a challenger. The RX 6900 XT hopes to knock Ampere's finest from its perch on high and send it spiralling back down to Earth. And it gets kind of close, too, with 4K performance a little off the pace of the RTX 3090—and all for one third off the asking price.

For that reason, it's simply the better buy for any PC gamer without any ulterior motives of the pro creator variety. But there's a reason it's not number one in our graphics card guide today, and that's simply due to the fact it's not that much better than an RTX 3080, and sometimes not at all.

But the RX 6900 XT does come with assurances that the RTX 3080 can't make, such as its 16GB of GDDR6 memory, which is a whole 6GB greater than the 10GB of (faster) GDDR6X memory on the green team card. The RX 6900 XT is a cheaper alternative to the RTX 3090.

PC GAMER VERDICT

- → Close to RTX 3090 performance
- → But cheaper!
- → Middling ray tracing capabilities

GeForce RTX 3090

NVIDIA \$1,499

Pro-creators only

This colossal graphics card is powerful, but far more fitting of Titan credentials than GeForce ones. It's not built with your average gamer in mind, instead it's targeting creative professionals and compute intensive application acceleration, and that's why it doesn't come with your average price tag, either.

As immense in price tag as it is in stature, the question on everyone's lips is whether it's worth it. For gamers, no. It's not much quicker than the RTX 3080. But for pro-creators, for whom time is money, and where lower render time has a direct

correlation with how much they can earn, the RTX 3090 comes into its own.

It's for that reason that we've placed this card last on our list, but since we know PC gamers will undoubtedly spend ungodly quantities of cash just in order to save face and ensure bragging rights, it's still worth a mention. After all, it is the most powerful gaming graphics card on the planet right now, whether it's a great deal or not.

PC GAMER VERDICT

- → Confidently top of the charts
- → Massive memory buffer
- → Huge and expensive

SPECS CUDA CORES: 10,496 / BOOST CLOCK: 1,695MHZ / MEMORY: 24GB GDDR6X / MEMORY BUS: 384-BIT / MEMORY BANDWIDTH: 936GB/S / TGP: 350W



COSMIC BEATS

The long life of a scientific and cultural icon comes to an end

disjointed, globe-spanning story this month, that takes in the island of Puerto Rico, the University of Milwaukee, spinning neutron stars at the edge of the galaxy, and your PC, via James Bond and a Battlefield 4 multiplayer map.

Where to start? Well, in the late 1950s, nuclear missiles re-entering the atmosphere as part of a Soviet attack were considered to be a bit of a worry. The missiles dropped radar-reflective decoys behind them, and nobody knew enough about the upper levels of the atmosphere to tell the difference between these dummies and the real warheads coming in hot. One way to get this information, it was decided, was to build an enormous radio telescope—a huge dish 1,000ft across—reclined inside a sinkhole on Puerto Rico.

Suspended above this dish would be a 190 ton platform carrying the receivers that would read the radio waves focused by the telescope. This platform also needed to be mobile, because moving the dish itself was going to be impossible. And so it was built, officially opened in 1963, a triumph of cold war engineering. When not looking for incoming nukes or bouncing signals off the Moon to find Soviet radar installations, the dish turned out to have other uses in the field of astronomy, and was soon showing results. It discovered that Mercury rotates once every 59 days instead

of the previously believed 88, meaning it was not tidally locked to the Sun. It made the first radar observations of a comet, discovered the first extrasolar planets, and in 1968 provided the first evidence for the existence of neutron stars, by timing the periodicity of the Crab Pulsar.

Pulsars, as you probably already know, are spinning neutron stars that emit beams of electromagnetic radiation from their poles. Every time the star rotates, assuming it's pointing in the right direction, the beam sweeps across the detector, producing a pulse rather like that of a lighthouse if lighthouses blinked at up to 700 times a second. The pulses were first observed on November 28, 1967, by Jocelyn Bell Burnell and Antony Hewish in the faint constellation Vulpecula (found in the center of the Summer Triangle asterism, sky fans). The signal was jokingly named 'Little Green Men 1', but further discoveries from other regions of the sky ruled out an alien civilization. As the science became more precise, it was possible to detect minute differences in the pulses put out by a particular pulsar, and in this way the first planets orbiting a star other than the Sun were discovered.

Discovering these enigmatic celestial metronomes is the purpose of Einstein@home (einsteinathome.org), a distributed computing project centered on the University of Milwaukee that you can run on your home PC in the same vein as Folding@home, using exactly the same BOINC software. It takes data from the Arecibo telescope as well as the LIGO



Message to the universe

Arecibo's ability to transmit as well as receive was put to good use in 1974, when a message was beamed from the dish toward the globular star cluster M13. The message encodes who we are and where we live in a binary notation aliens should understand, but will take over 25,000 years to reach its destination.

Tech Report





FAR LEFT: The Arecibo Observatory in better days, before the damage from natural disasters overwhelmed it.

LEFT: You can destroy the dish in *Battlefield 4* by blowing up the supporting wires, dropping the antenna onto it.

ARECIBO DISCOVERIES Just a few of the giant scope's greatest hits



CRAB PULSAR
A composite image from Chandra
X-Ray Observatory, Hubble Space
Telescope and Spitzer Space Telescope.



MERCURY

By bouncing radio waves off

Mercury, the Arecibo observatory was able to map ice deposits at the poles.

IT'S A SAD END FOR SUCH AN ICON

OF SCIENTIFIC DISCOVERY AND

FIRST-PERSON SHOOTERS



3 MESSAGEThe Arecibo Message, with colors added to the binary to make it easier for humans to read.



4 M13
The target of the Arecibo Message was globular cluster M13 in the constellation Hercules.

gravitational-wave detectors and the Fermi gamma-ray satellite, and sends it out to be processed on its volunteer network. So far, it's had success in discovering around 50 new radio pulsars and 25 previously unknown gamma-ray sources.

TICK TOCK

Pulsars are useful to science because they are some of the most regular clocks in existence. Changes in their blink rate can point to disturbances in the space around them, but also, as they are themselves moving through space, they can be used to calculate distances on the cosmic scale and to test theories such as Einstein's general relativity. Their regular pulses may also be

interrupted by the passage of gravitational waves, giving us a second method of detecting these alongside LIGO's laser interferometer method.

Arecibo was also the source of the data chewed through by the now-defunct

SETI@home project, searching for evidence of alien civilizations via their radio emissions. At the time of writing, the number of such cultures detected remains at zero.

Sadly, time has not been kind to the Arecibo telescope. Its structure of towers and cables, the weight of the receiving platform and its position near the tropics made it vulnerable to natural events, and so it was. In 2017 a hurricane brought down one of its feed lines, damaging the surface of the dish. In August 2020 another cable broke, further gashing the dish. Then in November the same year two more cables snapped, putting a large hole in the dish. The decision was taken to decommission and demolish the observatory, but the

telescope took things into its own hands in early December, with the failure of three cables causing the receiving platform to fall onto the dish, shearing the tips from the support towers as it did. No one was injured, but 190 tons falling from 150m does a lot of damage to aluminium, it turns out.

The baton will be taken up by other large telescopes, including China's FAST, the Square Kilometre Array, and future installations such as the Lunar Crater Radio Telescope, currently an early-stage proposal at NASA to be built on the far side of the Moon in a crater three to five kilometers across, and surely the setting of a future *COD* map. The benefits of this would be removing the effects of the Earth's atmosphere

It's a sad end for such an

completely (some radio frequencies are almost completely unexplored because they do not penetrate our atmosphere), and blocking out interference from all the radio equipment currently on Earth.

icon of scientific discovery and first-person shooters—it appears in both the film and game adaptation of GoldenEye, the book and movie Contact, and an episode of The X Files (called Little Green Men), and while the radio telescope in a sinkhole depicted in the *Battlefield 4* map Rogue Transmission is said to be in China, it bears enough similarities to Arecibo (including the three concrete pillars and distinctive domed Gregorian reflector that China's similar FAST telescope doesn't have) to make the inspiration clear. Goodbye Arecibo, we enjoyed running around shooting people underneath you. Especially Sean Bean. And you did some great science too.

Ian Evenden

BUYER'S GUIDE

Build the best PC for your budget



KEY

Budget build

PC gaming is for everyone. Pick the parts you want to build a new, well-rounded PC for a good price.

Mid-range build

You want to run every new game at 1080p 60fps. This recommended build will see you through.

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You're looking for the best PC on the market and superior components. But you still want to spend smart.

Buyer's Guide

BUDGET

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GRAPHICS CARD

COOLER

MEMORY

POWER SUPPLY

SSD

HDD

CASE

MOUSE

B450-A Pro Max

MSI **\$100**

A healthy dose of ports and PCIe SSD support has this B450 at the heart of our budget build.



Ryzen 3 3300X

AMD \$120

AMD has packed its latest Zen 2 architecture into a speedy four-core package, and that's great for gaming.



GeForce GTX 1650 Super

Gigabyte \$160

The GTX 1650 Super is much more than a rebrand of the GTX 1650, securing it the budget crown.



Wraith Stealth

AMD Free with the CPU

Gone are the days when a stock cooler was little more than a bonus paperweight. AMD's Wraith Stealth delivers.



Vengeance 8GB DDR4 (2x4GB)

The new norm for gaming is 16GB, but dual-channel 8GB memory is enough to get by for most.



CX Series CX550

Corsair \$70

Corsair's reputation for quality PSUs precedes them. You know you're in safe hands here.



WD Blue SN550 500GB

Western Digital \$70

Just because it's a budget SSD, doesn't mean it has to be slow, as the WD SN550 proves with its speedy NVMe connectivity.



WD Blue 1TB 7200rpm

Western Digital \$43

You don't necessarily need a HDD in 2020, but if you're a virtual hoarder, this'll give you loads of useful extra space.



Neos

BitFenix \$65

You'll want to minimize how often you rebuild your PC, so make sure to give it a good home. This case'll do nicely.



GW2280

A 1080p60 VA monitor will see you through in style and, once you upgrade, will make a superb second monitor.



G213

Logitech \$60

It may be a membrane switch board, but it's stylish, and well-built. Sometimes that's worth more than cheap clicky switches.



Logitech \$30

A classic shape delivered in a sleek shell, this mouse fits all hand sizes and grips. A solid option for the money.

Buyer's Guide

MID-RANGE BUILD

Our recommended build for playing the latest games



MOTHERBOARD



B450 Tomahawk Max

A reliable platform for your build, the Tomahawk Max also comes in black to complement any style.



Ryzen 5 3600X

AMD \$210

This CPU is one of the greats, and uses the Zen 2 architecture to dominate in gaming and productivity.



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COOLER

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임

CASE

DISPLAY

MOUSE

GeForce RTX 3060 Ti Founders Ed.

The RTX 3060 Ti is a little overkill, but we're willing to make sacrifices elsewhere to make it work.



Wraith Spire AMD Free with the CPU

We love a freebie, especially one as capable as the cooler included with the 3600X. This'll keep your machine running smoothly.



Ballistix 16GB DDR4 (2x8GB)

Crucial \$80

With plenty of capacity at 16GB, this unembellished memory has everything you need for gaming and more.



CX650M

Corsair \$108

The heart of your gaming PC is your PSU, and this 650W Corsair promises to keep your rig ticking nicely.



S70 1TB

Addlink \$44

Building on a budget doesn't mean sacrificing speed—the Addlink S70 proves you can indeed have both.



WD Blue 1TB 7200rpm

Western Digital \$43

Just like in the budget build, this HDD isn't strictly necessary, but for a pretty low price it's nice to have plenty of extra space.



Eclipse P400S TG

Phanteks \$90

An ATX case is all you need for this build. We like this one because it's simple, functional, and really nice to look at.



AOC G2590FX

Everything a PC gamer could want: 144Hz refresh rate, 1ms response time, and it's AMD FreeSync and Nvidia G-Sync compatible.



Alloy FPS

HyperX \$97

As the name suggests, this keyboard is built like an absolute tank, with a steel frame and Cherry MX switches.



Model O-

Glorious \$75

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ADVANCED

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Core i9 10900K

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GeForce RTX 3080 Founders Edition

Nvidia **\$699**

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Kraken X63

NZXT **\$150**

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Vengeance RGB Pro 32GB DDR4 (2x16GB) @ 3,200

Corsair \$164

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SuperNOVA 1000 G5 Gold

EVGA **\$214**

This calibre of gaming PC draws a lot of power. Thankfully, this PSU can handle it with high efficiency



WD Black SN750 1TB

Western Digital \$189

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860 QVO 2TB Samsung **\$243**

Built on QLC flash memory, it's not the quickest storage around, but it's a speedy alternative to a HDD.



600C

Corsair \$149

If you're going big on parts, you should grab a case that has plenty of room for upgrades down the line. This one will do just fine.



Nitro XV273K

Acer \$650

This one's an easy choice-4K and 144Hz for under \$1,000 is an offer we can't refuse, and neither should you.



G915 Lightspeed

Logitech \$

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Logitech \$137

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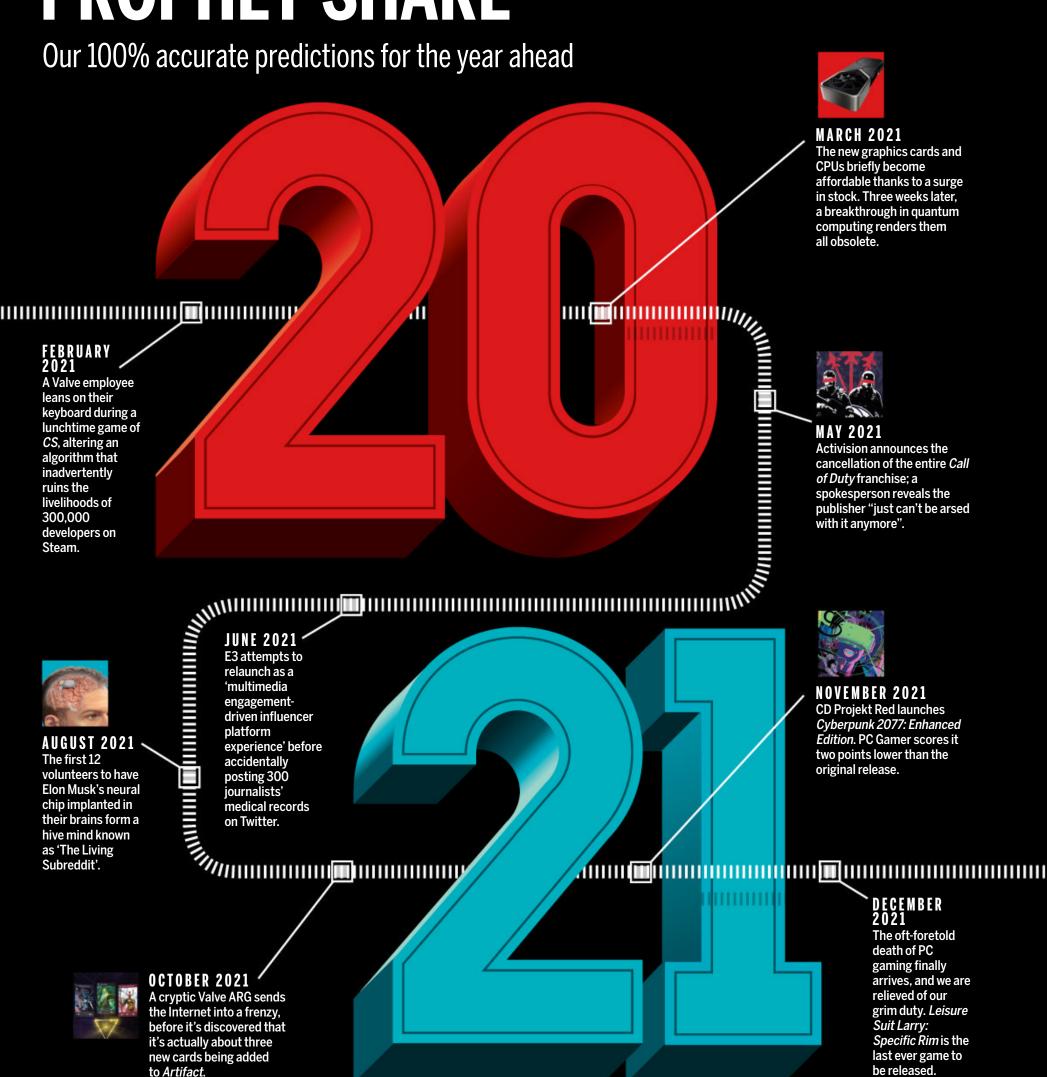
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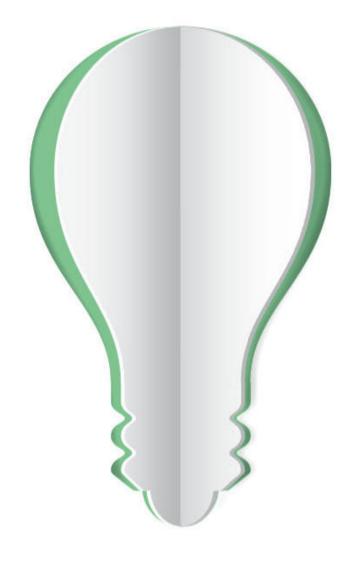
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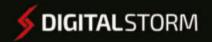
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