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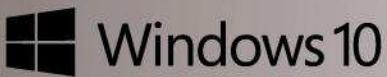
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# “DINOSAURS AND DANGER (FROM DINOSAURS)”



Management sims are going through something of a Renaissance, it seems. For starters, there's our cover game. *Jurassic World Evolution* is set to take all of Frontier's experience making *Planet Coaster*, and enhance it with the addition of dinosaurs and danger (from dinosaurs). Also this issue, we look at Sega's attempt to resurrect *Theme Hospital*-style medical

management, and review a game about building cities on Mars—with all the potential disaster that suggests.

*Phil Savage*

## PHIL SAVAGE

Specialist in  
Jokes, delegation

### Twitter

@Octaeder

### This month

Still hasn't found a freelancer to write his bio jokes for him.

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**ANDY KELLY**  
Specialist in  
Simulation, dinosaurs

### This month

Can he unearth *Jurassic World Evolution* details for our cover feature? Andy finds a way.



**PHILIPPA WARR**  
Specialist in  
Indie, plants

### This month

Is quickly establishing her brand in PC Gamer as, “I have thoughts about plants and mosquitos.”



**TOM SENIOR**  
Specialist in  
Strategy, elephants

### This month

Returned to *Dominions* for a new diary—only this time with less sacrifice and more elephants.



**SAMUEL ROBERTS**  
Specialist in  
Immersive sims,  
PCGamer.com

### This month

Took a break from the PC Gamer website to write about *The Blackout Club*.

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## JURASSIC WORLD

Disaster is an ever-present threat in park management sim *Jurassic World Evolution*.

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## VERMITIDE REVIEW

The rats are back, and they've brought friends. Steven Messner takes up arms in our lead review.

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## KEYBOARDS RATED

Ed Chester has bashed, pummeled, and rubbed a group of mechanical keyboards.

THE CHOICE OF TODAY'S TOP GAMERS.

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# MONITOR

NEWS | OPINION | DEVELOPMENT



Penn & Teller's support act should really dial back on the showboating.

## ELF HELP

The high elves need a hand in **THE ELDER SCROLLS ONLINE: SUMMERSSET**

**T**he *Elder Scrolls Online*'s first expansion sent players to Morrowind—giving us a chance to revisit the location of one of Bethesda's most beloved RPGs, albeit set many hundreds of years before its events took place. For the next expansion, we're heading to the Summerset Isles, home of the high elves.

This will be *Elder Scrolls* fans' first chance to explore the Summerset Isles since 1994's *The Elder Scrolls: Arena*, which contained the entirety of Tamriel thanks to its procedurally

generated overworld. Naturally, that rendition looked, well, like it was made 24 years ago. Zenimax Online Studios claims this updated rendition will offer a detailed landscape featuring tropical lagoons, colorful forests, cliffside vistas, and the "gorgeous manicured cities" of *The*

*Elder Scrolls'* most arrogant and condescending of races.

Expect over 30 hours of new story to delve into, with *Summerset* picking up the 'meta-plot' that started in *TESO's Orsinium DLC*. A Daedric conspiracy is brewing, and, with a corrupting influence threatening the high elves from within, Queen Ayrenn opens the Summerset Isles' borders and invites you to come and help sort the whole mess out.

In addition to the story, *TESO* is adding a new skill line based around the Psijic Order. The secretive group—a sort of precursor to the Mages Guild—has been mentioned in almost every *Elder Scrolls* game, and

---

**THE FIRST CHANCE  
TO EXPLORE THE  
SUMMERSET ISLES  
SINCE 1994**

---

## BEING DIVISIVE

## THE DIVISION 2

 Ubisoft revealed the existence of *The Division 2*, so I can finally stop pretending I'll revisit the first one. I ducked out early, but the Dark Zone—the lawless PvP area—has been



## #CAUSEANDEFFECT

## #WARGAMES



Sam Barlow's interactive series *#WarGames* is out now. Perhaps the most intriguing thing is that I know I'm influencing the story by paying attention to different elements but I

## KUNG-FUN

## ONE FINGER DEATH PUNCH



I'm a sucker for a strong aesthetic style, and yet I still loved *One Finger Death Punch*—a crude, ugly kung-fu brawler in which you used two buttons to fight your way through hundreds of stick



**ABOVE, TOP:** What is it with *TES* and freaky crabs?

**ABOVE, BOTTOM:** Stupid elves and their sexy kingdoms.

even shows up in *Skyrim* as part of the College of Winterhold questline. In *Summerset*, you'll be able to visit the island of Artaeum, join the Order's ranks, and unlock new abilities from its teachings. *Summerset* will also add jewelry crafting, letting you forge rings and amulets, rather than equipping the one you found inside that bear.

If, like me, you're not up to speed with *TESO*'s ongoing story, *Summerset* is designed to cater to new players as well as existing ones. Newcomers will be able to launch straight into *Summerset*, where you'll be given a new tutorial and starter area designed to get you up to speed without playing through the base game. Existing players are also free to ship their character over at any time.

## ELDER BROTHER

I'm in favor of this flexible approach to MMO expansions. While I didn't particularly enjoy the base game at launch, *TESO* appears to have improved a lot over the years. I had fun with the *Dark Brotherhood* DLC, for instance, which offered a distinct, *Elder Scrolls*-flavored approach to MMO quest design. Hopefully the expansion will continue to iterate and refine the experience.

Players will set sail to the lands of *Summerset* when it releases on June 5. ■

Phil Savage

## Highs &amp; Lows



## HIGHS

## Valve

Gabe Newell says *Artifact* is just the first of several games from the studio. Will we finally get *Ricochet 2*?

## Prey

Arkane is teasing what appears to be an expansion set on the Moon. We'll know more at E3.

## Two Point Hospital

Sega's management sim is looking like a clever adaptation of *Theme Hospital*. Read more on page 22.

## Cryptocurrency

It's time for our monthly update on the price of graphics cards. Yes: They're still ridiculously expensive.

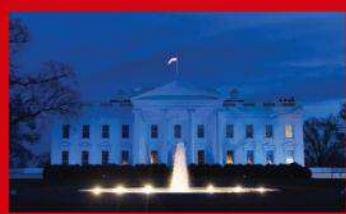
## RAM

Demand from smartphone manufacturers and datacenters is set to push RAM prices even higher.

## The White House

Violent videogames have been propelled back into the spotlight. Welcome to the '90s!

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# Special Report

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## HYBRID THEORIES

How amateur biohacking informs the award-winning VR project, **SEED**.

**T**here is one fantastic story about a botanist called [John James]—the self-described ‘Frankenstein of flowers’, says *Seed*'s lead designer, Olie Kay. “He scraped the radium paint from watch dials and used this on his budding roses—don’t try this at home! He said that the best way to dispose of the radioactive material was to simply bury it in the farthest corner of the garden!”

Stories like that completely captured the imagination of Kay and the rest of All Seeing Eye. The small studio's game, *Seed*, is a virtual reality project where you can breed and grow procedural plant life, either to complete missions or to enjoy a playful sandbox. As well as appealing to fans of pottering about in sheds, *Seed* scooped top honors (and \$150,000) in a competition held by Wellcome and Epic Games which focused on using scientific ideas in entertaining games.

The concept of garage biotech—where amateur plant breeders were developing their own varieties of plants at home in their own sheds and greenhouses—was introduced to the studio by Dr Helen Anne Curry, a senior lecturer in the history of science at Cambridge University and a key collaborator on *Seed*. The specific terminology is relatively new—garage biologist, biohacker—but, as

Curry points out, there is a long tradition of amateur experimental biology.

### GERMINATING AN IDEA

Her own interest in the field is rooted in the enthusiasm these hobbyist breeders from the early-to-mid 20th century had for tinkering. “In some cases this tinkering took the form of hybridizing distinct types but at other times it meant experimenting with X-rays, chemicals, or radioisotopes in hopes of turning out some unexpected new thing,” she explains. “It was precisely this experience of tinkering with plants, testing out combinations and treatments to see whether they might produce something good, that All Seeing Eye wanted to capture, and did capture, in the game.”

In order to represent plant breeding the developers broke the practise down into simple steps: Growing a batch of plants; observing their characteristics; selecting the ones with the most desirable attributes, and then going back to step one to grow the new batch using the selected crop as parents.

Extra stages where you can induce mutations or crossbreed plants could be slotted into this basic cycle. The radium-dial clocks actually make an appearance in the game, as does a technique which uses the plant alkaloid colchicine to alter chromosomes.



### What is Seed?

*Seed* is a room-scale VR project developed by All Seeing Eye. It lets you grow procedural plant life which you can then manipulate by breeding, mutating, and splicing genes. All Seeing Eye is now working out which direction to take the project post-award, and don't have a public timeline for release.



**FAR LEFT:** Seed was one of three finalists. Winter Hall took second, Terramars came third place.

**LEFT:** A player trying out Seed at a gaming event.

## FURTHER BREEDING Seed isn't the only game to incorporate genetics and breeding



### MENDEL

This upcoming space plant genetics sandbox actually started life as Owen Bell's NYU thesis project.



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A simple gardening sim from a pre-microtransaction age. Breed and crossbreed plants in your greenhouse.



### NICHE

This mixes turn-based strategy and survival with genetics. Breeding alters species strengths and weaknesses.



### ANIMAL CROSSING: NEW LEAF

Not a PC game, but I need to vent. I'm trying to breed blue roses, and it's the hardest thing in the universe! ARGH!

My own gardening experiments have taught me that sometimes seeds just don't grow, or they behave in some unexpected, willful fashion. That's not the case in *Seed*. "It's really important that a player's actions are always positive and that players always feel like they're making progress. Plants grow quickly and predictably—there's never any duds or seeds that just don't grow," says Kay.

Seeds also grow while you watch. Longer growth was an option but, Kay explains, "The instant gratification of seeing a plant grow before your eyes was really beautiful, rewarding, and satisfying for a player."

Real plant breeding can also be fiddly—seeds can be tiny and processes can involve delicate work using tools like tweezers. In VR, that level of precision would be a problem, so the team don't design any objects smaller than a ping pong ball. "For this reason, when a player wants to make a new hybrid from any two seeds they put them both in a big microwave-style machine, close the door and press the big green button," says Kay. "Using the historical material as inspiration to create a compelling setting and story, but not being slavish to it seemed exactly right," adds Curry.

*Seed* also offers Curry another way to share her research, so I ask what she's hoping players take away from the game. Broadly, she says that it would be great to encourage players to think more about plant breeding and how it's done. More specifically:

"It would be great if the mission structure of the game also ultimately led some players to recognize that most of

the plants they depend on for food or shelter or clothing or other uses are the products of significant human labor and ingenuity. I think that's something that often goes unrecognized today."

### MAINTAINING IMMERSION

A key part of *Seed*, and one which All Seeing Eye is still currently working on, is how to communicate key information to the player. "In a conventional screen-based game you can pause the action and display a panel of tutorial text to the player," says Kay. "But if you do that in VR you break the immersion."

The current solution is a lot of contextual voiceover work as a guide when you start, plus "subtle visual indicators designed to push the player towards certain objects and interactions".

There's still work to be done on that front, he says, but the approach to imparting that information may have a knock-on effect in Curry's own work.

"Storytelling is an essential part of historical work," she says. "Here the storytelling happens through an immersive experience, including through the players' experimentation within that experience. This was really eye-opening for me, and it has led me to think more about the ways that I use visual and audio materials, and the opportunities that might exist for me to allow readers or students to experiment and explore within the historical narratives that I have to share." ■

Philippa Warr



# In Focus

THE HIDDEN DETAILS OF ART DESIGN



# TOTAL GORE

VFX artist Stephanie Anderson on the love and care which goes into **TOTAL WAR: WARHAMMER II**'s bloodiest effects. *By Philippa Warr*

## MORE IS MORE

**1** The *Blood for the Blood God II* pack adds extravagant gore to *Warhammer II*. "It can be quite excessive at times," admits Anderson. "You end up drenched in a sea of blood with decapitated limbs all over the battlefield."

## BALANCING ACT

**4** The meatiness of gory explosions when a unit is cleaved at the waist took some tweaking. They needed to be gross but not too over-the-top. "When the chunks got too big they took too much of the focus," says Anderson.

## TECH UPGRADE

**2** Tech developments mean *Warhammer II* can handle more blood and particle effects than games like *Rome II* and *Shogun 2*. Thus you can now have "a full blood explosion complete with flying gibbs when units are cleaved in half".

## DEATH DETAIL

**5** It's not just about showpiece spouts; effects need to peter out over time. After the 'gosh!' moment of a waist cleaving, the stump falls to the floor, blood pulsing. Artists then tweak and rebalance the effects until they're satisfactorily gory.

## REFERENCE MATERIAL

**3** Realistic references are a starting point for new textures. Anderson spent a lot of time looking at pig carcass images to help with the gory chunks in the blood decals. It was surreal at first but she says, "It normalizes after a little while."

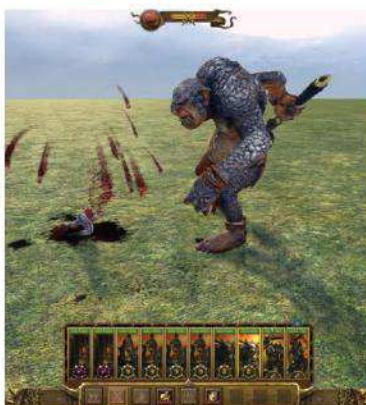
## BLOOD DRAW

**6** "We use 12 different particle emitters to create the blood explosion, and most are small simulations that wouldn't look like much on their own," says Anderson. But they come together via delicate layering to make believable, satisfying effects.



**LEFT:** The blood explosions form crimson fireworks, which are visible from a distance, and help bridge the gap between adding gory detail to the battlefield, and keeping the action legible for players.

**BELOW:** This prototype animation shows the Terrorgheist treating a unit like a bloodied ragdoll. The gory trail helps emphasize the arcing motions as it's thrown into the air.



**RIGHT:** Prototyping the effects of a powerful swipe from a Greenskin troll. There's a shower of meaty chunks from the Empire soldier, each trailing blood plus blood patches on the ground, and blood spurts from the torso stump.



# Inside Dev

MAKING GAMES IS HARD

## PEP TALK

The ‘inspiration’ behind new dialogue systems. *By Xalavier Nelson Jr.*

Last month, I examined the concept of dialogue in games, and how simple dialogue systems can still be a pain to create, even if you’re using a template. This month, I decided to speak to some of the developers not using standard dialogue and choice systems. Contrary to what I expected, these designs weren’t necessarily more difficult to create than a standard choice or text format—they weren’t even new, per se. They were harvested.

“We did not want to make episodic games like *The Walking Dead* or *Life is Strange*,” Big Bad Wolf, the studio behind episodic adventure game *The Council*, tells me. “These games have their own formula, and while it works well, we wanted to create our own. Moreover, our gameplay is systemic and not only narrative. Our intention was to create a narrative RPG—even though *The Council* may at first glance seem like a typical episodic adventure game, it brings a unique twist to the genre, a new kind of narrative experience.” Elaborating on the areas where *The Council* differs from its peers, Big Bad Wolf describes its Confrontation system. “Creating a combatless narrative does not mean stripping the gameplay from it, and we’ve worked hard to translate these gameplay elements in dialogue-based challenges. That’s how we found ourselves creating the Confrontation gameplay.

“The player is informed of how many blunders they have left. If they succeed the first step, they continue. If they fail, they lose the first instance and move on to the next. If they reach the maximum number of blunders, the dialogue ends with a bad outcome. If they manage to convince their counterpart without spending all their allowed blunders, they get the good outcome.”

Marrying this with consequences that follow the player through the game, Big Bad Wolf’s decision to slowly deploy RPG elements over the course of the first episode (choosing a class and gaining XP) is used to surprise you, revealing an experience that gets deeper the more you play.

In isolation, these concepts could appear normal. It’s the fusion of these elements that creates something new.

Or, at least, something that feels new, until you look at the artfully pilfered elements comprising the whole.

Joy Manufacturing Company, developer of historical visual novel *Ambition: A Minuet in Power*, wanted to replicate the social manipulation one might use in an 18th century French court. The team turned to roguelikes and card games to tackle group conversations. Every session a new court is generated for players to schmooze. Using a card game-like system, players “work the room”, matching topics of conversation to interested courtiers to climb a social ladder. *80 Days* developer, inkle, turned to titles like

*The Witcher* in its quest to reinvent the classic graphic adventure in *Heaven’s Vault*, creating an open-world experience where NPCs can misdirect you in an emergent way, based on your mutual knowledge of the world and each other. In its RPG *Elemental Flow*, Tea-Powered Games mixes *Oblivion*’s speechcraft with special powers, turning conversation into an active process, so you to imbue words with elemental qualities like firey directness.

Simply put: Developers steal, constantly, from their previous work and from one another, to build experiences that wouldn’t otherwise be delivered in their genre. And ‘inspiration’ for new methods of delivering dialogue and choices don’t just come from other games.

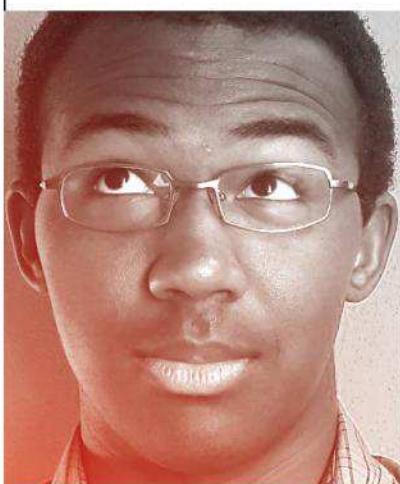
### CLASSIC INFLUENCE

Jake Elliott of Cardboard Computer, developer of *Kentucky Route Zero*, tells me about the influence classic works of literature have had upon his work. Sections where the perspective a player occupies can rapidly shift, or script-like text is manipulated in unexpected ways, have a clear root in books like William Faulkner’s *The Sound and the Fury*. “I think it’s kind of uniquely dizzying in a game,” Elliott says, “because you’re asked not just to keep up with shifts in perspective but to actually carry on a conversation while hopping between subjectivities.”

When I began to research dialogue systems, I expected to find slightly more complicated versions of the humble text box. What I found was a vibrant ecosystem of cross-pollination; devs transplanting conventions from other genres, even entire other *mediums*, to create new, inventive narrative interaction methods. In these, I don’t just see diverse combinations that will go on to affect future games. I see developers questioning what dialogue or choice can even mean in an interactive experience.

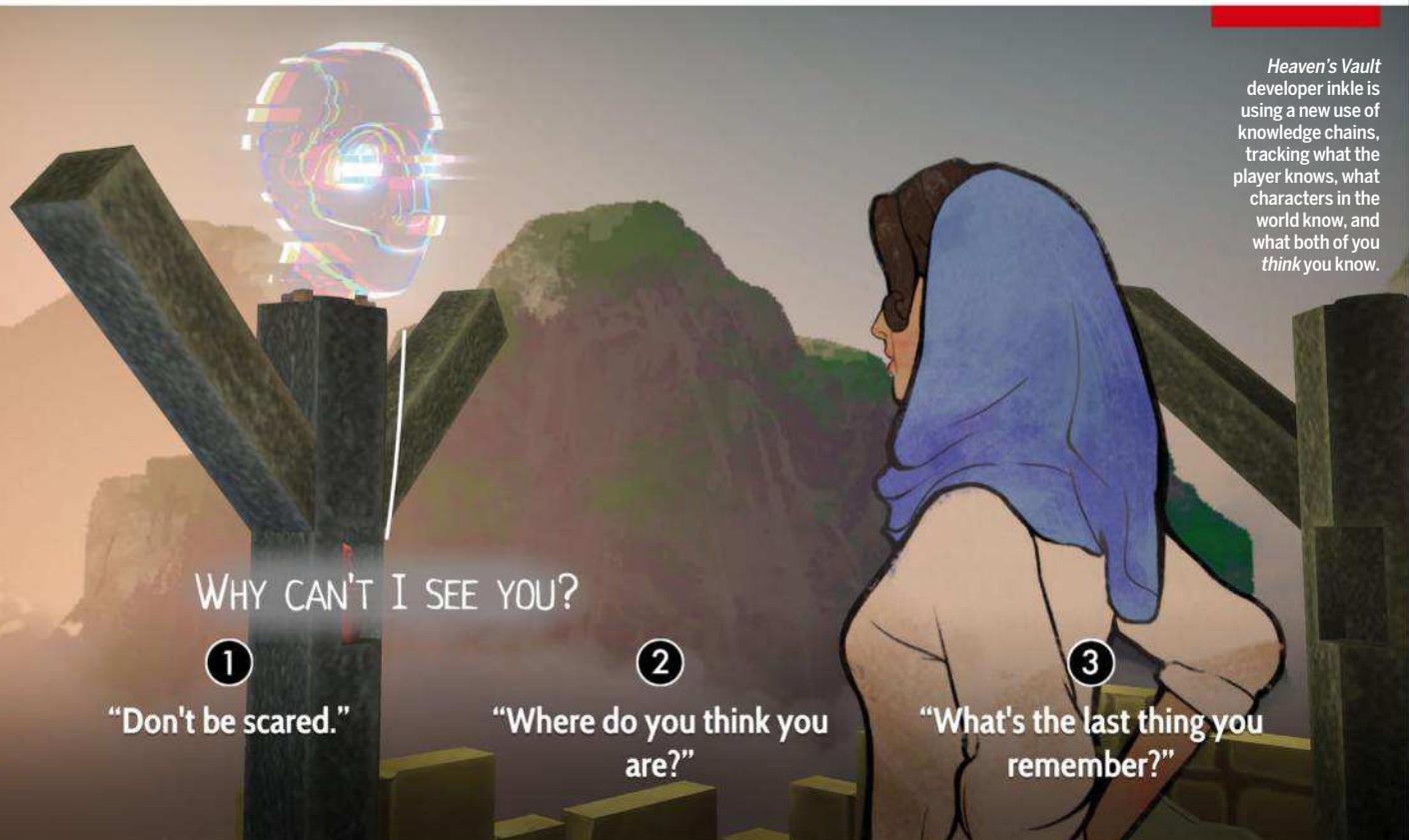
In dialogue, a world of possibilities still remains—possibilities directly built on the present, and past. ■

XALAVIER  
NELSON JR.  
I’m a full-time  
game writer and  
narrative designer,  
with credits inside  
and out of gaming.



class and gaining XP) is used to surprise you, revealing an experience that gets deeper the more you play.

In isolation, these concepts could appear normal. It’s the fusion of these elements that creates something new.



*Heaven's Vault* developer inkle is using a new use of knowledge chains, tracking what the player knows, what characters in the world know, and what both of you *think* you know.

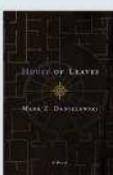


**FAR LEFT:** The developer of *Kentucky Route Zero* experiments with the format and structure of the traditional graphic adventure.

**LEFT:** The developer of *Elemental Flow* makes the process of conversation into an action RPG.

## SURPRISING INSPIRATIONS

*A few examples of unlikely source material for dialogue systems*



### HOUSE OF LEAVES

This bestselling novel shares traits with the perspective shifts used by William Faulkner in books like *As I Lay Dying*, becoming a touchstone for developers such as Jake Elliott experimenting with evocative text formatting.



### ROGUELIKES

These are an increasingly regular inspiration for story-based titles, with their emergent systems and wide range of randomly generated possibilities finding their ways into games including *Ambition: A Minuet in Power*.



### TOMB RAIDER

Some of inkle's most prominent inspirations for *Heavenly Vault* are adventure games like *Tomb Raider*. Games that, though they step outside the bounds of the 'pure' adventure, tell a characterful story in a 3D world.



### THE LAST EXPRESS

This wildly ambitious adventure game is another inspiration for inkle's *Heavenly Vault*. Set aboard the Orient Express, players are left to solve a mystery as events occur in real time—and so crucial moments can be missed.

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## CHALLENGE

## PLAY 100 GAMES IN 2018

Clear your backlog and expand your horizons. Here's what the team played this month

## CLOSING IN



**Phil Savage**  
Editor

## SELECTION BOX



**Philippa Warr**  
Deputy Editor

## A ROAD TRIP



**Andy Kelly**  
Section Editor

I've had a productive month, thanks to a selection of smaller games. **A Case of Distrust** is a short, neat detective adventure. **Chuchel** is a short, neat comedy adventure. And **Minit** is a short, neat *Zelda*-like adventure. You'll find reviews for all of them in the magazine.

Beyond that, I've mostly just played **Into the Breach**—also reviewed this issue. While it may look short (and neat), it's incredibly easy to lose hours trying to kill a swarm of bugs with my varied and versatile mechs.

I'm also back playing **Metal Gear Solid V: The Phantom Pain**. It hasn't made my list yet—I'm only adding stuff that I start or finish this year—but I'm closing in on the end. It's going to be strange to say goodbye to this massive, sprawling game that I've been chipping away at for nearly three years now.

When filling out my challenge this month I had plenty of free games to add in thanks to the Top 50 Free Games feature. I spent whole afternoons checking in on projects and replaying things to weigh them up against one another. FYI the list itself isn't comprehensive—it's more akin to a selection box which you can open up and find something tasty to suit your mood.

I've decided I can count replays of games towards my 100 games if the experience brings me something new. Not new in the way that **Proteus** brings me new delights, but new in terms of how I think or what I get out of the time. Thus the creepy late-night cable channels of **2:22am** is now on the list.

As for paid games, only the colored block-swapping of Ian MacLarty's puzzler **Dissembler** made the cut!

I started **Final Fantasy XV** this month, and it's a weird game. I love the concept of being on a road trip, journeying between locations, stopping off to camp. But the sidequests are hilariously half-baked and trivial.

I finally gave Frontier's theme park simulator **Planet Coaster** a go this month as well. The sheer amount of granular detail is overwhelming for a newcomer, but I'm having fun watching people riding my ineptly-designed roller coasters and cynically raising the price of hamburgers.

And after the disappointment of **Metal Gear Survive**, I decided to try another survival game called **The Flame in the Flood**. This one sees you traveling up a river in a post-apocalyptic setting, stopping off to scavenge supplies and craft life-saving gear. It's fun, elegantly designed, and very stylish.

## THE TOP 5 Mysteries to solve and cases to crack



**LA NOIRE**  
A lavish anthology of dark crime stories set in a post-war Los Angeles.



**HER STORY**  
An experimental, non-linear mystery comprised entirely of police interrogation clips.



**DANGANRONPA**  
A schoolboy is held hostage by a mysterious villain, and forced to solve a series of murders.



**BLADE RUNNER**  
This detective adventure follows a rookie cop on the hunt for rogue replicants.



**THE LAST EXPRESS**  
A gripping tale of murder and deception set aboard the famous Orient Express in 1914.

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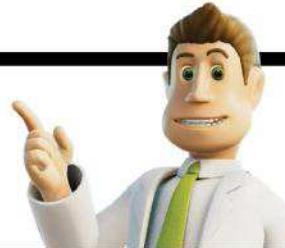
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# PREVIEW





## NEED TO KNOW

RELEASE  
2018DEVELOPER  
Two Point StudiosPUBLISHER  
SegaLINK  
[www.twopointhospital.com](http://www.twopointhospital.com)

# TWO POINT HOSPITAL

Silly hospital management returns after two decades

**I**mmediately after finishing the *Two Point Hospital* developer interview transcription I... well, I should have started writing this preview, but what I actually ended up doing was booting up *Theme Hospital* and curing a swarm of patients with comically swollen heads against a soundtrack of jaunty music and bathroom noises.

*Two Point Hospital* is both a standalone game in a new, broader setting and, inescapably, a spiritual successor to Bullfrog's 1998 hospital management simulation. Partly that's because of the structure and tone of the game—comedy and medically-themed design—and partly it's because the studio is being led by *Theme Hospital*'s lead developer, Mark Webley, and lead artist, Gary Carr.

In this interview they're joined by Ben Huskins—a long-term colleague of the pair and the lead designer on *Two Point Hospital*. He explains what players will be doing this time around:

"You're taking on the role of this hospital administrator and you're arriving at Two Point County," he says. "You start off in one little corner of the world with a tiny hospital in a little village. By proving yourself there you get the opportunity to establish a new hospital somewhere else in the county and gradually, over the course of the game, you're building up this healthcare organization."

Management of this organization is one of the big changes from the earlier game. "It's almost like a business sim on top of a business sim," says Huskins. "You've got each of your individual hospitals that you've built up and you've also got the whole organization. You're not just leaving hospitals behind. They're still there and they continue to contribute to the overall value of the organization."

FIRST LOOK

What the team is trying to avoid is that sense of having laid out and staffed a hospital full of treatment rooms, diagnosis facilities, and administrative layers, only to cast it aside for the next challenge. "That was a big thing early on," says Huskins. "We wanted to feel like you're not really throwing anything away. You're always building up and building out."

Being able to choose what you want to focus on within that organization is, *Two Point* hopes, going to enable the game to cater to different styles of play. Those who want to see more of the county might be content with reaching a one-star rating and unlocking the next thing, if you prefer to focus on one project for a long period of time you'd be able to spend longer with one hospital, levelling it up.

Carr contrasts this with progression in *Theme Hospital*. "It felt very linear, the original games. How long can I play this until the game beats me? We wanted to not get people into that situation."

## GETTING A CHECK-UP

Different parts of Two Point County will offer different challenges, too. A mountainous area might have snow and thus heating the space is a pressing concern. Hotter areas would need air conditioning and might require facilities for treating tropical diseases, while teaching hospitals would present their own set of challenges.

The comparison with *Theme Hospital* is inescapable. The 'spiritual successor' label doesn't feel right, though. It's more that a team led by the same people is making the idea, but in 2018, with lessons learned from its work and from playing a variety of sim games which were built on Bullfrog's management sims.

Webley specifically mentions *Cities: Skylines* and *Prison Architect* as inspirations, and it's interesting to note that the *Prison Architect* alpha trailer cites *Theme Hospital* and *Dungeon Keeper* as its own influences. "What goes around comes around," he says.

**"WE WANTED TO FEEL LIKE YOU'RE NOT REALLY THROWING ANYTHING AWAY"**

## Two Point Hospital

» So *Two Point Hospital* is a feedback loop crossed with a reboot, perhaps?

"The game is inspired by the work we did [20] years ago," says Carr. "But it's got lots of fresh ideas in there," adds Webley. Carr concurs: "We wouldn't want to make a remake anyway. It's got to feel different. It's got lots of new elements to it, otherwise what's the point?"

Another point of difference, in addition to the layered nature of the business and a flexibility when it comes to objectives, is that *Two Point Hospital* is intended as the first block in a coherent world—Two Point County—rather than an isolated game.

"We always imagined we'd have a place that would be the place where all our games would exist," explains Webley. "We're starting off with *Two Point Hospital* but we've got ideas we'd like to add into the county and make it a place where the simulations can maybe interact with each other as well. That would be quite cool."

I remember the potential for connection suggested by the use of 'Theme' in the original game's title. I'd vaguely hoped that disasters wrought by my *Theme Park* management style might turn into a *Theme Hospital* cash cow, the latter providing a venue for treatment.

Webley is more measured with his examples. He mentions the possibility of repeated characters; perhaps local celebrities or field-specific big names like a health inspector.

It'll be interesting to see how Two Point approach this connected idea of its games in the future, but right now the focus is on making *Two Point Hospital* a success.

When I ask about the research process we get to the humor that's at *Two Point Hospital*'s core. "We did weeks and weeks of research back in the '90s," says Carr. "We were going to do a serious hospital sim game. That was the plan originally.

"We got so weary of seeing illness around us and this horrible business of healthcare—which it is—that we just changed it on its head. Which obviously was a great idea but not intentional. We didn't go, 'We've got this brilliant spin!' We just did it."

As a result the games have never focused on treatment of real afflictions. Players of the original might remember

**"WE WERE GOING TO DO A SERIOUS HOSPITAL SIM. THAT WAS THE PLAN ORIGINALLY"**

the treatment for Bloaty Head—a doctor must pop the swollen bonce and reinflate it. Or the waiting rooms full of patients who had turned invisible or developed corrugated ankles.

### RUDE HEALTH

One of the first conditions revealed to be in *Two Point Hospital* is Light Headedness, where a patient's head is replaced with a lightbulb. Treatment of this condition involves a grabber hand unscrewing the bulb and screwing on a replacement head.

"Making up the illnesses and machines is a labor of love in the studio," says Webley. The starting point is a bad pun the team embraces and builds into a disease and treatment. The intention is to stay in the realms of surreal, comedic fiction.

For example, the condition Grey Anatomy has a name which riffs on the textbook, Gray's Anatomy, (the latter is also responsible for the pun name of the medical drama, *Grey's Anatomy*) and turns a patient monochromatic. On the other hand, Chrome's disease didn't make it into the game—the team ditched it because it was too close to the chronic inflammatory condition, Crohn's disease.

Without a playable build to hand I finish by asking the team for their own favorite moments so far. For Huskins, it's the little animations which bring the characters to life. "We've got such a rich set of animations in the game and behaviors. You can read lots into what people are doing," he says. "Stuff like a doctor who's just been on a really long shift, worked really, really hard, patient after patient, and finally it's time for him to go on a break, and he gets up, goes through the door and as soon as he's in the corridor he just sprints as fast as he can to the toilets."

For Carr, it was Dick Mayonnaise. "We have a random name generator," he begins. "Have you seen Toast of London?" asks Huskins. "We were watching that in the early days of Two Point and we loved the names they have there. We thought, 'I wonder if we can create a random generator that produces names like that?'" *Toast of London*, in case you were unsure, features names such as Hamilton Meathouse and Cliff Bonanza.

During a playtest someone looked to see which doctor had performed an action and found Dick Mayonnaise had made it into the game. He has now made it out of the game after an adjustment to the name generator removed Dick as a first name.

Mayonnaise, however, remains.

*Philippa Warr*





Treatment and diagnosis facilities compete for space.



Light Headedness is just one of the new diseases to treat.

## Artifact

## NEED TO KNOW

RELEASE  
Late 2018DEVELOPER  
ValvePUBLISHER  
In-houseLINK  
[www.twitter.com/playartifact](http://www.twitter.com/playartifact)

## ARTIFACT

Valve plays its cards right with its *Dota 2*-themed TCG

**V**alve has joined forces with Magic: The Gathering's legendary creator, Richard Garfield, to create a trading card game set in the *Dota 2* universe. For a general sense of what *Artifact* is like: If conventional card games are like chess (which I know they aren't), then *Artifact* is the 3D version which Spock plays on the Enterprise.

Each match plays out across three boards, representing the lanes from the *Dota 2* map. You deploy cards in these lanes to help you destroy enemy buildings and protect your own.

The base game has 280-plus cards and 44 heroes. A deck comprises 40 cards minimum (including 5 heroes). Swapping and selling on the Steam Market will let you grow your collection without relying on pack RNG.

Depending on the color combinations your decks are built with, you'll adopt different playstyles—perhaps stalling for time until you can afford big spells or relying on early aggression for a win.

Many heroes are from *Dota 2*, others are original creations. As the game expands, Valve expects some characters will begin life in *Artifact* before later appearing in *Dota 2*.

Unlike *Dota 2*, *Artifact* won't adopt a free-to-play model, so I'm expecting an entry edition to get you started then the ability to purchase new packs or go down the trading route.

*Tim Clark*



## MANY HEROES ARE FROM DOTA 2, OTHERS ARE ORIGINAL CREATIONS

**1** By killing enemy creeps and heroes, you'll earn gold which you can spend on equipment for heroes in the shop between rounds. If a hero gets killed they have a cooldown before you can redeploy them, so they'll sit the next round out. They keep their equipment buffs, though.

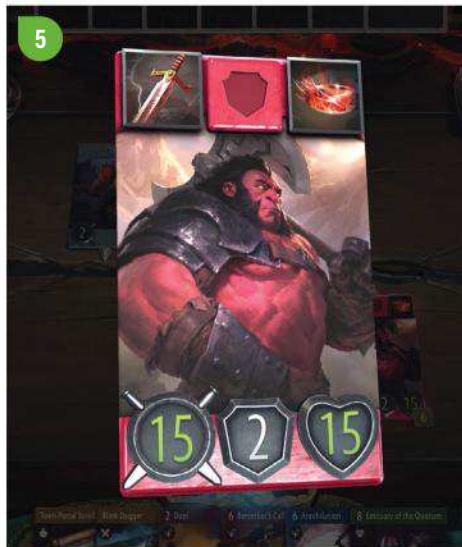
**2** This is your tower health—it starts at 40 in each lane. If you can destroy two of your opponent's towers, you win. If you can destroy one tower and then obliterate the Ancient (a structure which replaces it but has double the health), you also win.

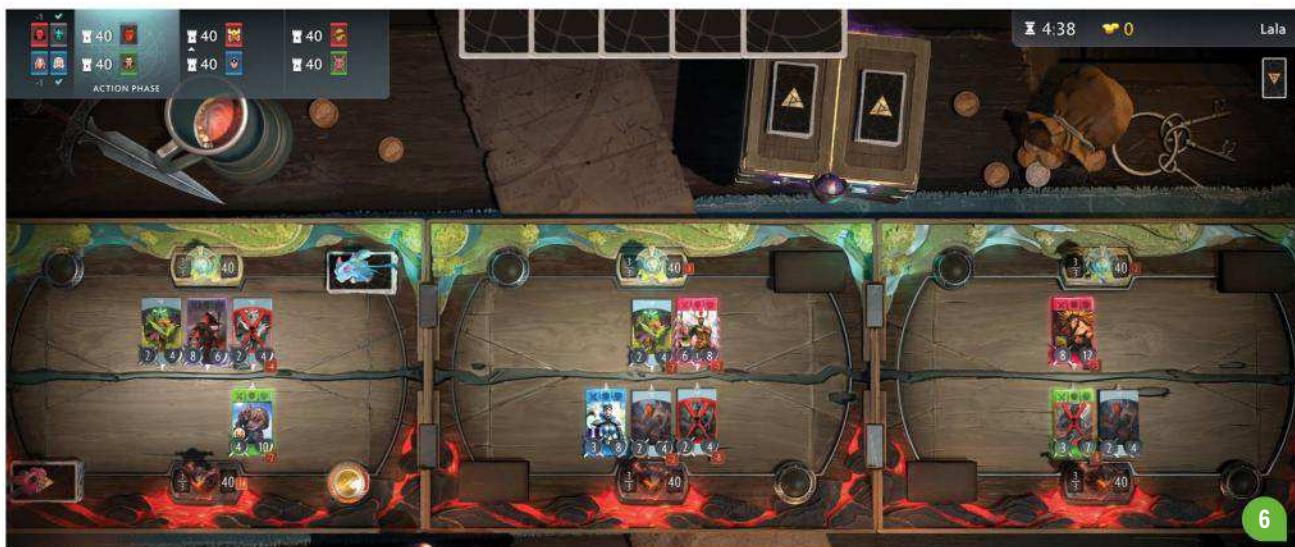
**3** Lanes have their own mana pools. They start at three and increase as you play. You spend mana to play cards in those lanes (or other lanes, depending on the attributes). Complicating this, you need a hero of the corresponding color in a lane to spend mana on cards of that color.

**4** Once a turn is over the units facing one another do battle. If there are no foes for one side to hit, they'll hit the tower instead. Watch out for cool spell animations when you play cards, as well as the adorable cheeky imps frolicking on the sidelines!

**5** These are hero cards. The top three boxes are the equipment slots. From left to right that's Weapon, Armor, and Item. You can equip one of each at a time. Across the bottom you get your hero's stats. From left to right the values show their Attack, their Armor, and their Health.

**6** Here's the zoomed out perspective, which gives you an overview of all three lanes. You'll need to keep track of the individual boards and the bigger picture, swapping between perspectives, to avoid getting caught out by your opponent.





## PREVIEW

In the grim future, factions are forced to get their hands dirty.



### NEED TO KNOW

RELEASE  
TBA

DEVELOPER  
Rogue Factor

PUBLISHER  
Focus Home Interactive

LINK  
[www.bit.ly/underhivewars](http://www.bit.ly/underhivewars)

# NECROMUNDA: UNDERHIVE WARS

Taking turns in a battle for old factories and boiler rooms

The vibrant box art for the Games Workshop tabletop game, Necromunda, will always stay with me; a lummusky punk screaming and unloading his boltgun blindly into the air, the sheer metal pillars of the Underhive filling the background. It perfectly captures the Necromunda spirit in all its rustiness and verticality.

### FIRST LOOK

Rogue Factor's turn-based shooter is hoping to capture that spirit. It's a simple enough premise: On a toxic planet ruined by human avarice, vast towers called Hives house massive populations. The elite reside at the top, and the lower you go, the more depraved things get until you reach the Underhive, where gangs of punks, ex-soldier types, and creepy pale men battle it out for decaying generator rooms and derelict factories. *Underhive Wars* takes place in one such Underhive.

I watch two of the devs square off, pitting a squad of hulking punks from



House Goliath against the anarchists of House Escher (if this sounds like too many mohawks, more factions are inbound, and you'll be able to create your own gangs). They set up their squads, customizing appearances and choosing loadouts using the four classes; the fairly self-explanatory Heavy and Brawler, the Deadeye (sniper), and the Saboteur, who lays traps and can turn the environment to your advantage.

Speaking of which, the environment is one of the things that sets *Necromunda* apart from its peers. The devs enter the fray on a map called Abandoned Railway, and the first thing you notice is how tall it is—four storeys, in this case. *Underhive Wars* is a strikingly vertical game, encouraging you to zipline between lofty walkways and outflank your opponent.

Another intriguing element is the decision to make the entire movement phase real-time, with both players running around simultaneously. This depletes Action Points, so you still need to be meticulous in your movement, but it allows you to force confrontations if you catch sight of an enemy player, zooming the action into a turn-based showdown.

### GIVING CHASE

It adds a new tactical dimension, as you can force a face-off while an enemy's running to a medical point, for example, or stalk someone as they're moving, then strike when you're in attacking range. It's a bold move, and will also make games more brisk than the prolonged affairs in Rogue Factor's last game, *Mordheim*.

Players with unhappy memories of *Mordheim*'s shonky AI will be pleased to hear that it's been redesigned here, which bodes well for an improved campaign. I'm yet to hear anything more about singleplayer, but I'm keen to know what kind of stories Rogue Factor comes up with for this grimmest of grimdark settings.

*Robert Zak*

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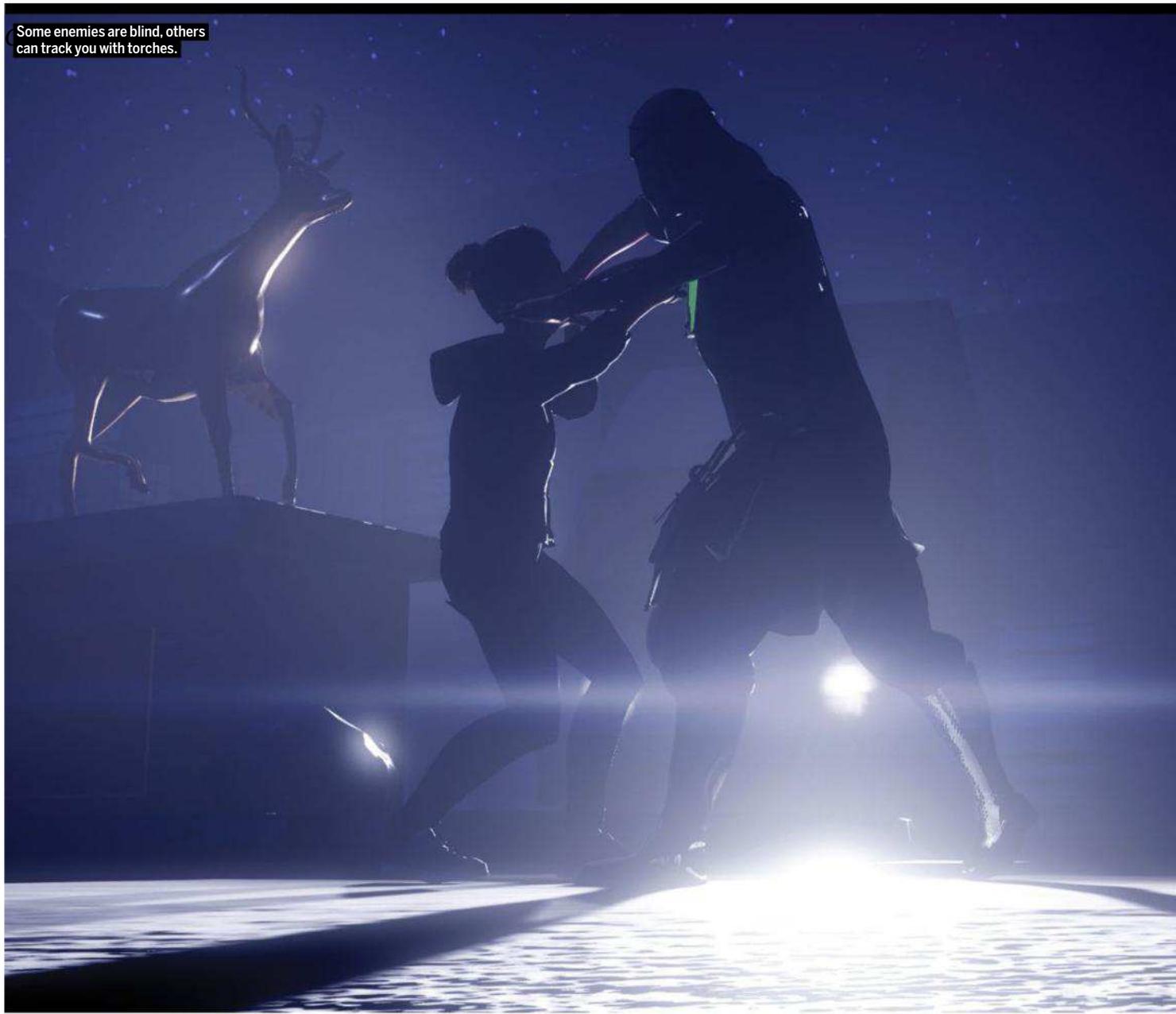
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## PREVIEW

Some enemies are blind, others can track you with torches.



It looks a little  
Stranger Things-y.



The game scales in difficulty depending  
on how many people are playing.

## NEED TO KNOW

RELEASE  
2019DEVELOPER  
QuestionPUBLISHER  
In-houseLINK  
[www.questiongames.com](http://www.questiongames.com)

# THE BLACKOUT CLUB

A co-op horror game from some immersive sim favorites

**I**n *The Blackout Club*, teenagers have been waking up in different parts of their hometown covered in dirt, or with blood under their fingernails and no memory whatsoever of what led them there. Something nasty lurks beneath the surface of this place, and the adults don't want to know, so it's up to the teens to get to the bottom of it.

They'll band together and uncover a vast network of tunnels under their town, and a sinister conspiracy involving the adults they interact with every day—but they don't even know they're a part of it.

In this co-op horror game for up to four players, you've got to document what's going on in this suburban town, but objectives are procedurally generated, thrusting your characters into new and tricky situations every night. It's partly a stealth game, but it'll also encourage you to create diversions and combine different abilities to survive. You have to film evidence of this conspiracy, and get it out of town.

### CAUGHT ON CAMERA

You embark on what's described as 'surveillance missions'. I ask Question developer Jordan Thomas how the game is structured, and how a typical mission might play out. The team's still figuring out the specifics, but the bones of it are in place. "You see the kids standing around inside their little hideout, and you have a map of the town. All you get to choose is where you spawn in—what part of town.

**YOU'VE GOT TO DOCUMENT WHAT'S GOING ON IN THIS SUBURBAN TOWN**

And as your character levels up, you gain access to new start points, more difficult challenges and narrative assets that are closer and closer to the heart of the conspiracy. It's not really a thing that ends. It's more Lovecraftian, where you're struggling endlessly against the unknown, but it gets juicier, I guess, as you go further into the neighborhood and deeper into the underground maze."

Thomas then describes what a typical objective will look like. "The Blackout Club contacts you using a series of emojis that is essentially a code to prevent detection by the adults in town, and you can translate those into text. It says something like 'capture footage of a lucid dragging someone towards the red door', so a particular enemy type and a particular mechanic. One of the players has to allow themselves to be grabbed, so the other player can get that footage on film."

### CINEMA SCOPE

If you manage to capture footage of a lucid—one of the game's enemy types—dragging a friend towards a red door, though, the mission doesn't end there.

"That's just the first objective,"

Thomas explains. "After completing that, another one is sent to you, and the hope is it feels a little bit like a flash mob, where they're constantly trying to stay ahead of the enemy, and you're only told what you need to know at the time. Those are deeply randomized. They could take you across town, they could take you deep into the maze, and the challenges along the way differ each time." You're capturing what Thomas calls the "grotesque behavior" of the enemies on camera, and the more complicated the behavior is, the more experience points you'll get for recording it.

There's also a 'boogeyman' of sorts to contend with, a larger enemy that can only be seen when one player 'blacks out' to reveal its location. The idea is to create horror moments that are usually scripted, only with systems and player behavior. Question is making *The Blackout Club* for co-op partly because horror is a social activity—watching scary films or playing scary games with others usually enhances the experience. I can't wait to give it a go with my cowardly PC Gamer teammates.

*Samuel Roberts*



Teaming up is the best way to survive.

### FIRST LOOK

## PREVIEW

*Phoenix Point*



### NEED TO KNOW

RELEASE  
Late 2018

DEVELOPER  
Snapshot Games

PUBLISHER  
In-house

LINK  
[www.phoenixpoint.info](http://www.phoenixpoint.info)

# PHOENIX POINT

X-COM has mutated into something new

**I**t's a suicide mission, but not in the way I was hoping. I'm in control of four New Jericho soldiers who have been infected with an alien virus. They're heading into battle one last time, on a mission to dispatch the mutants now occupying a New Jericho base. Our job is to secure the location and rescue any survivors. It's not going well.

*Phoenix Point* is the next game from *X-COM: UFO Defense* creator Julian Gollop. It's a return to *X-COM*'s brand of turn-based tactics and high-level strategy. But this is an evolution of the genre, incorporating elements introduced by Firaxis's recent *XCOM* series (the one without the hyphen). It's a merging of ideas both old and new, to create something distinct, with its own quirks and complexities.

Take character movement. Visually, it's similar to the recent *XCOM* games, with a blue area for where your soldier can move and take an action, and a larger, orange outline showing the zone you can relocate to at the cost of an action. But underneath this display is a system reminiscent of the original *X-COM*'s time units that offers more flexibility in your approach.

You can move incrementally, for instance. Where *XCOM* gives you one move order and one action per turn, *Phoenix Point* lets you move one tile at a time, and still take an action. Also, your movement zones are different depending on which weapon you have equipped. Switching to a handgun will give you a

PLAYED IT

larger movement radius than a heavier assault rifle. It's a system that bridges the broad tactical interactions of the older *X-COM* with the less fiddly interaction and UI enhancements of the new *XCOM*.

What remains consistent—across *X-COM*, *XCOM* and *Phoenix Point*—is the difficulty. Things start badly for me when mutated human-crab hybrids march up to my party, using massive shield claws to protect themselves from damage. *Phoenix Point* features locational damage and armor, but my team is on a bridge, unable to effectively flank. When I finally dispatch the crabmen, an assault trooper is dead, and my sniper is injured.

### ROCKET MAN

At least I have a secret weapon in the form of my heavy assault trooper. He's wearing a rocket booster that grants him improved movement, and lets him jump to high cover. I perch him on a tower, looking down on the mutants. I'm a genius.

Unfortunately, the mutants have some tricks of their own. And sending in a ginormous spider-crab lady with a ludicrous health pool is a better trick than anything I can produce. These boss mutants are individual characters, and they can follow you throughout your campaign. This one walks straight into the tower my heavy is camped in, demolishing it. He dies.

In addition to the battles, *Phoenix Point* will also feature an *X-COM* style Geoscape strategy layer. This is where you'll make high-level decisions for the Phoenix Project, as you attempt to overcome the mutant threat. You'll use the Geoscape to hunt alien buildings and gather resources, but also seek out other factions. New Jericho, which I'm playing as in this demo, is one such faction—a militaristic competitor to the Phoenix Project.

Each faction has its own classes. Many of New Jericho's traits, for instance, are focused on military tech. If you recruit a soldier for one of these factions, you can include that class into your own group.

My mission ends with my final trooper running from the boss into an ambush. It's over, but, based on my doomed session, I'm eager to see more. *Phoenix Point* is filled with ideas that offer a considered alternative to the recent *XCOM* games.

*Phil Savage*

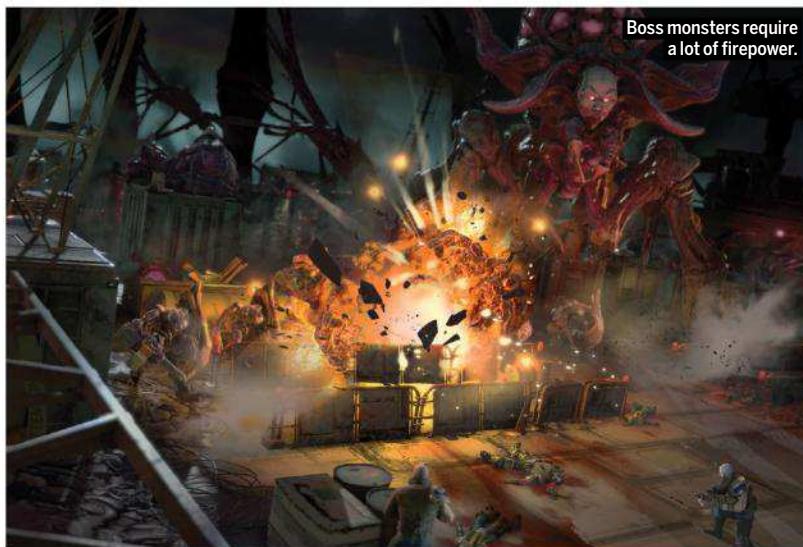
**IT'S A MERGING OF IDEAS BOTH OLD AND NEW, TO CREATE SOMETHING DISTINCT**



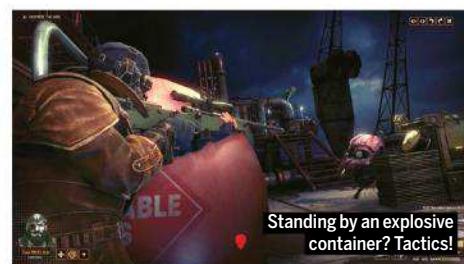
Snipers can target and disable specific body parts.



The Geoscape is where you plan future missions.



Boss monsters require  
a lot of firepower.



Standing by an explosive  
container? Tactics!

*The Wild at Heart*

## NEED TO KNOW

RELEASE  
2019DEVELOPER  
SleepNinja GamesPUBLISHER  
In-houseLINK  
[www.sleepnijagames.com](http://www.sleepnijagames.com)**THE WILD AT HEART**

**Two young friends embark on an adventure of magic and mystery**

If you ever snuck into the woods as a child, hoping to find mythical creatures, or searched valiantly for a portal into another world, *The Wild at Heart* feels like it's being made just for you. Currently in development at indie studio SleepNinja Games, it tells the story of two young friends who uncover a land of magic and monsters on the borders of their sleepy hometown.

It takes place in a small coastal town called Willowvale, which sits alongside a deep, sprawling forest. While exploring the woods one day, the game's protagonists Wake and Kirby discover that there are friendly spirits living among the trees, and they're being protected by an order called the Greenshields.

Justin Baldwin, creative director at SleepNinja Games, talks about these characters with unbridled enthusiasm. "The Greenshields defend the elemental spirit creatures from an all-consuming dark force called The Never," he says. "The Greenshields haven't had any new blood in years, and their order has stagnated to the point that they don't remember their own names. Wake and Kirby must work together, with the aid of a loyal swarm of Spritelings, to battle enemies, construct new pathways, gather resources, reinvigorate the order of the Greenshields, and discover the secrets of this forgotten world."

This all sounds very frightening for two children, but Kirby and Wake are prepared for their adventure. Wake is a precocious



## FIRST LOOK

kid with a brilliant mind but a troubled home life who spends his time engineering various contraptions, such as his proton pack-inspired Gustbuster. Kirby, meanwhile, is Wake's eight-year-old neighbor, who uses her budding investigative skills and trusty Peepmaster 4D goggles to solve mysteries.

**CREATURE FEATURE**

The images SleepNinja has shared so far look beautiful. Kirby and Wake can be seen interacting with strange creatures, such as the giant weasel Cath, who greets the children with a Cheshire Cat-like grin, and an overgrown toad called a Bellowog. The little radish-shaped creatures that follow Wake and Kirby are called Spritelings, and players can use their Pikmin-esque qualities to solve puzzles, fight enemies and craft items.

"Throughout Wake and Kirby's journey they will encounter many strange and interesting creatures," says Baldwin. "These creatures will usually be an embodiment of a theme or conflict in our story. These creatures will act as [Mario] Odyssey-like progression blockers that will need overcoming, befriending or appeasing to progress."

SleepNinja has taken cues from the movies of Studio Ghibli, as well as *Where the Wild Things Are* and *The NeverEnding Story*. Like those narratives, a vein of melancholy has also slipped in. "I knew for a while I wanted to make a game about escapism with little creature buddies," Baldwin says. "I think it came out of my continuing to work through and process things from my own childhood. It's a time that is supposed to be before responsibility, before tragedy, before the world is anything other than magic. However, it's also a time that can leave scars. We wanted to tell a story that aims for that imaginary escapism and nostalgia but also keep an honest heart when it comes to the challenges of childhood."

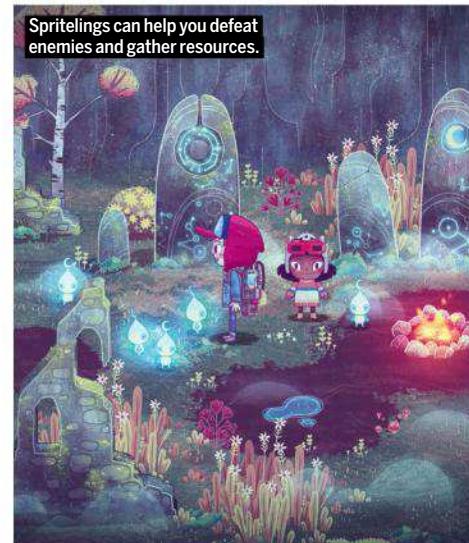
It's this interest in being a child that defines the game. "The lens of youth is the main theme," Baldwin explains. "Getting lost in videogames and comics and cartoons, exploring the woods, seeing all the sights that your imagination would show you. We want this game to make you feel like you're a kid again."

*Kimberley Ballard*

**"WE WANTED TO TELL A STORY THAT AIMS FOR THAT IMAGINARY ESCAPISM"**



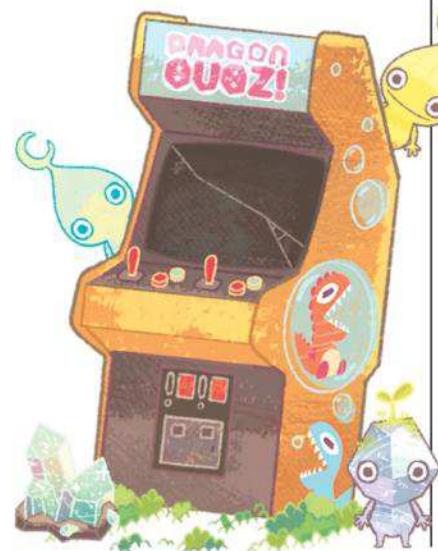
Wake and Kirby meet a giant weasel spirit called Cath.



Spritelings can help you defeat enemies and gather resources.



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# LIFE FINDS A WAY

**JURASSIC WORLD EVOLUTION** gives you the tools to build your own dinosaur theme park, but should you? *By Andy Kelly*



A

s you play *Jurassic World Evolution*, Dr Ian Malcolm (played, of course, by Jeff Goldblum) will occasionally chip in to remind you that what you're doing—creating thinking, feeling creatures in a laboratory to, essentially, sell theme park tickets to tourists—might not be totally cool. He's your conscience, and a neat way for the game to acknowledge the dubious morality of what you're doing, which the films have made a point of addressing. So while building your own Jurassic World facility is exciting, and a dream come true for many fans of the series, developer Frontier still wants you to think about the important philosophical questions it raises.

## COVER FEATURE

### Jurassic World Evolution

“Getting to write new dialogue for Dr Ian Malcolm is just the best,” says lead writer John Zuur Platten. “And getting to hear Jeff Goldblum perform it? It doesn’t get any better than that. And, yes, some other iconic characters from the series will be appearing in the game, too.” These haven’t been revealed yet, but the game is being co-developed with franchise owner Universal, so I wouldn’t be surprised if someone like Owen Grady (Chris Pratt) or Ellie Sattler (Laura Dern) turned up too.

Set on the Muertes Archipelago, a chain of five islands off Costa Rica, you’ve been hired by the Hammond Foundation as its new operations manager. It’s your job to keep the park’s guests happy and, more importantly, alive. But that’s easier said than done when there are tropical storms, saboteurs, and other disasters to contend with. The locals don’t call these islands the ‘Five Deaths’ for nothing.

“On the first island, Isla Matanceros, the weather doesn’t get much more dramatic than the odd rain shower,” says Michael Brookes, game director. “But as you progress through the other islands, you’ll start encountering other kinds of calamity. So there might be more storms, or your dinosaurs will break out if you haven’t been doing a good job of looking after them. But you’ll also have more tools for dealing with these situations as you progress. The trick is learning to predict disasters and prepare for them.”

“On Isla Tacaño you have two different areas connected by a very thin strip of land, so you’ll have to ferry things around and make sure you have the right resources to do so.”

On the smallest island, Isla Pena, you have the added challenge of having to deal with the most dangerous dinosaurs. There’s a lot of visual variety, and the time of day can totally change the mood of an island. You’ll be working on Isla Pena at night, which makes moments when storms roll in extra dramatic.”

#### FOSIL FUEL

My demo begins on Isla Matanceros, an expanse of jagged mountains covered by a jungle. I start by building an expedition centre, which lets me send archaeologists around the world to hunt for fossils and mosquitos encased in amber. These



## ANCIENT HISTORY Other Jurassic Park games released for PC



### JURASSIC PARK (1993)

Developed by Ocean Software, this shooter features both top-down and first-person levels, and even a few puzzles. A strong debut for the series on PC.



### TRESPASSER: THE LOST WORLD (1998)

An over-ambitious first-person game. *Trespasser* has become somewhat infamous for its laughably broken physics and bizarre, unwieldy control scheme.



### JURASSIC PARK III: DINO DEFENDER (2001)

A platformer developed by Knowledge Adventure. The studio also released *Scan Command*, which used a weird barcode-scanning peripheral.



### JURASSIC PARK: DINOSAUR BATTLES (2001)

Another game by Knowledge Adventure, this time you’re pitting various dinosaurs against each other in Pokémon-style battles.



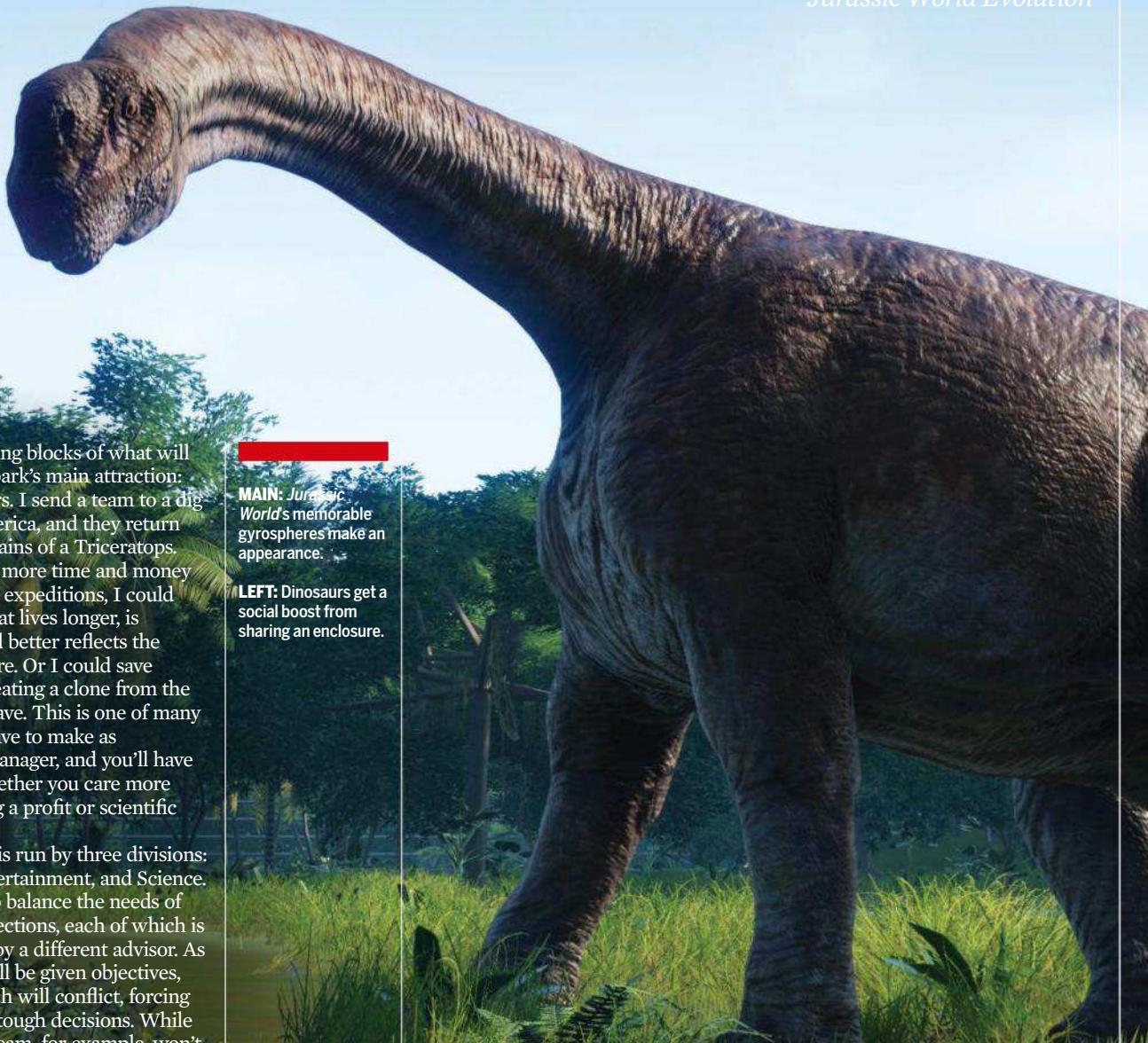
### JURASSIC PARK: OPERATION GENESIS (2003)

A first attempt at a park-building sim by Blue Tongue. A fun game, but the slow pace, dumb AI and repetitive missions let it down.



### JURASSIC PARK: THE GAME (2001)

In this low-quality episodic Telltale blunder, the story focuses on characters trying to recover the canister of embryos dropped by Dennis Nedry in the first film.



are the building blocks of what will become my park's main attraction: The dinosaurs. I send a team to a dig in South America, and they return with the remains of a Triceratops.

If I spend more time and money on additional expeditions, I could create one that lives longer, is healthier, and better reflects the actual creature. Or I could save money by creating a clone from the materials I have. This is one of many calls you'll have to make as operations manager, and you'll have to decide whether you care more about turning a profit or scientific authenticity.

The park is run by three divisions: Security, Entertainment, and Science. You'll have to balance the needs of these three sections, each of which is represented by a different advisor. As you play you'll be given objectives, some of which will conflict, forcing you to make tough decisions. While the Science team, for example, won't appreciate you creating fantastical new dinosaurs, the Entertainment guys will love it. Think Jurassic World's Indominus rex: a hybrid designed to pull in the crowds at great risk to the security of the park.

"Being balanced and keeping every division happy is an effective strategy, but requires a lot more effort," says Brookes. "You can follow one path, but the others will get annoyed. And that can even lead to sabotage." The specific details of this have yet to be revealed, but I can't help but think of Dennis Nedry. "You will get a loyalty bonus for sticking with one division, however, so there's an element of risk and reward to picking a side."

"I wanted to give each advisor an arc, and I wanted them to be people you would care about," says Zuur Platten. "As characters they're very

**MAIN:** *Jurassic World*'s memorable gyrospheres make an appearance.

**LEFT:** Dinosaurs get a social boost from sharing an enclosure.

natural extensions of the Jurassic Park franchise, and feel like they fit into that universe nicely. As well as watching the movies for inspiration, I also had feedback from the filmmakers and the studio to make sure it was right. We're being entrusted with a jewel here, right? This series is worth billions of dollars, and I'm very aware of that. So when I'm creating new characters and concepts, I'm doing it with respect."

Deciding I have enough DNA to create a Triceratops, I choose the

non-extinct animal that will be used as a base for its incubation. I go for the standard, a frog, but I could have chosen a lion, which will directly affect the stats and temperament of the dinosaur. A partially complete DNA profile also comes with the risk of the dinosaur dying before it's born, which can be costly and time-consuming. The dinosaurs are the heart and soul of your park, and the variety and quality of the clones will have a direct impact on its success.

I use the terrain tool to create a flat stretch of grassland, which is where I'll be housing my new Triceratops. I circle it with a steel fence, which is the cheapest kind. For more money I could build a stone wall or electrified fence, but for my starting budget this will have to do. I add some trees, then I finish the

**"SO WHEN I'M CREATING NEW CHARACTERS AND CONCEPTS, I'M DOING IT WITH RESPECT"**

# COVER FEATURE

## Jurassic World Evolution

enclosure with a small lake and a feeder that will automatically send bundles of food into the pen. Triceratops are herbivores, so this will only dispense plants, but for meat eaters a live goat will occasionally be set free in the pen—roaming around and bleating until the dinosaur gets hungry.

### CHAOS THEORY

Dinosaurs have very specific needs when it comes to their enclosures. You have to consider space, vegetation, and other factors, otherwise their happiness and health will suffer. An unhappy dinosaur will be increasingly likely to break out. If that happens, you'll wish you paid a bit extra for electrified fences. Dinosaurs are also social creatures, and some will be miserable if they don't have a playmate. With this in mind, I create two Triceratops and

send them into their new home.

"Some islands have starting layouts," explains Brookes. "They can be dilapidated or worn out, though, only giving you a very basic infrastructure to work with. Power can be more difficult or expensive to generate on some islands. And some islands will be covered in vegetation, so you'll have to clear space. Isla Sorna is the final island, with the biggest play space, and at that point we'll be throwing everything at you."

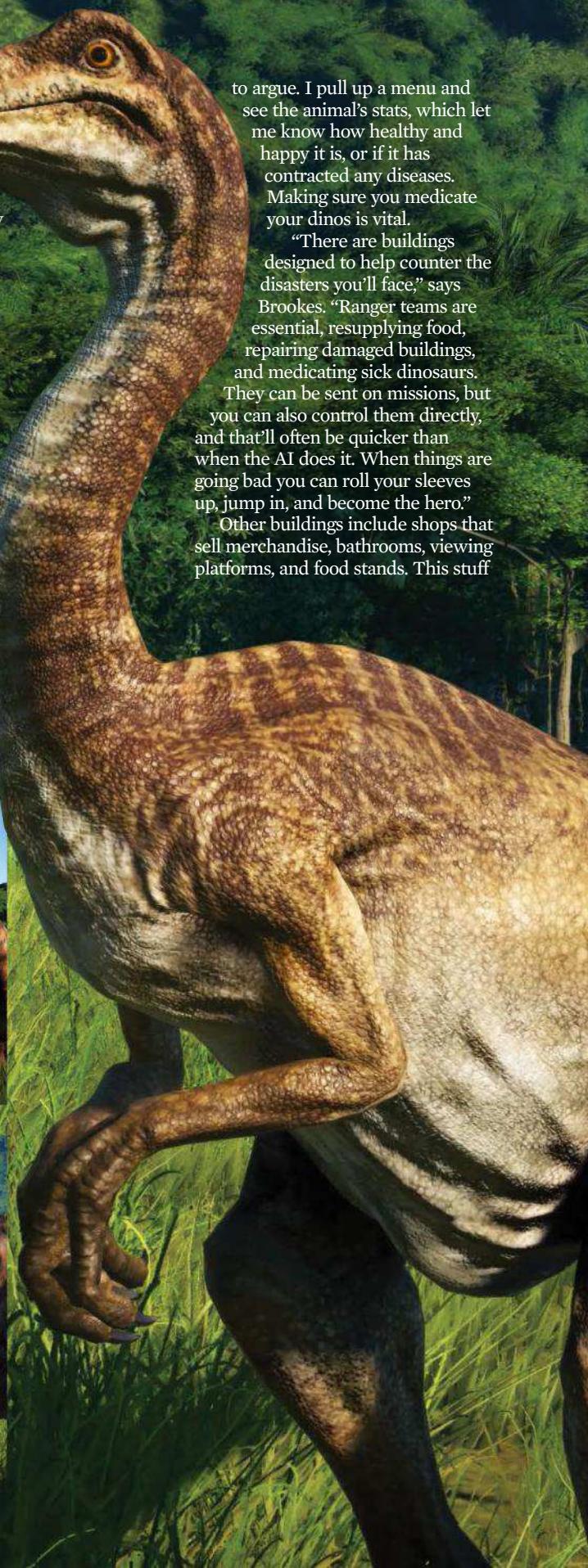
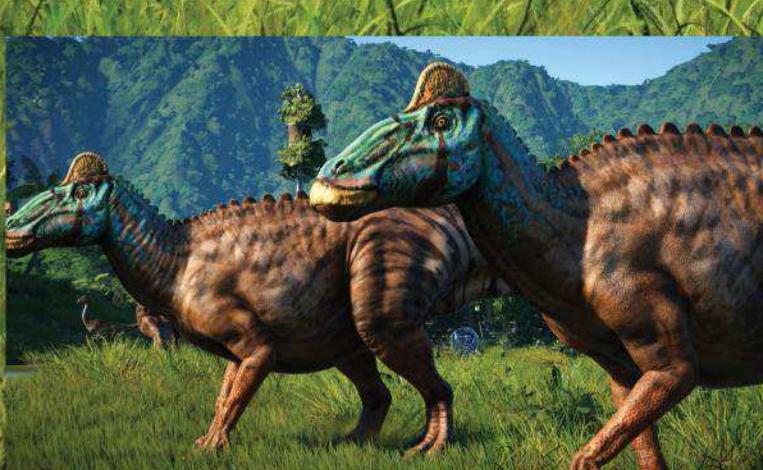
My newly cloned Triceratops emerge into their enclosure. I click on one them and the camera swings down to their level, showing off the incredible detail that has gone into their design, sound, and animation. Frontier's developers tell me several times that the studio's goal is making the best videogame dinosaurs ever, and when I see these huge beasts come to life I find it hard

to argue. I pull up a menu and see the animal's stats, which let me know how healthy and happy it is, or if it has contracted any diseases. Making sure you medicate your dinos is vital.

"There are buildings designed to help counter the disasters you'll face," says Brookes. "Ranger teams are essential, resupplying food, repairing damaged buildings, and medicating sick dinosaurs.

They can be sent on missions, but you can also control them directly, and that'll often be quicker than when the AI does it. When things are going bad you can roll your sleeves up, jump in, and become the hero."

Other buildings include shops that sell merchandise, bathrooms, viewing platforms, and food stands. This stuff



isn't as exotic as the dinosaur enclosures, but you need it to keep your guests entertained. Your advisors will inform you if the park is missing a building that serves a particular need, reflecting their own interests. If you don't have any merch stands your Entertainment advisor will suggest you get one, because that's a lot of profit you're missing out on. And your Security advisor might be happy if you build stronger walls or invest in more rangers to keep an eye on the your dangerous dinosaurs.

Later, without thinking, I create a Ceratosaurus—a carnivorous dinosaur—and release it into the same pen as the Triceratops. The enclosure is big enough that they don't immediately meet, but if I leave them in there, there's gonna be trouble. I send a helicopter and take

control of it myself. I could let the AI do this, but it's more fun being hands-on. I fly over the enclosure and switch to an over-the-shoulder view of a rifle-toting ranger, letting fly with a tranquilizer shot and sending the Ceratosaurus to sleep.

Next I send a transport chopper in, which scoops the heavy dinosaur up and flies it over to another enclosure I've built nearby. There's something hilarious about the way the snoozing Ceratosaurus' floppy limbs hang in the air as it's carted from one area to the other. Moving dinosaurs around is something you'll be doing a lot in the game as your park expands and your goals evolve, and this is how you do it. That tranquilizer rifle will also come in handy if an unhappy dinosaur ever gets loose and starts murdering your terrified, screaming guests.

### TALL TALE

*Jurassic World Evolution* is a sandbox facility-building sim, but there is some structure. You'll be told a complete story, but the pace and frequency of the events will depend on your playstyle. A player who leans into Science will experience a very different story to someone who prefers Security, and vice versa. While this does limit your freedom, I like the idea of a simulation game

with a strong story that lends your actions some context and consequence, rather than being totally open-ended.

"I look at it like I'm setting the table, then letting you pick what you want from the buffet," says Zuur Platten. "There isn't a lot of beat-to-beat narrative, but the game does have campaign elements. The three divisions have their own characters and stories that are unique to those paths. And if you complete all the missions for a division, they'll tell you a complete story. So the game is both freeform and scripted."

Although *Jurassic Park* simulation/strategy games have been attempted before—including 2001's *Park Builder* (weirdly, a Game Boy Advance exclusive) and 2003's *Operation Genesis*—this is the first one that really feels like it might make the dream a reality. With the backing of Universal and a studio as talented as Frontier working on it, this is shaping up to be something pretty special. Playing god and filling a theme park with dangerous prehistoric creatures might be a morally questionable endeavour, but it sure as hell is a lot of fun—even if Dr Malcolm disapproves. ■

## "I'M SETTING THE TABLE, THEN LETTING YOU PICK WHAT YOU WANT"

**MAIN:** Up close, the dinosaurs have a huge amount of personality.

**FAR LEFT:** A peaceful scene, but disaster is always around the corner.

### ALTERED BEAST

*Some of the dinosaurs you can clone*



#### BRACHIOSAURUS

Enormous herbivores that lived 160 million years ago and whose necks could reach as high as 30 metres.



#### CERATOSAURUS

A carnivore that existed 150 million years ago, which had a set of horns on its head and a tail for swimming.



#### EDMONTOSAURUS

A billed dinosaur that roamed the earth 73 million years ago. Its beak was used for crushing plant matter.



#### TRICERATOPS

One of the most recognisable dinos thanks to its three distinct horns. Existed around 70 million years ago.



#### GALLIMIMUS

These ostrich-like dinosaurs, active 70 million years ago, could run at speeds of 60mph.

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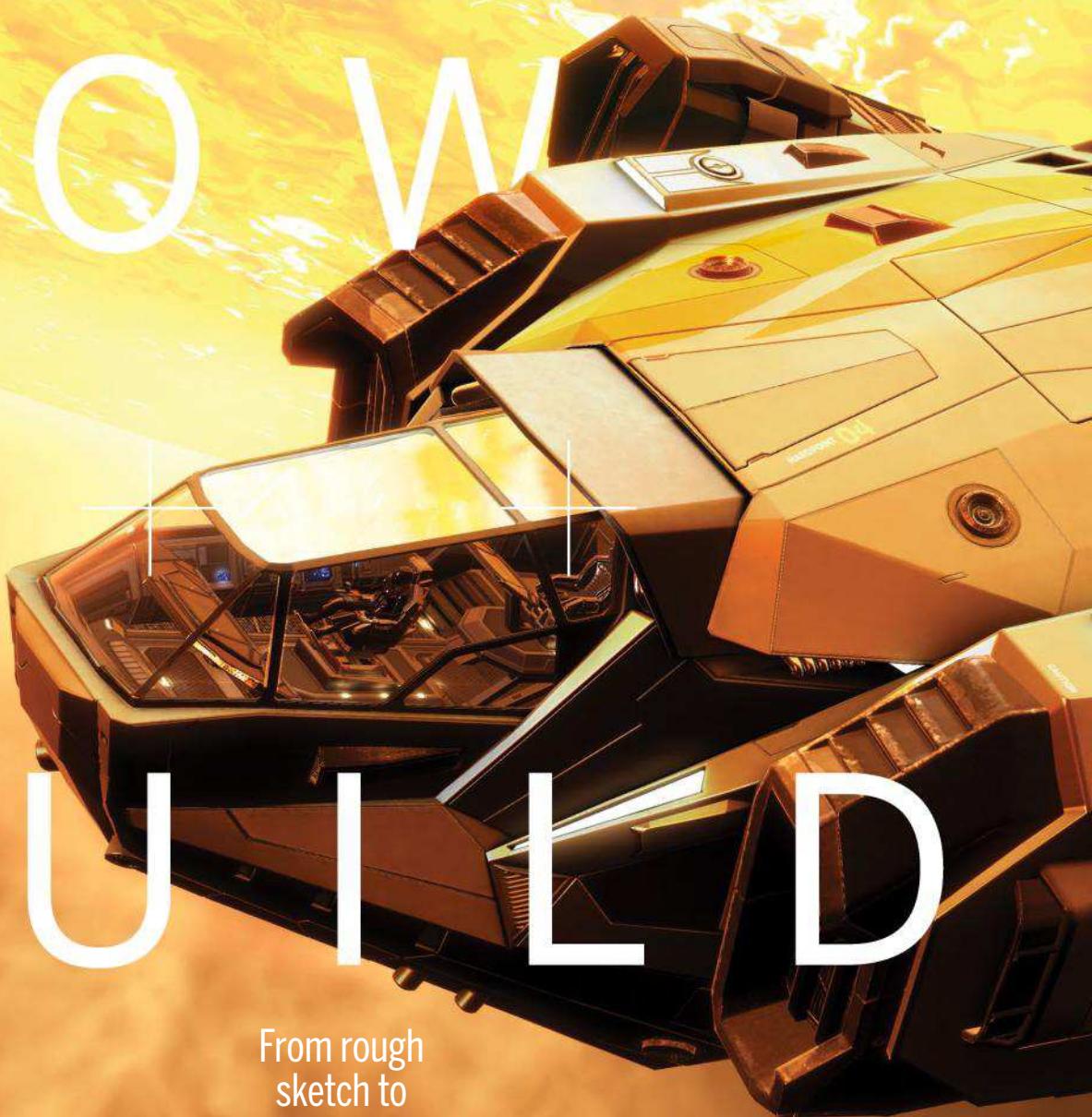
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# HOW BUILD SPACE



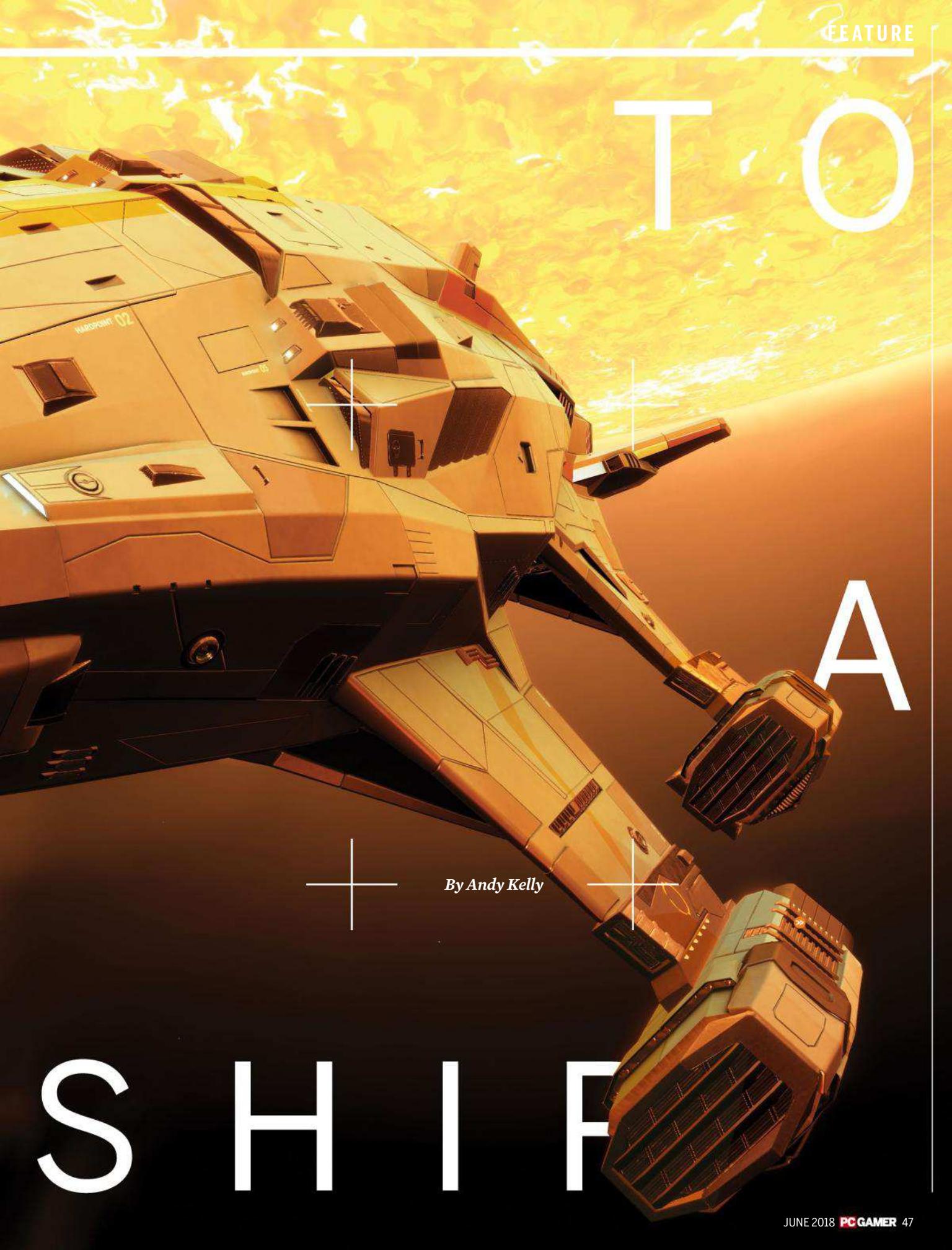
From rough sketch to final model, here's how Frontier creates the spaceships of **ELITE DANGEROUS**.

# SPACE

TO

A

SHIFT

*By Andy Kelly*

T

There are over 30 flyable ships in *Elite*, and every one has its own distinct personality. These craft are the real stars of the game, and the thing every commander aspires to own—whether they're an explorer, trader, bounty hunter, or pirate. But how are they built? It's something that has always intrigued me, how an idea makes it from someone's mind to a spaceship that can be flown in-game. So I asked how Frontier does it, focusing on the latest ship to be added to its growing space garage: The mighty Chieftain.

"The Thargoids have returned," says Sandro Sammarco, lead designer of *Elite Dangerous*, referring to the mysterious aliens that have been tormenting pilots across the galaxy. "And their arrival has inspired the Alliance to build a war fleet, including a new ship called the Chieftain." This combat-focused ship is manufactured by Lakon, most famous for its Type-9 freighter. It shares some design elements with that ship, but is a very

**BOTTOM:** The 'face' of the ship is an important part of its design. Frontier wanted the Chieftain to look intimidating.



different, and deadlier, beast. The idea behind the similarities is that the ship has been created quickly, on the fly, as a response to the looming Thargoid threat.

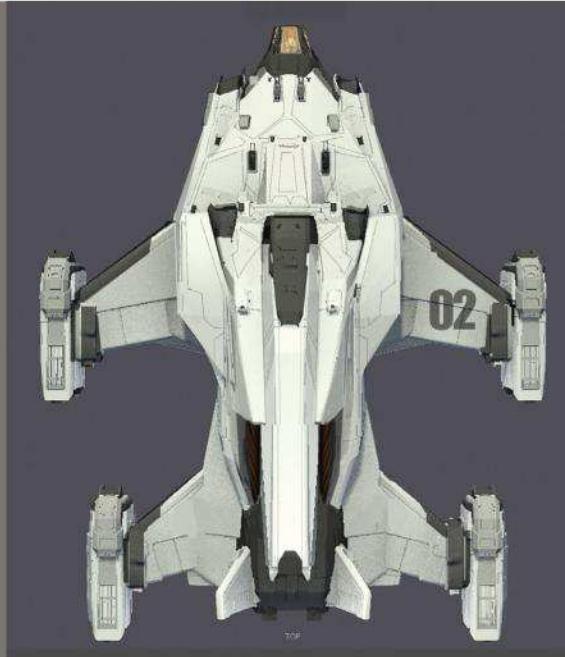
"The Empire, Federation, and Alliance are currently the three big superpowers in the game, and they control huge swathes of space," Sammarco continues. "They don't generally like each other very much, and have been close to war. And with the arrival of the Thargoids, the Alliance decided it had to protect itself and its people. So they commissioned Lakon to build them a range of new war-ready ships, including an experimental craft, the Chieftain, designed to battle Thargoids."

And so, although this isn't the case with every ship in *Elite*, the Chieftain was born from a story necessity; a way for the Alliance to fight back against the alien invaders. "Players have been clamoring for Alliance ships for a long time," says Sammarco. "So we really wanted to make that happen anyway, and the arrival of the Thargoids was the perfect opportunity. This is the right time to introduce more ships, especially if they're built for combat."

Knowing that the Chieftain is an alien hunter gives Frontier's designers a starting point. "When we create a

**"WHEN WE CREATE A SHIP, WE LIKE TO GIVE IT A BROAD ROLE"**





ship, we like to give it a broad role. There is a crossover sometimes, because we have ships that are good at several things, but in this instance we wanted to lean into one role at the expense of others. The Chieftain is all about space superiority, about outmaneuvering your opponent. It's similar to the Vulture, one of our heavy fighters, in that respect. But that ship is more expensive, so it's nice to have a more affordable version with those capabilities."

### THE SHIP BACKBONE

Frontier has something it calls the 'ship backbone'; a design chart plotting every ship in the game and the niche it fills. "It roughly illustrates things like value and effectiveness. At the bottom you have Sidewinders and Adders, and at the top there are monsters like the Anaconda. It's only an approximation, but it gives us an idea of where a ship fits. In the Chieftain's case, it sits somewhere in the upper-mid range. This is where ships are still fun to fly and maneuverable, but are starting to show some real teeth in combat."

This is an important step when it comes to designing a new ship: Figuring out where it sits in the hierarchy, making sure it doesn't fill a role another ship already does well, or be so overpowered that it throws the whole game into turmoil. "For balancing we think about the loadout. How many guns is the Chieftain going to have? It's a warship, so it'll have a stack of them, of course. But it doesn't have to beat other ships in its class in terms of the size of its guns, because it's going to be behind them, dodging their fire."

The backbone helps Frontier weigh new ships up against others in its class, to make sure it doesn't massively outclass them. "With the Chieftain we looked at the baseline of other ships in its range and worked from there. This speeds the creation process up, especially compared to the early days of *Elite Dangerous* when there were no precedents, no backbone, and everything had to be

**TOP LEFT:**  
Throughout the many design iterations of the Chieftain ship, the four engines were always there.

created from scratch. We're getting better at balancing new ships, and we're happy with where the Chieftain is sitting on the chart."

Creating a ship is a collaborative process. The 3D and concept artists will work closely with the designers and writers to make sure a new ship works in all areas: From aesthetics, to function, to purpose. "Sometimes what's happening in the game will drive us towards designing a particular kind of ship. The lore, the progression of the story. And in those cases it's not just about where the ship fits on the backbone, but how it serves the narrative."

When a ship slots neatly into the backbone, Frontier starts thinking about what makes the ship desirable. "I call it the shtick," says Sammarco. "I can say it's a combat ship, but there are other combat ships. What makes me, as a player, want this one? There are instant wins in the fact it's an Alliance ship, and a Lakon ship, which gives it a distinctive styling and lore. A car manufacturer will ask, 'What do our customers want? What will sell this car?' It's the same when it comes to designing ships for *Elite*."

### CHART ATTACK

One of the biggest selling points of the Chieftain is the position of its hardpoints. "A ship like the Imperial Clipper has trouble in combat because the hardpoints are fixed to the wings and spread far apart. This makes hitting

### BIG DATA

*The Chieftain in numbers*



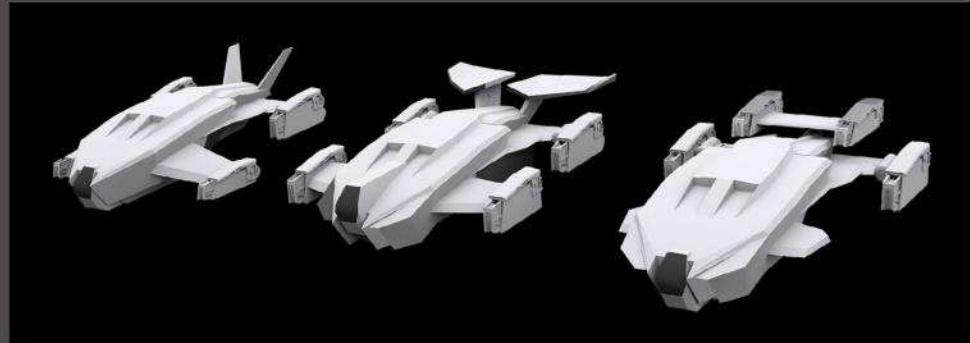
Cost: 19,382,250CR
Insurance: 969,112CR
Top speed: 235m/s
Boost speed: 338m/s
Shields: 162MJ
Armor: 504
Hull mass: 400t
Cargo capacity: 32t
Fuel capacity: 16t
Unladen jump range: 9.39ly
Mass lock factor: 13
Hardpoints: 10

# STEP BY STEP

*The different stages of designing a ship*

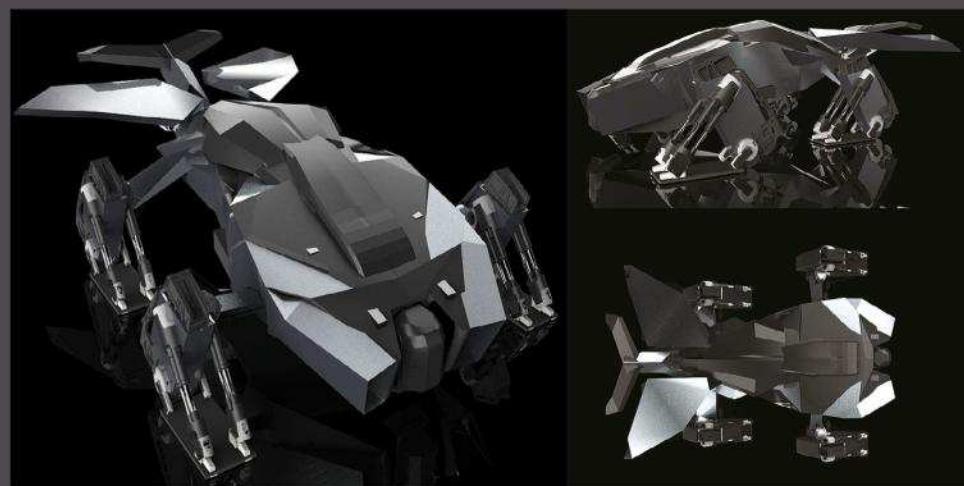
## 1 BLOCKOUT

This is the first stage. The artists will draw rough sketches called 'blockouts' in 3D software, which help establish the basic shape of the craft being designed. "The nice thing about working in 3D is that we can check the design out from every angle," says Chris Gregory, art director. "But we don't texture them, because that can be a little misleading. You can be seduced by the fact that it's shiny. You need to get the basics right before the details."



## 2 IDEATION

Once the shape has been settled on, the artists then focus on the details, such as how the landing gear will function and where the engines are placed. A ship can go through dozens of iterations at this phase until it clicks. "We also want the front of the ship, its face, to have a representative character that feels right. For the Chieftain, we wanted it to be beefy and imposing, and we might think of something like a rhino."



## 3 PAINTOVER

The 3D models are then sent over to the concept artists, who paint directly over the blockouts to get a sense of how the ship will look when it's flying around in the game. They also add details like lights and heat vents to help them understand how the ship will operate. "Our artists are getting good with the 3D software, which means they can test things to do with linkages and pistons without having to send it back to us after the paintover."





## 4 KITBASH

In sci-fi movies, particularly from the '70s, effects studios like Industrial Light & Magic would 'kitbash' their ships using model kits for planes, tanks, battleships. Frontier does something similar, sticking 3D elements to the blockouts to give them depth and fidelity. But it's only a visualization tool: None of these premade objects will make it into the game. "In the same way it allowed those guys to throw shapes together, it allows us to quickly establish the details of the ship."

## 5 COCKPIT

The cockpit can go through as many iterations as the ship itself. The shape of the canopy is carefully considered, because this is what pilots see the most. It has to look good and function well. "When designing the cockpit we're thinking about the seating position, working out the camera view, and making sure the struts aren't too heavy. We put a rough model in the game, then the designers play it and give us feedback on how it functions."



## 6 FINAL MESH

When the design is finished, the artists will create the final 3D model, which has to be highly precise. "Our models are really tidy and we never waste any polygons. The density of the mesh has to be consistent all over, and we'll create multiple versions with different levels of detail, so when you see it close up it'll be super detailed, but when it's a dot in the distance it's not. A lot of finesse and detail goes into the panel lines and how they connect up."





Now that multi-crew ships are a thing, designers have to consider where other players will sit.

things that are close to you difficult. But with the Chieftain, there are two mounts on either side of the cockpit, very close to its centerpoint. They're like a predator's eyes looking forward. And the other guns are on two lines across its back, dead center. It's basically perfect for dogfighting."

The Chieftain has the most concentrated set of centerline weapons in the game, which solves the problem of making it desirable to the playerbase—especially for pilots who love combat. But it doesn't have the biggest guns, so there's a trade-off for that accuracy. It has less internal space than other ships in its class, which is a problem for traders. And its jump range is relatively limited. The designers have to make sure any new ship they introduce is balanced against the others, which is where that backbone graph proves invaluable. So while the Chieftain is definitely a formidable, powerful vessel, it has its share of weaknesses too. It's only fair.

"The ships in *Elite Dangerous* are more than the sum of their parts," explains Sammarco. "The actual experience of flying them is more than just the numbers that define their flight model. We'll tweak its maneuverability, maybe take its shields down a bit. It looks tough, so we make sure it has reasonably strong armor and quite a lot of health. A nice, robust ship, but with weaker shields than similar craft. We build these trade-offs in, because it keeps things interesting."

Before a ship is rolled off the production line, it's prototyped and extensively playtested. "It's at this stage where we catch some of the most obvious flaws," says Sammarco. "It could be too quick, too powerful, or spin out too easily. So we'll tweak its performance based on that data." After that, Frontier will usually test a new ship out in a closed beta, letting real players—the harshest critics—get

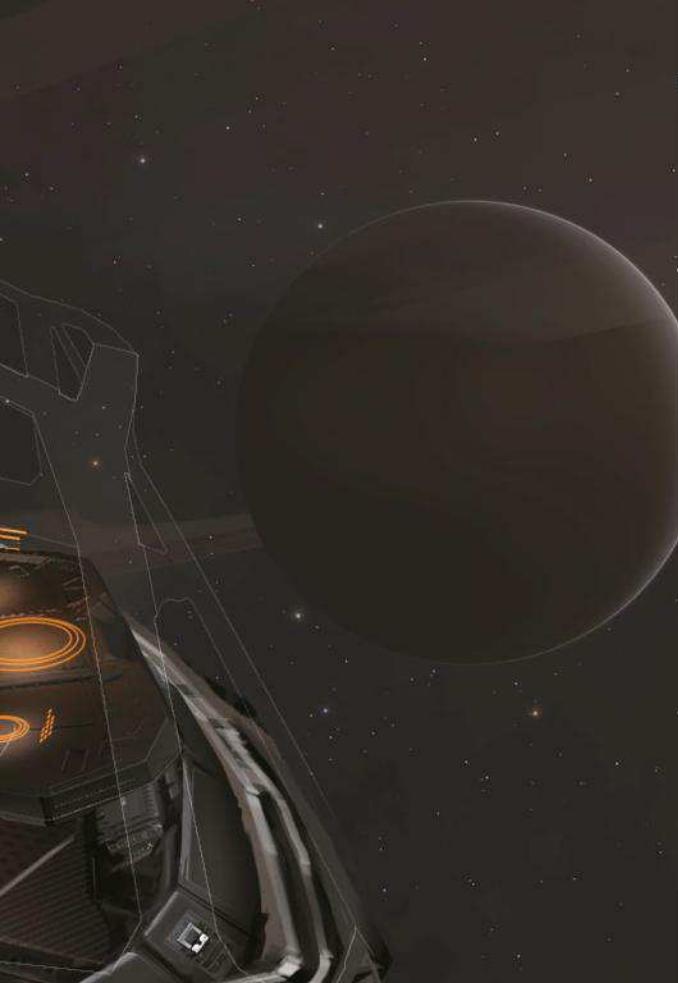
## FULL THROTTLE

*How the engine sounds were created*



The sounds of the Chieftain's engines were created by audio designer Paola Velasquez Barrera. The ship sounds different from other Lakon models, reflecting the fact that it's one of the company's first warships. "A lot of the Lakons have an organic sound, based on old-world technology" she says. "But with this one I used

more synthesized sounds." The position of the engines on the Chieftain, which are placed on either side of the cockpit, also factored into the sound design. "It's a very stereo sound when you accelerate, and you notice the difference compared to other Lakon ships. It has so many engines, and getting it sounding right was a challenge."



their hands on it. "We had a great response to the Chieftain in the beta. Our players know more than us. They're playing *Elite Dangerous* all the time, and we love tapping into that knowledge."

#### CHANGE UP

Based on beta feedback, some changes were made to the maneuverability of the Chieftain. "People complained that it was too slidey and not particularly controllable. So we tightened its thrusters up, and it's far more responsive now, going where you want it to go before it starts sliding all over the place." Frontier puts great trust in its community, but they will tweak ships after launch if



**TOP:** The early 3D blockouts get increasingly complex as the design is iterated on.

**BELOW:** The Scarab buggy in this image gives you an idea of just how big the Chieftain really is.

PHOTO: FRONTIER GAMES

**"OUR PLAYERS KNOW MORE THAN US. THEY'RE PLAYING ELITE ALL THE TIME"**

necessary. "For all the testing we do, and the community does, this is a complicated game with a lot of moving parts. So we'll look at the data and make changes."

This, Sammarco says, is a fact of life when it comes to developing an ever-expanding, constantly evolving game like *Elite*. "When I started in the industry, which was a long time ago, you'd beaver away for a year, maybe two, then it would go out. And barring any patches to make sure the game works, that was it. It was done, and you would move on. But *Elite* is a live game, and we're still adding new content three years later. It's brilliant and terrifying, and there's a real inertia to anything we add. We have to make sure everything doesn't topple over

when we introduce a new element."

The Chieftain was finally released into *Elite Dangerous* on February 27, as part of the first chapter of the free *Beyond* expansion. Almost immediately after it was made available, it generated some heated debate within the game's community. Some commanders are critical of its weak shields, but others find it to be a hardy fighter that's well suited to venturing into Resource Extraction Sites—areas of space where wanted criminals can be found and their bounties claimed. You can't please everyone, and almost every ship introduced into the game splits the community. But that's the beauty of Frontier's diverse hangar of ships: There's one for every kind of pilot. ■



# The TOP 50 FREE GAMES

Here's our latest list of the best games that are completely free.

By Phil Savage, Philippa Warr & Andy Kelly

Replayable p60

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PCG'S Picks p62

Classics p55

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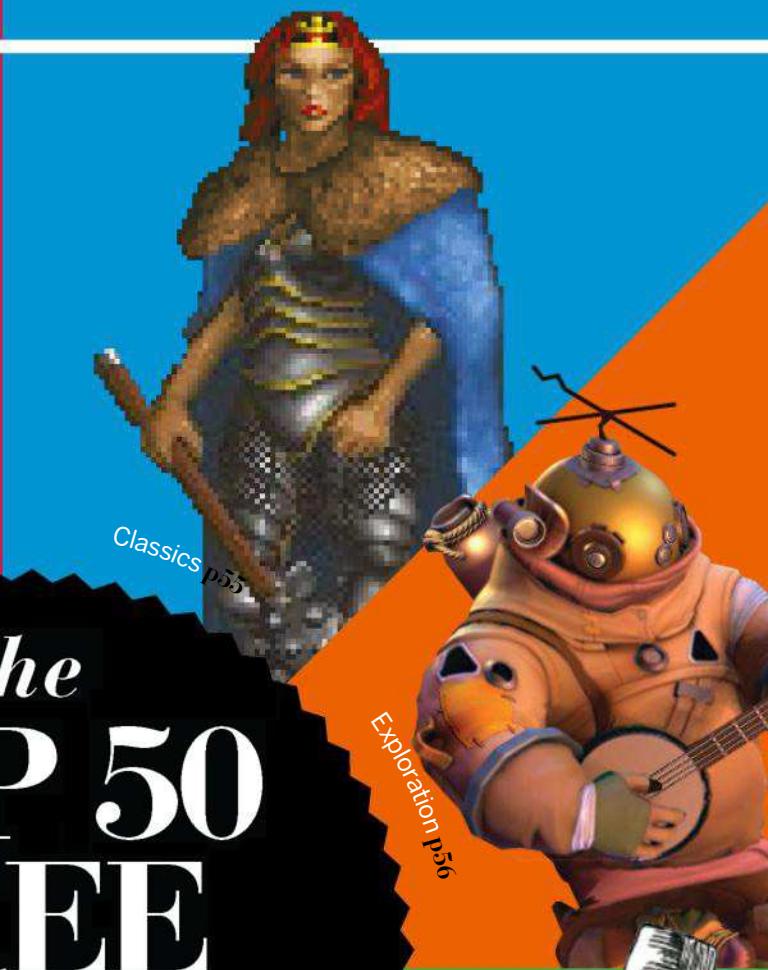
Strange & Surprising p61



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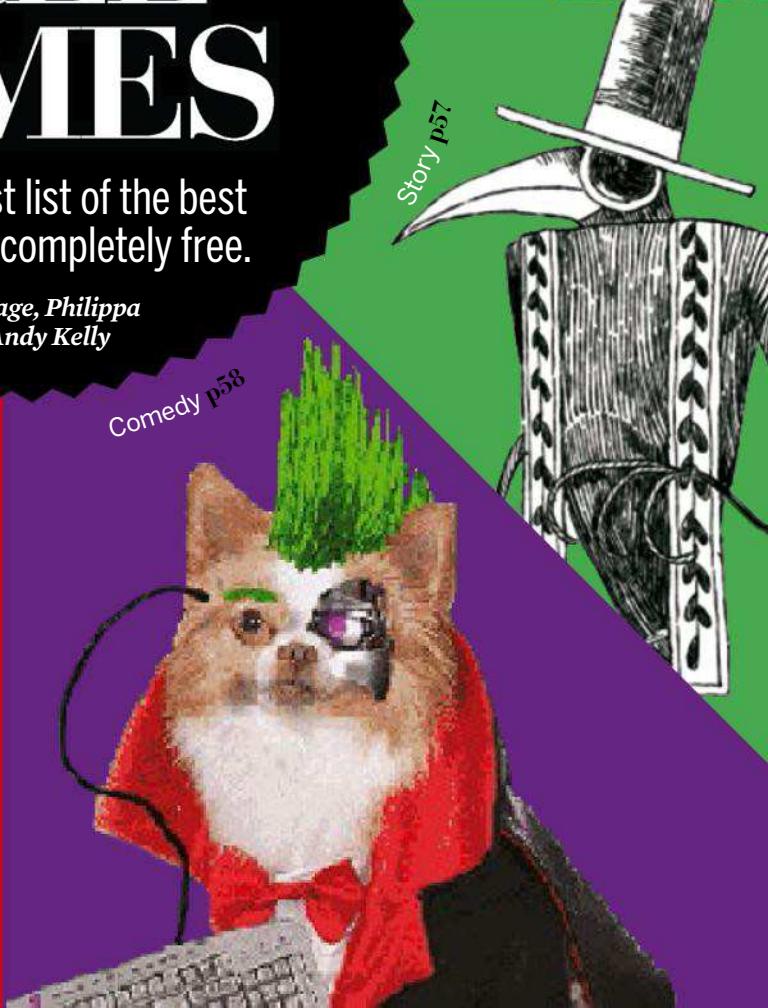
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The Top 50 Free Games



## CLASSICS

## STARCRAFT

**T**wo decades after it was first released, Blizzard now offers its strategy space opera free of charge. The bundle also brings you the *Brood War* expansion's fresh crop of campaigns, tilesets, units, and upgrade advancement. One of the longest-serving games on the esports circuit, the pro

scene is largely over for *StarCraft*, but the top players can still make a few bob in the tournaments that remain. That means in addition to being a free game, you could pump up your actions-per-minute and earn an infinite return on your zero investment. PC Gamer: Offering sound careers advice since 1993. **PW**  
[www.bit.ly/starcraft-free](http://www.bit.ly/starcraft-free)

## THE ELDER SCROLLS II: DAGGERFALL

**B**oasting a 63,000 square mile map, *Daggerfall* is an enormous RPG set in the Breton homeland of High Rock. It features many elements that remain in the *Elder Scrolls* series today, including guilds, enchanting, and a reputation system. It's not as accessible as *Skyrim*, but fans will get a kick out of exploring an early version of Tamriel. **AK**  
[www.bit.ly/daggerfall-free](http://www.bit.ly/daggerfall-free)



## SIMCITY

**I**f you want to drown in nostalgia, head to [www.bit.ly/archivedos](http://www.bit.ly/archivedos). There you'll find the Internet Archive's MS-DOS software library, which offers thousands of DOS games, all playable through your browser. Maxis's original *SimCity* is on there, letting you bring housing and commerce to a land of chunky '80s pixels. **PS**  
[www.bit.ly/simcitydos](http://www.bit.ly/simcitydos)



## TRIBES 2

**T**ribes: Ascend dev Hi-Rez has released every *Tribes* game for free. If you're after a singleplayer experience, try Irrational's *Tribes: Vengeance*. But for frenetic multiplayer, it's *Tribes 2* that you want. The unofficial patch at [www.tribesnext.com](http://www.tribesnext.com) will get you up and running. **PS**



## BENEATH A STEEL SKY

**D**eveloped by Revolution, best known for *Broken Sword*, this dystopian point-and-click adventure was co-created with *Watchmen* artist Dave Gibbons. It's an enjoyable adventure, with clever puzzles that make use of the hero's body-switching robotic sidekick. **AK**



## FREECIV

**F**irst released on PC over 20 years ago, this open source turn-based strategy game is heavily inspired by *Civilization*. Available in 33 languages, running on pretty much every OS under the sun, for no cost at all, it's no surprise the game has been wildly successful. **AK**



### THESE MONSTERS

**T**hese Monsters offers an intensely colorful art gallery and monster experience. You explore a structure littered with TVs and pictures of beasts. If you'd prefer procedurally generated artists try *Secret Habitat* and if you'd prefer to be the artist go with *Joy Exhibition*. **PW**



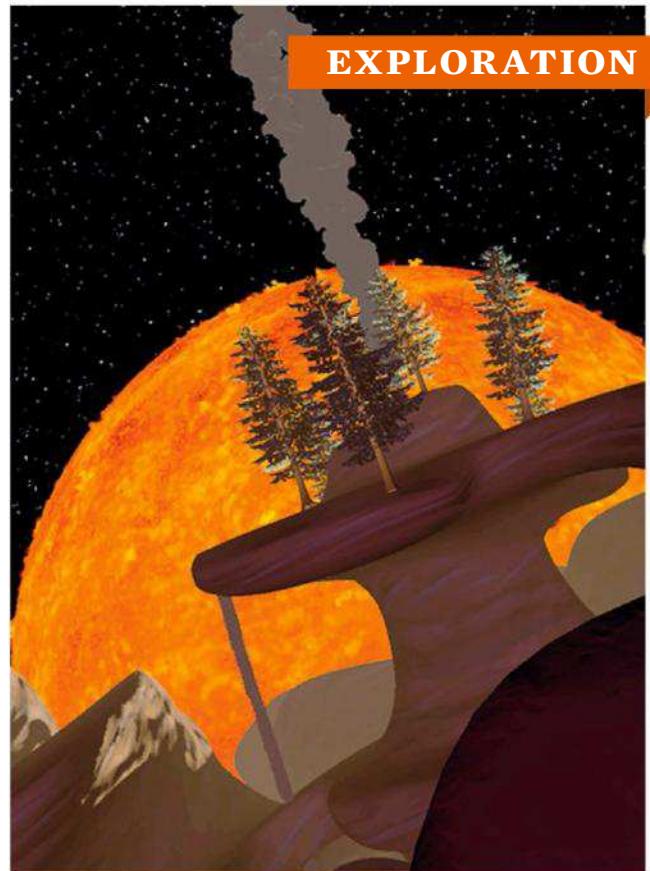
### BERNBAND

**S**till images don't do *Bernband* justice. In a screenshot it's blocky and confusing, but in motion it turns into a future city, complete with hovercars and seedy drinking establishments. While you investigate, your arms waggle and your feet clip clop delightfully. **PW**



### STORYSEEKER

**S**toryseeker is stuffed with amazing oddities for you, a strange plague doctor-like creature, to observe. There's the society of weasels, and the creatures who seem to be laying siege to an iceberg. And that's all before you even meet the king of snails. **PW**



### EXPLORATION

## OUTER WILDS

**T**hough still not released as a full game, *Outer Wilds* has been attracting attention for years. It's already won two IGF awards, including the Seumas McNally Grand Prize. The alpha for this delightful first-person space exploration game drops you into a little solar system that's stuck in a time loop and leaves you to choose what you do with that time. I remember hopping from planet to planet before discovering that trying to land on the sun was a bad idea. Even though this build is presumably out of step with the main game, it's replete with little surprises and mysteries to uncover. **PW**  
[www.bit.ly/outerdemo](http://www.bit.ly/outerdemo)

## OFF-PEAK

**O**ff-Peak is like visiting a scrapbook made from a jazz fusion dream. It's a strange but brilliant space, furnished with all manner of oddities. There's the former viola player who now treats his ramen counter as a string section, and the whale which hangs in the main space, dwarfing everything else as you steal pizza slices far below. **PW**  
[www.bit.ly/offpeakpc](http://www.bit.ly/offpeakpc)



## ORCHIDS TO DUSK

**P**ol Clarissou's contemplative alien landscape experience is more at the meditating end of the exploration spectrum than the clicking end. All you can do is guide your character around the world for a few minutes as your oxygen runs out. Will you head for a distant oasis, or settle down in the sand as you brace yourself for the end? **PW**  
[www.bit.ly/orchidspc](http://www.bit.ly/orchidspc)

# The TOP 50 FREE GAMES

STORY

## A RAVEN MONOLOGUE

**I**t'll take you less time to play this textless tale than it will take for me to write here why you should. It's a tiny storybook about a raven interacting with villagers while a bittersweet song loops. It's easiest to think of *A Raven Monologue* as a short, sharp burst of emotion, not a million miles

away from one of those pre-movie Pixar shorts in terms of its impact. Mechanically speaking, your only interaction is moving back and forth between the wonderfully illustrated panels, but there's an ambiguity to the tale which means that puzzling out your own interpretation of events is a significant part of the action. **PW**  
[www.bit.ly/monologuepc](http://www.bit.ly/monologuepc)

## BUTTERFLY SOUP

**I**'m only partway through *Butterfly Soup* myself, but it's here because of the heartfelt nature of the recommendations that caused me to pick it up. When a game causes people to email me saying that the way it represents Asian-ness and identity is relatable in a way no other piece of media has achieved for them, that's worth celebrating. **PW**  
[www.bit.ly/butterflypc](http://www.bit.ly/butterflypc)



## BIRDLAND

**B**irdland is a Twine game which marries a deliciously bizarre series of weird bird dreams at summer camp with a coming-of-age story. You play as Bridget, and must attend odd classes by day and navigate bird interrogations by night. These sections intertwine with dream decisions, changing your character stats and options. **PW**  
[www.birdland.camp](http://www.birdland.camp)



## GALATEA

**E**mily Short's interactive fiction game strips out many of the verbs associated with the genre. Instead, the action is centered on a single in-depth conversation. It's a modern retelling of the Greek myth of the same name, featuring a detailed dialogue system. **PS**

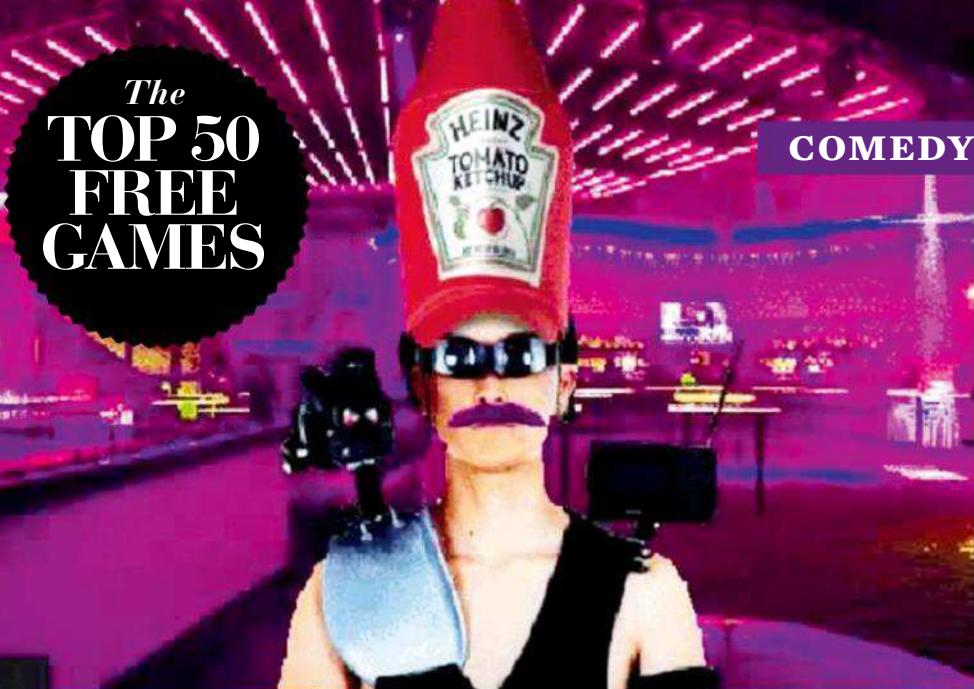


## EMILY IS AWAY

**P**arty like it's the early-'00s in this narrative game set in a chat client. You'll get to know fellow high school student Emily through snippets of online conversations about life, love and indie rock music. If you enjoy this, paid-for sequel *Emily is Away Too* is worth checking out. **PS**

# The TOP 50 FREE GAMES

COMEDY



## BARKLEY, SHUT UP AND JAM: GAIDEN

New York is reeling from the devastation of a Chaos Dunk. Falsey accused of the crime, former NBA player Charles Barkley is on the run from Michael Jordan. This is the basis for an absurd JRPG that delights in sending up the genre's tropes. **PW**



## STICK SHIFT

Creator Robert Yang says, "Stick Shift is an autoerotic night-driving game about pleasuring a gay car." It's part of an anthology with *Hurt Me Plenty* and *Succulent*, covering eroticism, politics, and more. It's funny while also offering food for thought. **PW**



## DOG OF DRACULA 2

et after the condiment prohibition of a now-overthrown tyrant, and with the world now largely jacked into the cyberbahn, *Dog of Dracula 2* takes you into the seamy, neon world of Nuevo Tokyo. Follow the tale of a friendship gone awry—of your link to a little pup in a Dracula cape who's sporting a green mohican and a range of cyber implants. The text spits out lines like, "The neon glow of her e-cig illuminates her rain-stained onesie," and your orange-suited avatar can peer at USB ramen before entering a dive bar containing pastries of easy virtue. *Dog of Dracula 2* dives headfirst into '90s pop culture references and fantastically daft cyberpunk tropes with nothing less than total commitment. **PW**  
[www.bit.ly/draculapc](http://www.bit.ly/draculapc)

## MURDER DOG IV: TRIAL OF THE MURDER DOG

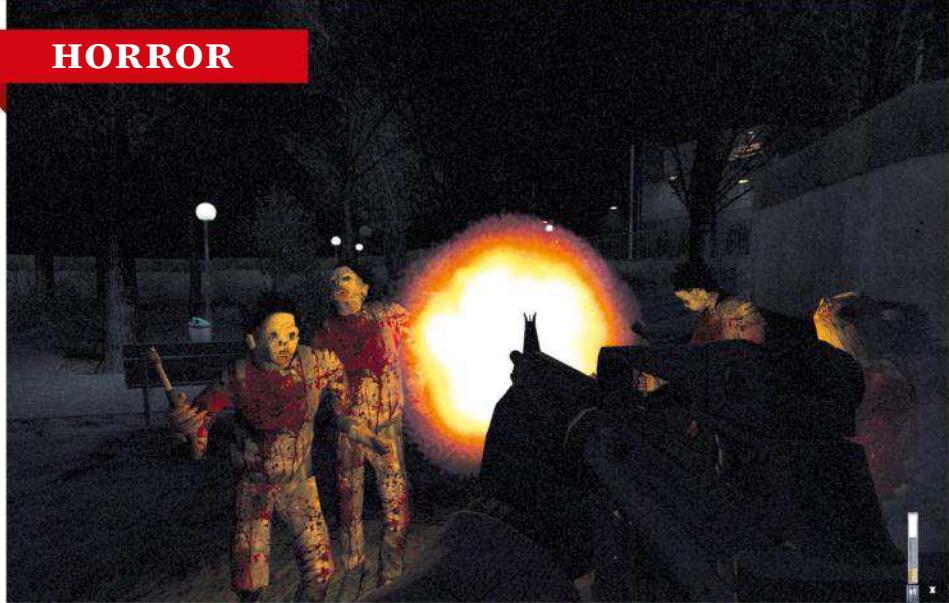
**T**he Murder Dog is on trial at the Hague for crimes against humanity. You, the Murder Dog, are definitely guilty, but court proceedings and the in-game legal system mean that there's still the chance of a not guilty verdict. You can dispute accounts, call witnesses, and eat evidence as you try to wiggle out of a death sentence. **PW**  
[www.bit.ly/murderdog](http://www.bit.ly/murderdog)



## ICARUS PROUDBOTTOM'S WORLD OF TYPING WEEKLY

**T**here's something inherently satisfying about typing, even if you're just copying sentences on your screen as fast as possible—maintaining accuracy to build up a gauge that lets you activate multipliers for points. This arcade tapping is played over a hilarious episodic mystery featuring a robot detective and a spirit owl. **PW**  
[www.bit.ly/typeweek](http://www.bit.ly/typeweek)

## HORROR



## CRY OF FEAR

**A** Half-Life total conversion from 2012, *Cry of Fear* is impressive for the sheer number of things it tries to do with the aging GoldSrc engine. It doesn't take place in a series of grey, blocky corridors, for one thing (rather, a grey, blocky city), and it even boasts a basic inventory system. It's a

game about running from spasmodically jerking not-humans as you explore and solve puzzles and generally feel bad about your situation. It's scary, primarily due to jump scares, but also because of its relentless tension. Despite some rough edges, this is an ambitious eight or so hours of quality horror. **PS**  
[www.bit.ly/cryfear](http://www.bit.ly/cryfear)

## SLENDER: THE EIGHT PAGES

**B** ased on the internet legend of the Slender Man, this horror was catapulted to notoriety by shrieking YouTubers. It involves wandering a dark wood collecting pages, avoiding Slender, and its claustrophobia makes it genuinely difficult to endure. **AK**  
[www.bit.ly/slendereight](http://www.bit.ly/slendereight)



## MY FATHER'S LONG, LONG LEGS

**M**ichael Lutz weaves a disturbing tale of a father with an obsession for digging the ground beneath the family home. The pacing and tension ensure that you're gripped until the very end, never quite knowing where it's leading you. **PW**  
[www.bit.ly/fatherlonglonglegs](http://www.bit.ly/fatherlonglonglegs)



2:22AM

**C**reated for a contest with the theme Public Access Television, 2:22AM encapsulates that guilt when you've stayed up too late and ended up on the odd channels. The world feels weird, and there's a headache building behind your eyes as you dig a grave or fry an egg. **PW**



## HOUSE OF ABANDON

**T**his story of a person playing a text adventure takes a sinister turn. Originally standalone, it became the first episode of eerie, atmospheric adventure *Stories Untold*. You can still play it for free by heading to the Steam page and clicking "Download PC Demo". **PS**



## CHYRZA

**C**hyrza's brand of horror is that unsettling strangeness you get with ruined alien deserts and mentions of a strange and terrible pyramid. But it's not just *Chyrza*. *Kitty Horrorshow's* back catalogue thrums with eerie and creepy experiences. **PW**

# FEATURE

## The Top 50 Free Games



### DOUBLE ACTION: BOOGALOO

**I**s it enough to just kill your foe? Far better to gun them during a slow-mo dive off a balcony. That's the joy of *Double Action: Boogaloo*, an action shooter with acrobatics and bullet time that somehow works as an online deathmatch. **PS**



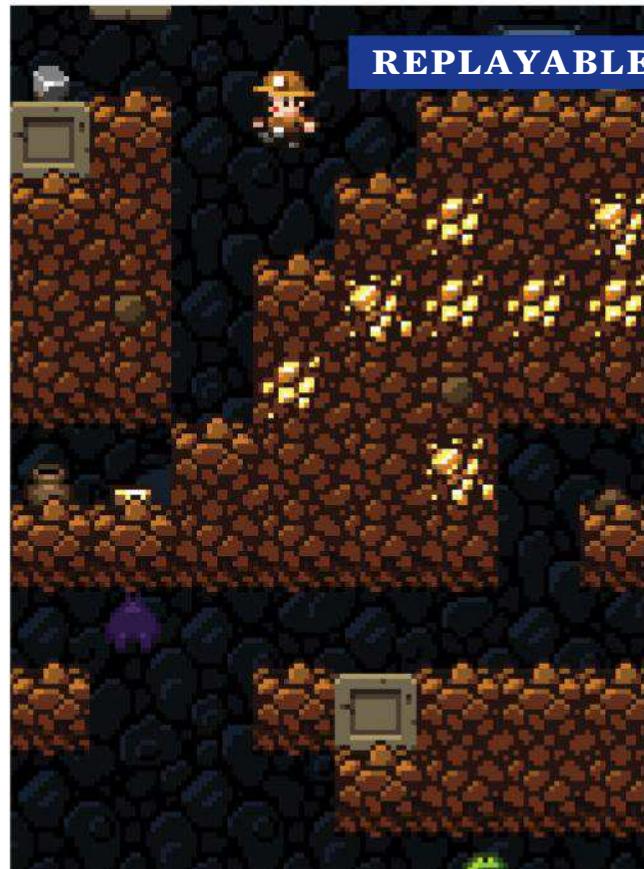
### BROGUE

**A**SCII roguelikes have a reputation for being impenetrable. *Brogue*, despite staying true to the genre, works hard to feel approachable. The controls make navigating its dungeons a breeze, and the elegant shading makes its symbols atmospheric and readable. **PS**



### GIRAFFES VOLLEYBALL CHAMPIONSHIP 2016

**T**aking place in the distant past of 2016, this game allows you, a waggly-legged ruminant, to showcase your staggering ability to head a ball over a net. Or to gaze into the abyss of inadequacy as you fail time and time again. Either way. **PW**



### SPELUNKY CLASSIC

**T**here's a good chance you know what *Spelunky* is. The paid-for remake was PC Gamer's 2013 GOTY and a sequel is in the works. But 2009's original is still free and worth playing. It's a dungeon platformer that tasks you with collecting gold and gems as you plunge deeper into a dangerous subterranean world. You'll die a lot, but as you do you'll learn to avoid each bat's awkward approach angle, or to not jump in front of the obvious traps. Then you'll clear the caves and emerge into a jungle, where you'll start dying again. **PS**  
[www.bit.ly/spelunkpc](http://www.bit.ly/spelunkpc)

### DWARF FORTRESS

**T**his is almost certainly the most ambitious game on this list. *Dwarf Fortress* can be played as either a management sim or an adventure roguelike, letting you carve out your place in the procedurally generated world, or just explore it. The community-created graphics packs can help you make sense of its interface. **PS**  
[www.bay12games.com/dwarves](http://www.bay12games.com/dwarves)



### THE DARK MOD

**D**on't let the name fool you. While originally a total conversion for *Doom 3*, *The Dark Mod* is now a standalone tribute to the *Thief* games. A healthy community has crafted a library of levels set in a variety of dark towns. From one-off missions to multi-part campaigns, if you're looking for recommendations, visit [www.bit.ly/pcgdark](http://www.bit.ly/pcgdark). **PS**  
[www.thedarkmod.com](http://www.thedarkmod.com)

# The TOP 50 FREE GAMES

STRANGE & SURPRISING

## A MUSEUM OF DUBIOUS SPLENDORS

**A** Museum of Dubious Splendors is both a storybook and exhibition space. It elevates objects by supersizing them, by connecting them to the game's collection of tales, by putting them in a museum space, by making them beautiful and weird, dangling in space. It's part of Studio

Oleomingus's bigger project; a narrative experiment called *Somewhere*. The drip-feed of its facets illuminates a search for the mythical city of Kayamgadh. Studio Oleomingus offers a vibrant world of uncertain fictions and exploration. It might be the most exciting studio in game development right now. **PW**  
[www.bit.ly/oleomingus](http://www.bit.ly/oleomingus)

## FROG FRACTIONS

**A**t first, *Frog Fractions* appears to be an insipid edutainment game about a frog that's trying to teach you maths. But as you unlock new upgrades, things become surreal, until you finally break out into weirder and more inventive adventures. Just when you think you've got a handle on what it actually is, it turns into something new. **PS**  
[www.twinbeard.com/frog-fractions](http://www.twinbeard.com/frog-fractions)



## SLITHER.IO

**S**teve Howse's multiplayer browser game smooshes *Snake* and *Agar.io* together. Your task is to grow the longest worm on the server. Outmaneuvering opponents, especially when they have you caught in their own trails is incredibly satisfying. Turning into pellets when you coast from that success straight into another snake is less so. **PW**  
[www.slither.io](http://www.slither.io)



## SKEAL

**R**ecommending *Skeal* is a tough job because the absolute best experience is to go in with zero idea of what to expect. To that end, it's a downhill skiing experience which becomes transcendental the longer you ski and the more reveals you trigger as the jape unfurls. **PW**



## UNIVERSAL PAPERCLIPS

**W**hen you start, you have zero paperclips. Creating new ones is laborious, but... well, I won't ruin the surprise. Like *Cookie Clicker*, it starts as a game about making a number bigger, but turns into something far more sinister. **PS**

# The TOP 50 FREE GAMES

PCG'S PICKS

## ZINETH

**I**t's worth digging through the entire Arcane Kids catalogue. Its manifesto—"Make the games you wish to see on the Dreamcast"—informs its anarchic output, and has resulted in such oddities as *Bubsy 3D* and the unsettling *Sonic Dreams Collection*. But my favorite remains student project

*Zineth*—a skate-'em-up that pays homage to *Jet Set Radio*. Traversal feels great, as you jump, grind and wall-run your way to uncontrollable speeds, rewinding time whenever you make a mistake. The memorable soundtrack and abrasive, cel-shaded aesthetic serve to enhance *Zineth*'s unique sense of style. **PS**  
[www.zinethgame.tumblr.com](http://www.zinethgame.tumblr.com)



### LITTLE PARTY

**P**laying free games offers unique snapshots of other lives. *Little Party* shows you a party from the point of view of the mum whose home it's happening in. She's friendly but peripheral, negotiating tension between interacting and interfering. **PW**



### GRAVITY BONE

**A** heist drama that packs enough ideas into its ten-minute running time to fill a much longer game. *Gravity Bone* shows off a flair for cinematography that Blendo Games' Brendon Chung would push even further in the paid-for sequel, *Thirty Flights of Loving*. **PS**

## LOST CONSTELLATION

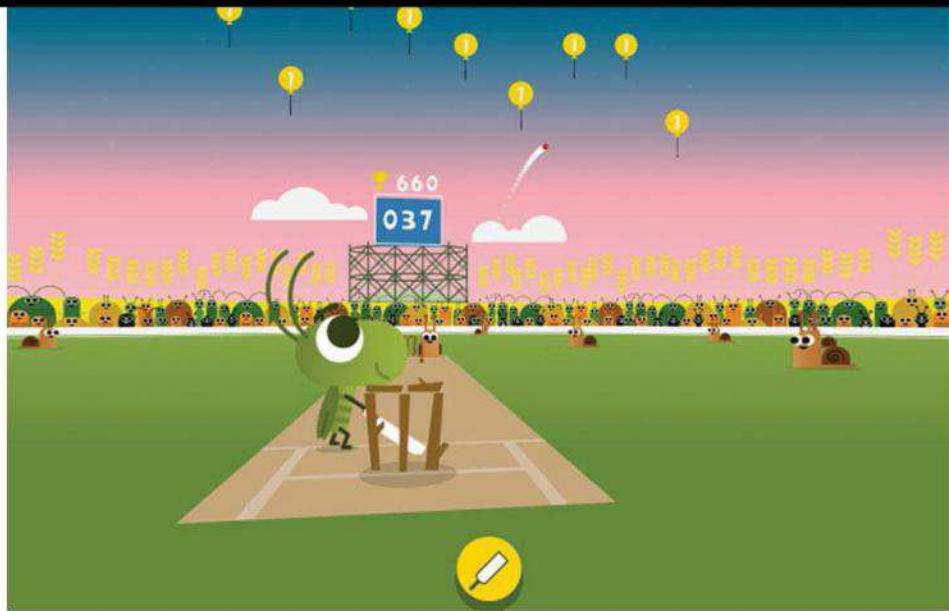
**T**angentially related to *Night in the Woods*, *Lost Constellation* is an adventure about an astronomer who journeys through a forest to see ghost of her dead lover. The tone will be familiar to fans of *Night in the Woods*, as will its mix of warmth and melancholy. **PS**  
[www.bit.ly/finjilost](http://www.bit.ly/finjilost)



## SACRAMENTO

**D**ziff's interactive sketchbook leaves you to explore a watercolor world just beyond a little train station. Wander amongst the flamingos or lily pads, or head on over to the big greenhouse and take a peep inside. When the sun sets you'll be scooted back to the station and sent on your way. **PW**  
[www.bit.ly/sacmentopc](http://www.bit.ly/sacmentopc)

The Top 50 Free Games



## GOOGLE DOODLE

**G**oogle Doodles transform the company's logo on its search page. Sometimes it's a still image to highlight a holiday or memorable event, but plenty have interactive elements, becoming games and toys. These seed games into people's lives in a way that's different from purposely going

to a gaming site. You went to look up a recipe for banana loaf and suddenly you're solving a Rubik's cube. Or you wanted to find out what's so great about yachts and now a cricket minigame has ruined your productivity. These are games as unexpected delights, rather than sought-out distractions. **PW**  
[www.bit.ly/g-doodles](http://www.bit.ly/g-doodles)

## GOOGLE EARTH VR

**W**hile VR is yet to hold my interest, there are a few free experiences worth seeking out. Chief among them is *Google Earth VR*, which lets you fly across the world, sticking your nose into its satellite maps. It also incorporates Street View—letting you stand in front of a static, 3D image of your house from the comfort of your actual house. **PS**  
[www.bit.ly/vrgoogleearth](http://www.bit.ly/vrgoogleearth)



## TWISTED INSURRECTION

**I**t's *Command & Conquer: Tiberian Sun*, but better. This is a standalone game that adds new buildings and units, and features completely new campaigns. It's a treat for fans, taking a lesser-loved entry and turning it into something essential. **PS**  
[www.twistedinsurrection.net](http://www.twistedinsurrection.net)

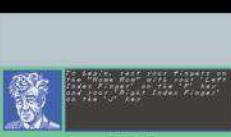
## SHOOTOUT, INC

**T**his began life as a mashup of *Hotline Miami* and *Superhot* called *Superhotline Miami*—a top-down shooter where time only moves when you do. It inspired its creator to push the concept further, making an original game with a cool, minimalist art style. **AK**



## COLORATURA

**I**n this award-winning text adventure, you play as a lifeform captured by Blind Ones, (or humans, as we humans would call us). It excels by asking you to take the role of a creature you don't understand, manipulating creatures it doesn't understand. **PS**



## DAVID LYNCH TEACHES TYPING

**F**eaturing a fantastic impression of the director, this is not a game about teaching you typing. It uses its premise to confound you in a number of clever ways, and pays homage to David Lynch's love of messing around with your head. **AK**

# REVIEW

## HOW WE REVIEW

We review each game on its own merits, and try to match it to a reviewer who's a passionate expert in the field. The main aim of reviews is to help you make buying decisions.

### ALPHAS & BETAS

We'll review any alpha, beta, or otherwise unfinished game that you can currently buy. For these games, we won't assign a score, but we will tell you whether they're worth your time.

### DOWNLOADABLE CONTENT

DLC might be hours-long new missions for a game, or it might be a single new item. Either way, if we think you want to know about it, we'll review it.

## OUR SCORING SYSTEM EXPLAINED

**00%-09%** Broken or offensively bad; absolutely no value.

**Example** Leisure Suit Larry: Magna Cum Laude

**10%-19%** We might be able to find one nice thing to say about it, but still not worth anyone's time or money.

**Example** Gettysburg: Armored Warfare

**20%-29%** Completely falls short of its goals. Very few redeeming qualities.

**Examples** Family Guy: Back to the Multiverse

**30%-39%** An entirely clumsy or derivative effort. There's little to no reason to play this game over a similar, better one.

**Examples** Trials of the Blood Dragon

**40%-49%** Flawed and disappointing.

**Examples** Aliens: Colonial Marines

**50%-59%** Mediocre. Other games probably do it better, or its unique qualities aren't executed well.

**Examples** Primordia, Homefront: The Revolution

**60%-69%** There's something to like here, but it can only be recommended with major caveats.

**Examples** No Man's Sky, Ghost Recon: Wildlands

**70%-79%** A good game that's worth playing. We like it.

**Examples** Life is Strange, Planet Coaster

**80%-89%** A great game with exceptional moments or features, and touches of brilliance. We love it.

**Examples** Overwatch, Mass Effect: Andromeda

**90%-94%** A compelling recommendation for most PC gamers. Important to PC gaming, and likely ahead of its time.

**Examples** Forza Horizon 3, Dishonored 2

**95%-96%** Far and away one of the best games we've ever played. We recommend it to the entire world.

**Examples** Half-Life 2, Kerbal Space Program

**97%-100%** Advances the human species. Boosts the immune systems of nearby children and small animals.



The Editor's Choice award is granted in addition to the score, at the discretion of the PC Gamer staff. It represents exceptional quality or innovation.

**Find out more**  
[www.bit.ly/pcgreviews](http://www.bit.ly/pcgreviews)



## Turning the tide

*Warhammer: Vermintide II* doesn't ease you in gently. I've played three missions, and failed each of them—destroyed by the combined might of rat ogres, Chaos Sorcerers, and Stormvermin. You'll fail a lot early on. It can be deflating, but as Steven makes clear in his review, it's hard to deny how good it feels to slice through a rat army.

We've packed a lot in, because quiet periods no longer exist on the PC release calendar. There's a little of everything: From the joyous arcade fun of *Puyo Puyo Tetris*, to the tightrope act of continued existence in *Surviving Mars*, to the delicious tactical puzzling of *Into the Breach*.

*Phil Savage*

**PHIL SAVAGE**

**EDITOR**

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**LET US KNOW  
WHAT YOU THINK**  
 Email us via [pcgamer@futurenet.com](mailto:pcgamer@futurenet.com) with your reactions, or simply tweet us your thoughts @PCGamer



66



74



80

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## This month's rat bastards...



**STEVEN MESSNER**  
Specialist in FPS, rats  
**Currently playing** Warhammer: Vermintide II  
**This month** Got on-the-job training as an exterminator.



**ANDY KELLY**  
Specialist in Action, Kojima  
**Currently playing** Metal Gear Survive  
**This month** Wished he could enter a portal to a world where Kojima was still in charge of MGS.



**FRASER BROWN**  
Specialist in Sims, xenobiology  
**Currently playing** Surviving Mars  
**This month** Tried to feed a colony full of Martians without the help of Matt Damon.



**HANNAH DWAN**  
Specialist in RPG, Ignis  
**Currently playing** Final Fantasy XV  
**This month** Was incredibly wrong about Prompto being the second worst boy. It's Gladio, obviously.



**CHRIS SCHILLING**  
Specialist in Puzzle, another puzzle  
**Currently playing** Puyo Puyo Tetris  
**This month** Enjoyed two great puzzle games that play great together.



**TYLER WILDE**  
Specialist in Adventure, waiting  
**Currently playing** Where the Water Tastes Like Wine  
**This month** Journeyed the land looking for stories, ie, refreshed Twitter.



**CHRIS THURSTEN**  
Specialist in Retro, Blendo  
**Currently playing** DmC: Devil May Cry  
**This month** Is fast running out of games for They're Back's Blendo Corner.

# CHAOTIC GOOD

Gleefully gory combat in  
**WARHAMMER: VERMINTIDE II**. By Steven Messner

**V**ermintide II's 'AI director' is sadistic. With a lumbering Chaos Warrior already attacking us, the AI summons an armored Stormvermin ambush from behind. They quickly knock out Bardin the dwarf, Kruber the mercenary and Sienna the fire mage, leaving only me, the nimble elf Kerillian, to save us. If I can just get to one of them, I can revive them and turn the tide back in our favour. Then, out of nowhere, the AI summons a Chaos Sorcerer.

Usually these special enemies like to hang out at a distance and summon tornados that scatter us to the wind—an attack I can easily dodge—but this Chaos Sorcerer wants to make it personal. He teleports to me and begins sucking the soul out of my body, rendering me completely helpless. A party member could save me, but that's pretty hard to do when they're all already incapacitated. It's a cruel end to our adventure, made even more sinister when, as I'm slowly being dragged to the sorcerer, a Chaos Warrior storms up and finishes me off with a coup de grâce, even though I was already as good as dead. I half expect the AI to start teabagging me.

*Vermintide II* can be maddeningly difficult. One or two of my teammates will be incapacitated, surrounded by vermin, and it'll feel like it's game over. Then my hammer

smashes in the skull of the last Rotblood, and my tunnel vision widens. It's over. We survived.

As good as *Vermintide II* is at creating epic scenes of tension (even if it sometimes goes too far), it's diminished by a frustrating multiplayer setup that can steal away what valuable agency you have over that experience. Fatshark's sequel to *Vermintide* is challenging and thrilling, but it can also be frustrating as hell when the multiplayer fails.

**NOT MY KIND OF GRIND**  
Like the first game, *Vermintide II* is a *Left 4 Dead*-style, four-player co-op first-person action game in which your party wades through treacherous levels fighting off hordes of Skaven ratmen, who have now allied with the Rotbloods, a clan of vicious Chaos raiders. Set during

I can unleash an ear-splitting roar that draws the ire of every nearby enemy

## NEED TO KNOW

**WHAT IS IT?**  
*Left 4 Dead* meets apocalyptic fantasy but with loot.

**EXPECT TO PAY**  
\$30

**DEVELOPER**  
Fatshark

**PUBLISHER**  
In-house

**REVIEWED ON**  
Core i5 3570K,  
16GB Ram, GTX 970,  
Windows 10

**MULTIPLAYER**  
Four-player co-op

**LINK**  
[www.vermintide.com](http://www.vermintide.com)

Warhammer's End Times, *Vermintide II*'s apocalyptic fantasy setting is disturbing and marvellous. Its 13 levels tour ruined cities and treacherous bogs that are each as gorgeous and moody as the last.

With each mission lasting about 30 minutes, you'll end up repeating them. That might sound boring, but each level is expansive enough that revisiting them never feels repetitive thanks, in part, to the AI director mixing up spawns. It's a system that mostly works, though some areas of each mission do bleed together because fighting a group of Skaven doesn't feel all that different from fighting a group of Rotblood raiders.

This uncertainty of what enemies spawn, and where, has surprising benefits. In one sequence, my party escorted a minecart through a pitch-black stretch of an abandoned mine. The first time I played this mission we had a terrifying fight against a troll that came charging at us from the dark. Another time we were ambushed by a horde of naked Clanrats. During my third playthrough, nothing attacked us at all. The silence put me on edge for minutes, though.

Unlike *Left 4 Dead*, however, *Vermintide II* is wearing layers of RPG underwear. It's a lot to take in at first, but I've come to love the nuances each character career (a kind of subclass) offers because each plays a subtle but crucial role in a party. The five characters have their own special ability, passive bonuses, unlockable skill trees, and weapons. Once you level a character up a bit, you'll also unlock new careers that offer vastly different playstyles.

Bardin the dwarf's Ironbreaker career is probably my favorite because it transforms him into the closest thing *Vermintide* has to a tank. When my special meter fills up, I can unleash an ear-splitting roar that draws the ire of every nearby enemy. Fortunately, this ability also grants me unlimited stamina for the next few seconds that I can use to block ➤

## BIG BADS

These four brutal beasts really like to ruin your day



**CHAOS SPAWN**

This nightmarish monster can grab party members and chew on their face in order to regenerate lost health.



**CHAOS TROLL**

Vomiting is never cool, especially when this troll coats you in puke to slow your movement speed so he can thrash you about.



**RAT OGRE**

These giant rats don't need any nasty tricks to massacre your party—they're fine doing that with their bare hands.



**STORMFIEND**

Equipped with two flamethrowers, the Stormfiend can quickly pin your party down. Aim for the weird baby on its back.



## REVIEW

### Warhammer: Vermintide II



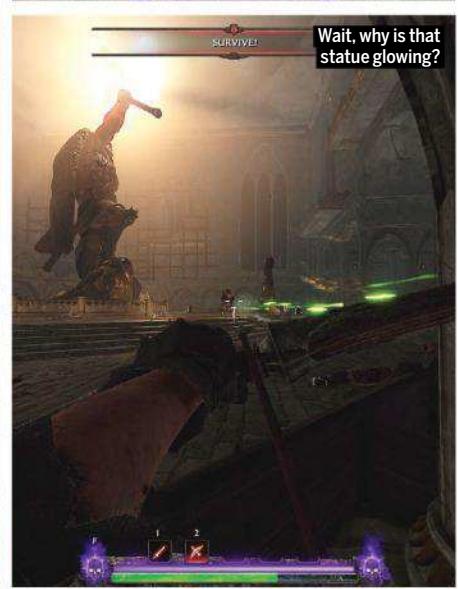
Great use of lighting and volumetric smoke adds a real sense of doom.



Wait, why is that statue glowing?



Bosses like Rat Ogres take a ton of effort to kill.



» attacks. With all eyes (and swords) on me, my team can quickly carve through the baddies.

You'd think a loot system would be reason enough to keep playing, but it's the thrill of severing Skaven limbs or surviving an all-out rush by the Rotblood horde that keeps me playing. Despite only using the left and right mouse buttons to attack and block, there's a satisfying depth to combat. Each of the 50-ish weapons has their own timing, attack arcs and reach, and the fighting never feels clumsy or technical.

Bardin's Drakegun is a flamethrower that can ignite dozens of enemies when fully charged, while Kerillian's Asrai hunting bow is basically an assault rifle that shoots arrows. Each of the melee weapons is similarly varied, and just when I think I prefer large, slow weapons, like Kruber's halberd and its ability to decapitate multiple enemies in a single swipe, I try out Kerillian's dual daggers and fall in love with how rapidly she can dice wimpy ratmen.

Dodges, parries, and charged attacks are a lot more difficult to master, however. *Vermintide II* feels especially difficult in the first few hours. Despite an entertaining tutorial, it's terrible at explaining how to use these different moves properly.

Now that I've mastered the basics, though, I love how challenging *Vermintide II* can be at higher difficulties, where a single enemy attack can nearly kill me. That level of mortality turns even a small fight into a tense dance of slashing and dodging. And if I really want to amp the challenge up, each mission has hidden tomes and grimoires which take up valuable inventory slots and lower the party's overall health in exchange for better loot. I do resent how mandatory they feel when the party is already struggling to survive, however.

A good team is just as necessary as good reflexes, and *Vermintide II* shines when you're playing with a group of friends. Special monsters like the Skaven Packmaster will slip behind my party during a fight and will try and yank one of us away, requiring the group to move quickly and save our friend. That's not nearly as bad as when a green circle appears at the party's feet, heralding a deadly tornado from a Chaos Sorcerer.

## There are so many variables that can create failure beyond my control

These moments are so common, but always surprising, that each session feels like a brutal gauntlet. There are times when the whole party dies and the sense of shared frustration is palpable, but those moments when we do survive are so satisfying.

## WINNER LOOT ALL

While I like *Vermintide II*'s loot, I hate how I receive and manage it. The inventory screen is poorly

organized and rarely displays information that is actually useful. Characters can also share and equip the same trinkets and charms, but there's no 'equip all' button. I have to painstakingly switch characters to update their gear and free up their currently equipped items for salvaging. It's a nightmare.

Astonishingly, *Vermintide II* lacks a menu that shows even the most basic stats like health or stamina. I'm all for RPG systems that deviate from the norm, but it's frustrating how obtuse *Vermintide II* is with its underlying mathematics and stats because it makes meaningful experimentation virtually impossible. Why include weapons that up my chance of scoring a critical hit if I can't determine what my base chance is? Even the meaning of Hero Power, the total measurement of my character's prowess, is hidden behind an easily missed tooltip.

## CAREER DAY

*Here's a sample of Vermintide II's 15 careers*



### BARDIN, THE IRONBREAKER

Able to taunt enemies, the Ironbreaker is the tank of any group. They also negate any attack once every 20 seconds.



### KERILLIAN, THE HANDMAIDEN

Kerillian's Handmaiden career makes her an impossible-to-hit melee expert that can dodge extra long distances.



### KRUBER, THE HUNTSMAN

The Huntsman can dish out absurd amounts of damage. He can also vanish temporarily and regenerate ammo with headshots.



### SALTZPYRE, THE ZEALOT

This fanatic does more damage the lower his health is, and his special ability will charge him forward in a fiery blaze of death.



### SIENNA, THE BATTLE WIZARD

Capable of torching hordes of Skaven, the Battle Wizard is a powerful mage who needs to cool down frequently or risk burning up.

The moments when Rotblood raiders and Skaven have my party surrounded are thrilling, but if the party dies, I'm often feeling like my time is wasted. It's not that losing in *Vermintide II* can't be fun, but that there are so many variables that can create failure beyond my control. If the party leader (and host of the match) disconnects, all the progress I made in a mission is erased and I have to start over. There's also no indicator of who is speaking via the in-game voice chat, making it hard to identify which of your companions is calling for help. Even latency is hidden. I can do everything right in a mission and still lose due to things I can't control. Add in the fact that loot is only awarded when you beat a mission or gain a level and *Vermintide II* can feel stingy for all the wrong reasons. It's not fun to be deprived of loot needed to tackle harder difficulties because the host quit.

It's frustrating that a sequel would still struggle to nail such basics, and the RPG progression doesn't entice me the way it does in similar games. But *Vermintide II* succeeds on the merits of its stellar combat and level design. After 40 hours, that Rotblood warhorn signalling a Zerg-like rush of raiders, or the sound of a Gutter Runner assassin chattering in the darkness, still turns my blood to ice. ■



## PC GAMER

The combat and level design are so feverishly fun that I'll put up with its bad matchmaking and RPG progression.

80

## VERDICT

# BUG HUNT

*FTL*'s maker returns with minimalistic mech tactics game, **INTO THE BREACH**. By Alex Wiltshire

**S**urely this is where it ends. One bug is attacking the train I'm defending. Another is about to destroy a building. Every time a building falls, I lose a Power Grid point. I've only got one left and once it's gone, the Vek win. If you've played *FTL*, you'll know the panic of a no-win situation. *Into the Breach* will bring that feeling back, and it's wonderful. Developed by the same team, it's built on the same roguelike progression, interplaying abilities and knuckle-gnawing tension.

My Lightning Mech could run up to the bug attacking the train and lightning whip it, but that would destroy the train. This is impossible. Every move I try either fails to deal with both bugs or takes out the train.

*Into the Breach* is a turn-based tactics game in which your squad of three mechs faces a swarm of ground-dwelling bugs, the Vek. Each level is played out across just five turns on an 8x8 grid, and your goal is survive, build up your mechs, and finish the Vek off in a final battle. But its party trick is that you see what the Vek will do on their turn. *Into the Breach*'s tactics are tight and controlled because you know the exact results of your every move. You know what the Vek will be attacking, for what damage and in what order. That evens the odds, even while you're almost always outnumbered.

You also have amazing weapons on your side. Thinning the Vek's numbers is always a good idea, but many weapons can also move them

and relocate their attacks. If you're clever, you can make them hit each other or push them into hazards. You always have many options, but you're rarely sure you're choosing the best.

Wait. What if my Hook Mech pulls the bug attacking the city with its grapple? Now it's sitting a tile away from the other bug and... I'm a genius. My Boulder Mech lobs a rock between them, pushing both away so their attacks end up hitting nothing. I've saved the day.

While *Into the Breach*'s tactics are exacting and complex, its strategy gives you choice and variety. Campaign runs are set on four themed islands. Each island features a set of levels to choose from, each with different objectives. You might need to protect a coal plant, to kill seven enemies, or to destroy a dam. If you succeed, they'll grant certain rewards, either Power Grid points, Reactor Cores (which power up your mechs' abilities and weapons), or

If you loved  
*FTL* for its  
thoughtful and  
clever design,  
it's all here

## NEED TO KNOW

**WHAT IS IT?**  
A roguelike tactics game about duffing up bugs with mechs.

**EXPECT TO PAY**  
\$15

**DEVELOPER**  
Subset Games

**PUBLISHER**  
In-house

**REVIEWED ON**  
Core i5-6600K,  
GeForce 1070,  
16GB RAM

**MULTIPLAYER**  
None

**LINK**  
[www.subsetgames.com](http://www.subsetgames.com)

Reputation, which buys weapons and other gear.

You don't lose the game if you fail objectives—only if you lose all your Power Grid—so you'll constantly weigh up pros and cons. Should you sacrifice your Combat Mech to defend the coal plant, earning a Reputation point? Or is it better to ensure the mech's survival? If you don't get better gear, you might not survive later levels. But when a mech is destroyed its pilot is killed, replaced by an AI which can't earn XP and therefore won't earn extra HP, movement, and other abilities. This is a game of hard choices.

## BREACH AND CLEAR

After surviving two islands, you can choose to fight the final battle or attempt the other, now more difficult islands to gather more gear. *Into the Breach* is easier to finish than *FTL*, but it's designed as a score-attack game, rating your runs by the number of lives you saved. You'll also unlock new squads of mechs by completing special achievements. Each squad has a different focus, so the Rusting Hulks deploy attack-cancelling smoke, while the Hazardous Mechs deal big damage but get damaged in return. They're all a joy to learn, every battle a new test of your skills. The challenge never stops changing.

If you loved *FTL* for its thoughtful and clever design, it's all here. But *Into the Breach* is a much tighter, more focused game. While there are plenty of weapons to master, pilots to unlock, and tactics-changing level gimmicks to face, you'll have a good idea of its breadth in your first run. For some it might lack expansiveness, but for me, *Into the Breach* fuels the most consistently rewarding tactics I've played in years. ■

## SHOPPING FOR MECHS



**BURST BEAM**  
"Fire a piercing beam that decreases in damage the further it goes."

You look smart. Have I got the gun for you. Uh, yeah, it does also melt buildings. A bit.



**SHIELD PROJECTOR**  
"Shield tiles from damage."  
Nah, it doesn't do any damage, but look at the positives: You get to watch the apocalypse from total safety, yeah?



**UNSTABLE CANNON**  
"Powerful projectile that causes damage to shooter as well as the target."  
Let's not focus on getting a little dinged! Just think about the other guy.



**ROCK ACCELERATOR**  
"Launch a rock at a tile, pushing adjacent tiles."  
Everyone likes to blow off a bit of steam by chucking a massive rock at a bug, am I right?



**AERIAL BOMBS**  
"Fly over a target, dropping an explosive smoke bomb."  
You can be my wingman anytime, yeah? Haha! No, it's what Tom Cr... don't walk away.

**POWER GRID** ⚡ **GRID DEFENSE** 18% **POD GRID** ⚡ **GRID DEFENSE** 15% **POD GRID** ⚡ **GRID DEFENSE** 15%

**ENEMY ACTIVITY**

**POD RECOVERED**

**REACTOR CORE** Reactor Cores are used to upgrade your units between missions.

**CONTINUE**

**End Turn**

**UNDO MOVE**

**TIDES**

**ATTACK ORDER**

**Victory in 3 turns**

**Bonus Objectives**

- ★ End Battle with less than 4 Mech Damage (Current: 0)
- ⚡ Protect the Coal Plant

**Ground Tile**  
No special effect.

**Difficulty** **NORMAL** **Start Game**

**Rough Riders**

**Ramming Speed** Kill an enemy 5 or more tiles away with a punch.  
Note: Achievements earn you Coins you can use to unlock new Mech Squads!

**Brute**

**Artillery Mech** 2 3 Ranged

**Change Squad**

**Time Traveler**

**Pierre Nguyen** ...  
No Special Ability  
+3 Grid DEF, +2 Mech HP

**Change Time Traveler**

**ENEMY ACTIVITY**

**ENEMY ACTIVITY**

We're saved!  
They're here!

**POWER GRID** ⚡ **GRID DEFENSE** 18% **POD GRID** ⚡ **GRID DEFENSE** 15% **POD GRID** ⚡ **GRID DEFENSE** 15%

**ENEMY ACTIVITY**

**Save us!**

# CRYSTAL DEATH

**METAL GEAR SURVIVE** trades tactical espionage action for zombies and survival, with mixed results. *By Andy Kelly*

**O**n the edge of my base camp is a vast wall of poisonous dust. Stretching for miles into the sky, this gray, churning cloud will kill me if I set foot in it. But when I build an air tank, jury-rigged from a broken one carried by a less fortunate survivor, I'm finally able to venture inside. I could stay out here in the sunshine, but in there I'll find rare materials and blueprints for better weapons and gadgets. It's a risk worth taking.

As I cross into the dust, the sun disappears and I'm surrounded on all sides by an oppressive grey fog. And through the gloom I can see the telltale red glow of wanderers—aggressive zombies with glowing crystals where their heads used to be. These are the most common enemy in Dite (pronounced *dee-tay*), and they're a constant threat, lurching out of the dust to attack any reckless survivor who bothers them.

Journeys into the dust are when *Metal Gear Survive* comes alive. Getting in and finding something useful is only half the battle; you also have to find your way out without being mauled by enemies or getting lost and dying of thirst or hunger. It's an ordeal made more stressful by the fact that your character has to eat and drink pretty much constantly.

*Survive* kicks off immediately after the events of *Ground Zeroes*. As Big Boss escapes in a chopper, a regular grunt in his army (that's you) is left behind on ruins of Mother Base, only to be sucked into a wormhole and

transported to another dimension. That dimension is the aforementioned Dite, which is a desert littered with rubble, wrecked cars, ruined outposts, and enemies.

As exciting as forays into the dust can be, *Metal Gear Survive*'s world is uninspiring. Compared to the lively, colorful ocean of *Subnautica* or *The Long Dark*'s haunting Canadian wilderness, it's a shit-brown sea of sand and rocks that I never once felt compelled to explore. And when you

do find something, it's usually just a scattering of rusty old shipping crates or a grey military outpost.

In its favor, the environment does feel dangerous. Whenever I leave my base behind and head deep into the desert, I get nervous about what lies ahead. But mainly because I know that if I die out there, I'll lose everything I picked up and have to do it all over again. It's frustrating pretty much all of the time, but if you like grueling survival games, you might enjoy how little the game cares about entertaining you.

## In its favor, the environment does feel dangerous

### NEED TO KNOW

**WHAT IS IT?**  
A survival game set in the *Metal Gear* universe.

**EXPECT TO PAY**  
\$40

**DEVELOPER**  
Konami

**PUBLISHER**  
In-house

**REVIEWED ON**  
Core i5-6600K,  
16GB RAM, GTX 1080

**MULTIPLAYER**  
One to four players

**LINK**  
[www.konami.com](http://www.konami.com)

Fashionable PC survival games provide the template for *Metal Gear Survive*, which means gathering materials, killing animals for meat, and crafting gear. You'll start out hunting sheep with a rusty spike, but later you'll have an animal pen in your base and a selection of guns. It's a tried-and-tested core loop, but rendered insufferable by how miserably slow everything is.

Your character runs like he's wading through treacle, and runs out of breath after about five seconds. Harvesting Kuban energy from fallen enemies—an important in-game currency that's used for everything from crafting to refilling your air tank—takes ages.

### ON THE FENCE

I do like its willingness to be silly, however, which is when it feels the most like a *Metal Gear Solid* game—albeit superficially. I love being able to craft objects during combat, throwing up a fence to stop a group of charging zombies, then poking them through the mesh with my spear. And I'll never tire of sprinting towards a sheep or deer and knocking it out with a wild punch.

But just as I'm being charmed by these glimmers of personality, they're smothered by tiresome busywork and a confusing mess of a UI. There are a dozen better (and cheaper) survival games on PC that do almost everything *Survive* does, and better.

The inevitable presence of microtransactions, including paid-for additional character slots, also means the endeavour reeks of cynicism. More than anything, *Survive* feels like a business decision to me. An attempt to cash in on the survival game craze using a familiar name to lure fans in. Don't be fooled. ■

## DIE HARD Upgrades to live longer



**QUICK HANDS**  
Harvesting energy from piles of dead zombies is achingly slow, so spend some points on this upgrade as soon as you can.



**LEG SWEEP**  
Crouch and sweep the leg. Karate Kid-style, to knock a zombie on its ass. Comes in handy when one is lunging at you.



**CQC COUNTER**  
That's short for close quarters combat. If it's good enough for the legendary Big Boss, it's good enough for whoever you are.



**DIVE ATTACK**  
If you're standing above a horde of zombies, use this to deliver death from above with the melee weapon of your choice.



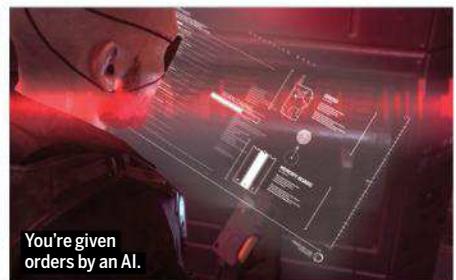
**SPRINT SWING**  
Give your melee weapon some extra heft with this move, which lets you transition from a sprint to a powerful, high-damage swing.

### PC GAMER

Has flickers of brilliance, but the painfully slow and draining survival simulation routinely snuffs them out.

### VERDICT

59



# MARS ATTACKS

**SURVIVING MARS** is a city builder with a killer attitude. *By Fraser Brown*

A colonist has died," *Surviving Mars*' AI assistant warns me in its detached, robotic voice. By the time I'm looking at the dome where she's kicked the bucket, four more colonists have joined her. It quickly becomes a cascade, with people collapsing and gasping for air in every dome. In an alarmingly short space of time, my sprawling extraterrestrial colony of hundreds is decimated. Surviving on this inhospitable world is no mean feat, but it's worth the effort.

Famine, dehydration, domes cracking and exposing their denizens to the deadly world outside—my first colony ended up being a lesson in the folly of setting up shop on Mars. Over 300 colonists perished. It started peacefully, however, with cute drones and pressure-free building projects.

Humans don't start coming to Mars until they can survive there, so the infrastructure needs to be established first. By the time the first human set foot on the planet, I had an elaborate network pumping oxygen and electricity to everything from domes to drones. The objectives are daunting, but by not forcing you to worry about colonists first, *Surviving Mars* has a forgiving early game.

Depending on the bonuses that you get from your mission sponsor, you'll also get some help. The easiest sponsor to pick for your first game is the International Mars Mission, netting you a decent cash pool.

## Living on Mars is hard, so colonists need looking after

Money doesn't mean anything on Mars, but it's used to buy crucial cargo that can be sent from Earth.

Despite its survival bent, *Surviving Mars* follows the same pattern as *Tropico*, turning resources into finished products while keeping people happy. It's something familiar to hold onto when the curveballs start flying.

Between the dust, meteors and tornados, living on Mars is tough. If you've planned for the worst, kept your stockpiles topped up and put your drones in the right place, though, you'll be treated to a mechanical ballet as diligent gatherers scoop up resources and then get everything under control, fixing up machines and repairing drones all over the colony.

Even once you've got some automation set up, however, it still feels like disaster is nipping at your heels. Something is always going on, however most of the crises that strike

### NEED TO KNOW

**WHAT IS IT?**  
A deadly survival city builder set on the Red Planet.

**EXPECT TO PAY**  
\$40

**DEVELOPER**  
Haemimont Games

**PUBLISHER**  
Paradox Interactive

**REVIEWED ON**  
Core i5-3570K,  
16GB RAM, GTX 970,  
Windows 10

**MULTIPLAYER**  
None

**LINK**  
[www.survivingmars.com](http://www.survivingmars.com)

your colony feel surmountable with a bit of creative tinkering.

### SPACED OUT

If only humans were as great workers as drones. Living on Mars is hard, so colonists need looking after. Working during the dark hours, getting sick, seeing someone die—there are so many threats to colonists' mental state, and they can culminate in depression or even suicide.

That's why domes need to be filled with infirmaries and social spaces. These places give colonists somewhere to get help or relax, but they also need to be maintained, necessitating more resources and colonists. That's the tension at the heart of *Surviving Mars*: It constantly drives you to expand, whether through resources running out or colonists needing more services.

Since colonies can grow to a gargantuan size, *Surviving Mars* needs a solid UI to make sense of it. Unfortunately, the one it has isn't up to the task. There are quality of life features, like the ability to pin things to a taskbar, but the menus are messy, and there's a lot missing. It provides an overview of the colony, but there need to be more ways to view details.

The result is a lot of extra micromanagement, which seems out of place in a game where you command armies of automated helpers and hoard state-of-the-art technology. I like that even once you get an advanced colony going you still need to be hands on, but there's often just too much to juggle at once.

As fiddly and stressful as *Surviving Mars* can be, nothing else marries survival and city building so deftly. It's a tricky but satisfying space disaster, but I do wish I'd managed to save those 300 colonists ■

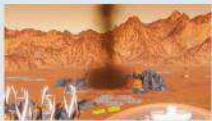
## WILD WEATHER

*The Martian climate sucks, look out for these*



### DUST

Mars is very dusty. That's a problem for solar panels and anyone with serious allergies. It can't be avoided, but not building dust-spewing mines near other buildings helps.



### TORNADOS

Martian tornados wreck everything in their path, and they always seem to find a way to take out the life support. All you can do, really, is get the hell out of the way.



### METEOR SHOWERS

Even the sky hates you. Early warning systems can be unlocked, and even automated lasers, but until then, you'll just have to hope a rock doesn't strike one of your domes.



### THE COLD

Some areas get so cold that domes can't properly protect the colonists. Heaters can keep everyone toasty, though that means you'll need to put stress on your power supply.

### PC GAMER

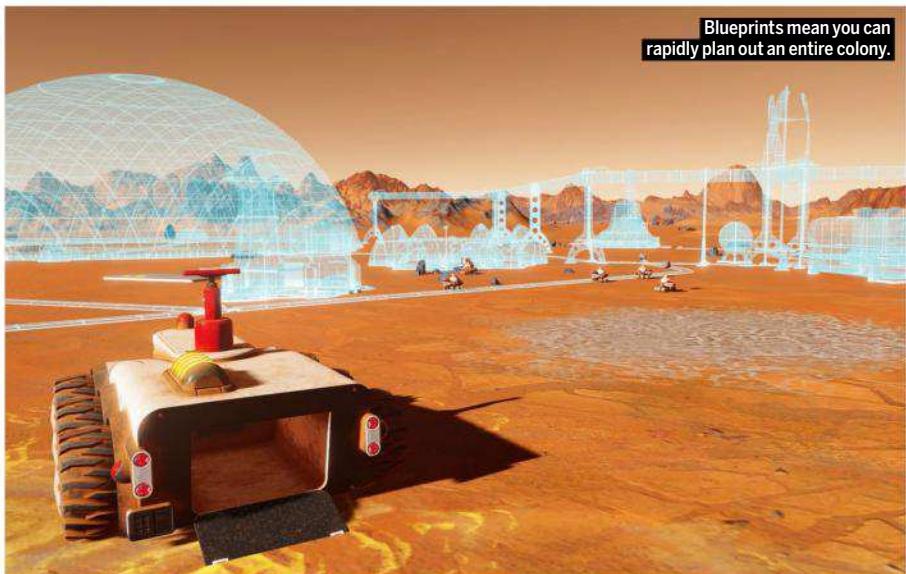
### VERDICT

*Surviving Mars* is a lot of hard work, but managing your own burgeoning off-world colony never stops being compelling.

80



Oh no, Elon Musk is in town.  
Everyone hide!



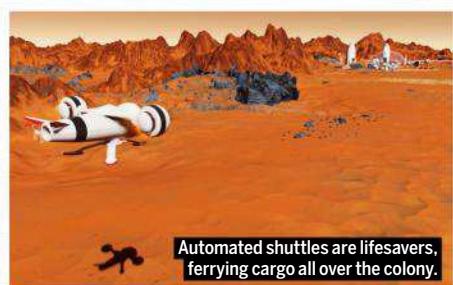
Blueprints mean you can rapidly plan out an entire colony.



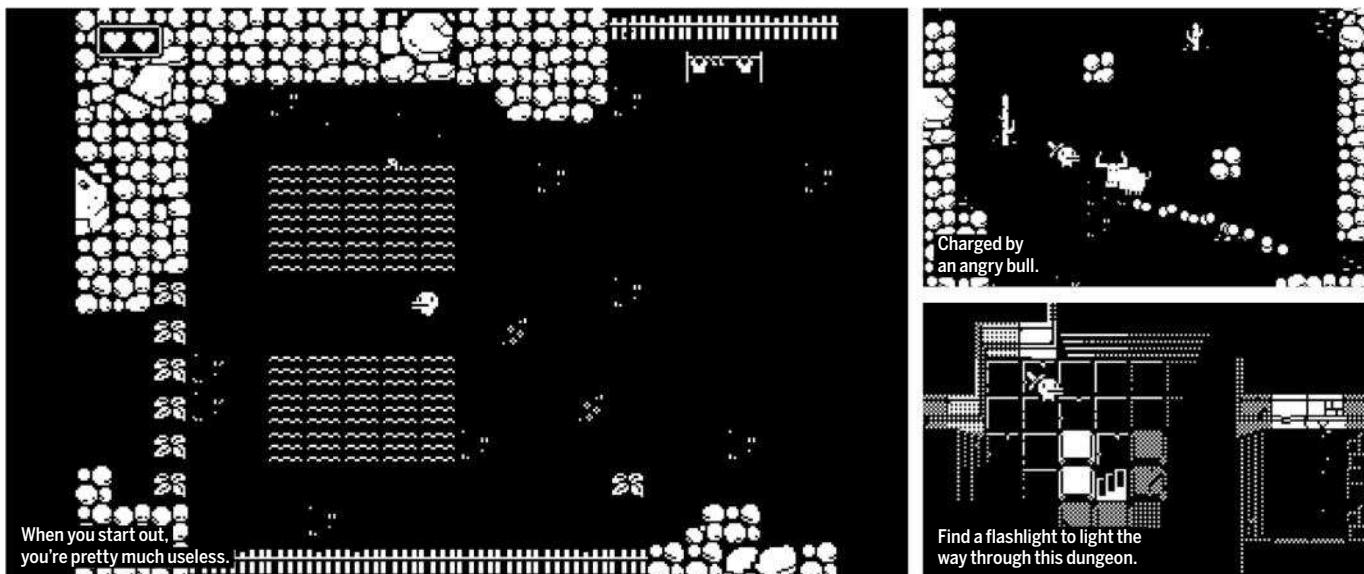
This is what everything falling apart looks like.



Domes come in various sizes,  
but they can fill up quickly.



Automated shuttles are lifesavers,  
ferrying cargo all over the colony.



# TIME OUT

**MINIT** is a cute, cruel adventure where your character dies every 60 seconds. *By Andy Kelly*

No matter what you're doing in *Minit*, no matter where you are, you will drop dead every 60 seconds. Life in this *Legend of Zelda*-inspired adventure is fleeting, and you only have a minute at a time to solve its puzzles, talk to its characters and complete its quests. A timer at the top of the screen ticks those 60 seconds down relentlessly, and throughout your time with *Minit*, you are at its mercy.

That all sounds very dramatic, but *Minit* isn't completely sadistic. Some of the items you find, such as a sword washed up on a beach, will carry over to your next life, opening up more areas to explore. And as you traverse the world you'll find houses that will act as respawn points. So with every life you'll make a little more progress and explore a little further, until you lift the curse and end your temporal torment.

Although it has the look and feel of an early *Legend of Zelda* game, *Minit* is really a series of puzzles. The nameless protagonist finds items fairly regularly, granting them a variety of powers. A cup of coffee will give you the energy to push boxes and open up new paths. A glove lets you throw your sword and attack distant enemies. The watering can lets you extinguish fires.

## Minit has no real stakes, which cheapens the timer system

And if you find enough hidden coins, you can buy a pair of sneakers to help you run faster.

With every item found, another obstacle can be bypassed. When the game begins, you're trapped by a row of bushes, but once you've found the sword you can cut them down. Later on, a bridge won't be fixed until you deal with some bandits on the other side, which is where that sword-throwing ability comes

in really handy. You essentially repeat this cycle until every corner of the map is accessible.

You will die in the process, a lot, but not just at the hands of the timer or the enemies roaming the map. You can actually kill yourself at the tap of a button. If you know you won't be able to complete a task or reach your destination in the time you have left,

## NEED TO KNOW

**WHAT IS IT?**  
An adventure where you die every minute.

**EXPECT TO PAY**  
\$10  
**DEVELOPER**  
JW, Kitty, Jukio, Dom

**PUBLISHER**  
Devolver Digital

**REVIEWED ON**  
Intel i5-6600K,  
GTX 1080, 16GB RAM

**MULTIPLAYER**  
None  
**LINK**  
[www.minitgame.com](http://www.minitgame.com)

it's often easier to just hit the death key, respawn back at your house, and try again. I found myself doing so distressingly often.

The problem with this is that death, rather than some ever-present threat, becomes little more than a minor inconvenience to you. And sometimes, when you're stuck on a puzzle, it's annoying, too. *Minit* has no real stakes, which cheapens the timer system and makes it feel somewhat arbitrary. I left the game thinking the concept was more interesting than the execution.

## PIXEL PERFECT

These reservations aside, I had a lot of fun. I love the art, which squeezes a lot of personality into just a few black-and-white pixels. The dialogue is endearingly silly, and some of the puzzles were satisfying to solve. The death timer is arguably more of a novelty than anything else, but it does make for a unique, if occasionally frustrating, experience. ■

## PC GAMER

The death timer can feel like a gimmick, but it gives this fun, charming adventure a compelling edge.

## VERDICT

69

# SPEAKEASY

**A CASE OF DISTRUST** is a stylish noir adventure. *By Phil Savage*

**A***Case of Distrust* is an adventure game about clues and interrogation. It looks gorgeous—each screen a block of color given life by silhouettes and the stylish transitions that link each scene. As P.I. Phyllis Malone, you gather evidence by clicking on the objects in each room, and take statements by questioning suspects. Present the right details to the right people and you'll unlock new leads—a place, a witness, even a culprit.

Characters are almost all archetypes—the aloof fixer, the surly kingpin, the easygoing bartender. The formula works, though. *A Case of Distrust* wields its setting and genre adeptly. My favorite conversations take place during taxi rides between locations. These chats cover everything from transportation and Egyptomania to the plight of immigrants, and are fascinating in how they convey the excitement of the era.

It's clear that Malone is a dogged investigator, with the jaded outlook and troubled past that typifies any fictional detective. But to many of the people she interacts with, Malone is a curiosity; a woman in a man's world.

She is belittled and underestimated—rarely overtly, but it's evident in the occasional remark and insensitive action. And yet, such comments feel more pronounced because of how neatly she fits the P.I. archetype.

It's a balancing act that mostly works, but not always. Malone's internal monologue upon experiencing discrimination can feel clinical, and not in a way that comes across like a character choice. It's a small thing—the

game is economical with its language—but it detracts from the impact of these moments.

At three hours long, *A Case of Distrust* is slight but satisfying. It's not immune from the standard

## It's not immune from the standard adventure game problems

adventure game problems, though. At one point I became stuck because I missed a piece of evidence. It was my own fault, sure, but not knowing how to proceed highlights the uneasy alliance between adventure and investigation. Interviews can seem like negotiations where the subject could clam up at any moment, but that feeling disappears when you're left asking about every item in your notebook, hoping for a lead.

## INTEL INSIDE

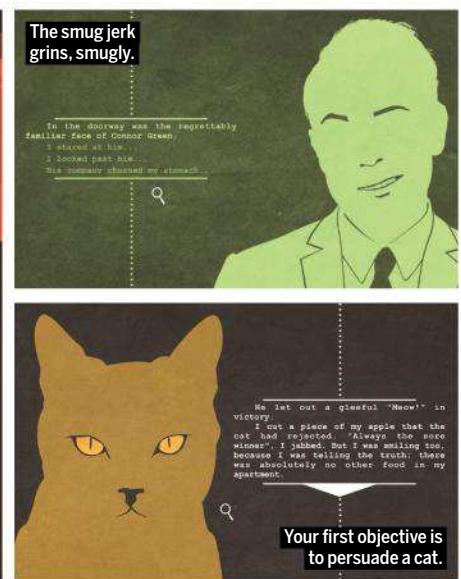
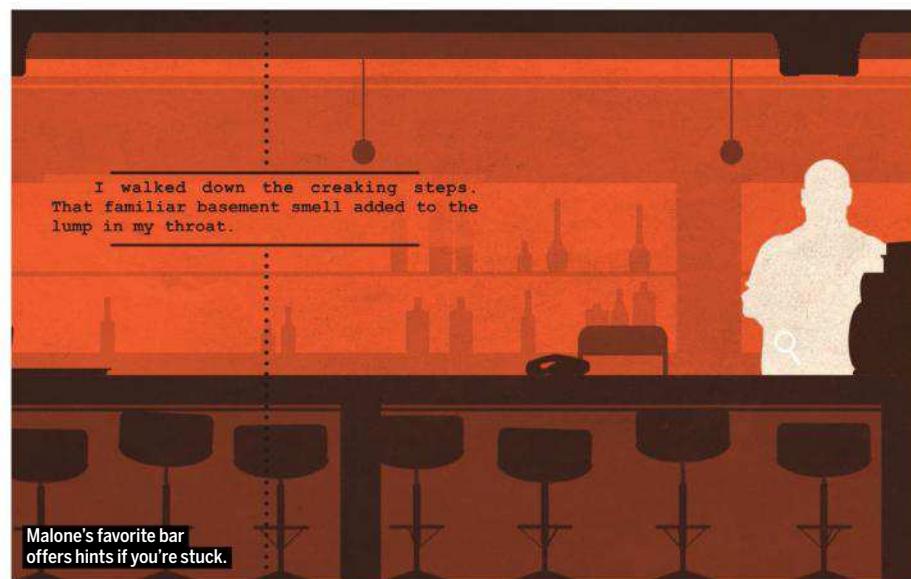
Still, the mystery is engaging. Your interactions, though basic, are enjoyable—a fulfilling loop of gathering intel and using it to put the squeeze on suspects. *A Case of Distrust* feels atmospheric and evocative—its unique style creates a compelling drama that cuts through its small missteps and frustrations. ■

## PC GAMER

A well-formed slice of noir mystery, beautifully presented. Some writing issues aside, it is well worth your time.

## VERDICT

78



# TO THE MUN

## KERBAL SPACE PROGRAM: MAKING HISTORY

lets you perform mission control. *By Ian Birnbaum*

**K**erbal Space Program's rocket-building sandbox has attracted modders since the beginning, and after seven years they've crafted hundreds of additions—everything from planetary bases to ion drives. So what can *Making History*, KSP's first official expansion, offer players that hasn't already been done? Not its collection of real-life spacecraft, which is a curious inclusion given that space history is one of the most popular subjects for mods.

The expansion offers a pretty good version of the Apollo 11 lunar lander module, for example, but a perfect recreation has been available since 2014. As such, and in keeping with what already makes KSP great, *Making History's* best addition is not an object, but a tool—a new way to experiment and create. The

Mission Builder, which players can use to script and plan missions and stories using simple tools, turns the expansion into a must-buy.

For most of its life, KSP was a sandbox game. The only missions were the ones I made for myself. Contracts that reward players with money, science, and prestige in career mode were a late addition, and I've always found them to be the weakest part of KSP. Instead of focusing on big-picture goals, like taking my first steps on distant planets, contracts have me duct-taping and kit-bashing single-use spacecraft to take a new landing gear to a certain height and speed, checking off a box to get paid.

Contracts provided some goals and direction in the open world Kerbal arena, but they were never about telling *stories*. The new Mission Builder and History Pack (a set of prebuilt missions based on space race launches) change that. For the first time, I can fly and build missions that follow a script.

In one of the first missions, my Soviet spacecraft is suffering from a cascading electrical fault, and my only hope is to rendezvous with a nearby satellite and use its diagnostic systems to reboot. As I carefully fly over to the satellite, random systems

**Making History's best addition is not an object, but a tool**

explode and my time begins to run out. After I finally get the computers to reboot, mission control throws me a curveball: Is there any way I could deorbit that satellite so the R&D team can see the computer logs? Suddenly, I'm on a white-knuckle solo flight home in a satellite that wasn't meant to fly.

For KSP veterans, improvisation and surprises only happen as a result of our own incompetence. Thanks to

### NEED TO KNOW

**WHAT IS IT?**  
A history-themed expansion pack for *Kerbal Space Program*.

**EXPECT TO PAY**

\$15

**DEVELOPER**

Squad

**PUBLISHER**

Private Division

**REVIEWED ON**  
Core i5 4690K, 16GB RAM, Nvidia GTX 970, Windows 10

**MULTIPLAYER**

None

**LINK**

[www.kerbalspaceprogram.com](http://www.kerbalspaceprogram.com)

*Making History*, space can be a dangerous place again. Random failures might cut a mission short. A meteor shower might puncture all of my solar panels, leaving a deep-space crew stranded until help arrives. All of these variables are present in the Mission Builder, which is a great tool for scripting your own stories, as if you're a sci-fi dungeon master running a deep-space tabletop RPG.

### DRAG AND DROP POD

Everything in the Mission Builder is drag-and-drop. To script a mission to the Mun, drop a Spacecraft Launched icon and a Spacecraft Landed icon and draw a line to connect them. Start at Kerbin, land at Mun. Drop a score bonus and a time limit, and draw new lines to wire them in to the script. Zoom in and tweak a menu option to make the objective more specific. Add a scripted event. Give the player a choice between salvaging data and saving a stranded Kerbal.

The building blocks are simple, and there's no limit to how deep you can stack the Mission Builder's scripted emergencies and radio messages. I've been astounded by KSP modders' technical skill and devotion to historical engineering minutiae, and I'm sure that will all be applied here—perhaps with minute-to-minute recreations of Apollo 11 driven by actual radio transcripts. These tools can do that.

KSP's devs have built a new set of tools that the community hasn't provided for itself. The KSP community is fantastic, and more ways to create and share space adventures is exactly what it needed. For the price, it's nice to also get the big dump of new, historical parts, but *Making History* is great for the making, not the history. ■

### WHO DESIGNED IT BETTER?

We put the real-life hardware against the Kerbal-designed versions to see how accurate the recreations are. Verdict: Close enough for government work.



The Soviet Vostok spacecraft



KSP's new KV-1 Reentry Pod

Image: Wiki Commons



Gemini IV command module



KSP's Mk2 Command Pod

Image: National Air & Space Museum



NASA's new RS-25 engines



KSP's KS-25 engines

Image: NASA

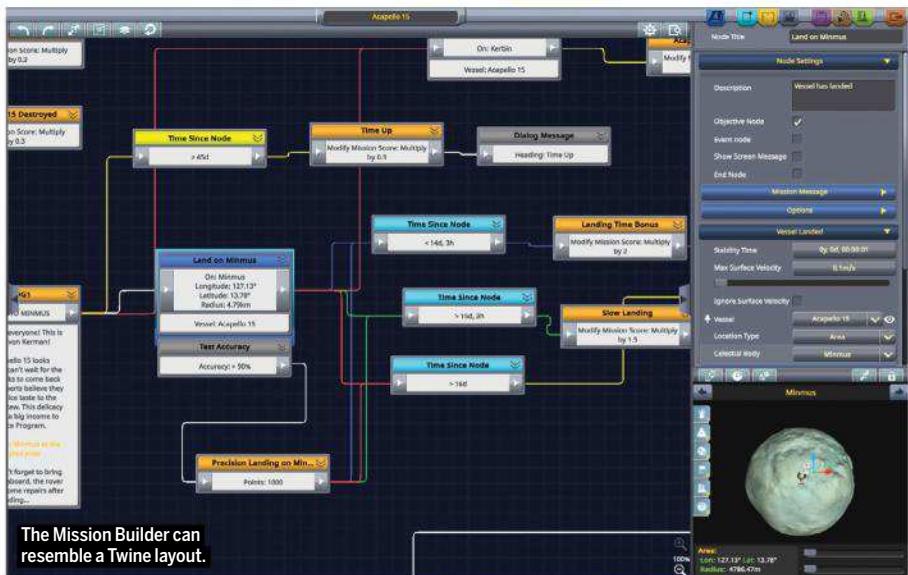
### PC GAMER

KSP's sandbox gets bigger by focusing on what makes it a great PC game: Freedom, and random explosions.

### VERDICT

82

## *Kerbal Space Program: Making History*



# ON THE ROAD AGAIN

**FINAL FANTASY XV** arrives on PC, and the imperfect RPG was worth the wait. *By Hannah Dwan*

The wait for *Final Fantasy XV* on PC has been long, following lots of talk from Square Enix about optimization, mod support, and nicer-looking hair. If you've waited 15 months—on top of the almost decade-long wait after the original *Versus XIII* announcement—to play this road trip-themed action RPG, though, it looks fantastic, and arrives in a more complete form than it did on consoles.

While previous entries are better-known for turn-based combat, or real-time with a complex strategic layer in the case of *FFXII*, this is a pure action RPG—and a pretty simple one at that. Your character, Noctis, rides around in a car with his three friends for most of the game. You can take on sidequests, hunt for specific creatures, and tackle dungeons that unlock new weapons. The second half of the game is more linear, which doesn't play to the game's strengths as much. *FFXV* is at its best when it's focused on the idea of a road trip between four friends.

As well as including all of the updates from consoles, the *Windows Edition* arrives with all of the DLC released so far (the three character-centric standalone episodes, plus the multiplayer update, *Comrades*) and many graphical upgrades. You also get a more embellished final chapter than the other platforms originally did, making what was a rushed

## The Final Fantasy RPG experience has been streamlined

closing chapter into a more satisfying (if still slightly incoherent) climax. What *FFXV* is particularly good at is creating spectacle. Fights feel grand; enormous creatures and operatic music heighten the sense of drama. Summons return to the series in their most extraordinary form yet—powerful giants that'll lay waste to pretty much any opponent. The graphical upgrades for PC only accentuate this, with improved detail and resolution options.

The world is gorgeous, and fun to explore. The four main characters do most of their traveling in the Regalia, their royal car. From the desert wastes of Hammerhead, to the bustling town of Lestallum, the boys drive across the map. Little animations and smaller interactions emphasise the feeling of camaraderie.

The *Final Fantasy* RPG experience has been streamlined, though. Completing main quests gives you

## NEED TO KNOW

**WHAT IS IT?**  
The latest *Final Fantasy* game, on PC after 15 months of waiting

**EXPECT TO PAY**  
\$50

**DEVELOPER**  
Square Enix

**PUBLISHER**  
In-house

**REVIEWED ON**  
Core i5 7400, 16GB RAM, GTX 1060, SSD install

**MULTIPLAYER**  
In *Comrades* DLC only

**LINK**  
[www.finalfantasyxv.com](http://www.finalfantasyxv.com)

more than enough experience to keep up with the story's level expectations. The Ascension Grid, *FFXV*'s progression system, provides simple upgrades and little more. Grinding is a thing of the past thanks to these changes, but there's little incentive to explore past the major story quests when your other options aren't particularly interesting.

Conversation choices don't offer much aside from a little flavor, the world is open but somewhat limited until you've finished the story, and there's no real strategy in fights except stabbing enemies in their weak points. It's not much of an RPG, really—not in the traditional sense.

## FIGHTING FANTASY

There are just a couple of attack commands. While you can swap weapons out mid-fight for faster or slower attacks, the complex strategies you could pull off with status effects and the strengths of different party members in previous *Final Fantasy* games just aren't here. The game's one attack button can, pretty much, be held down to constantly attack.

There is Wait Mode, which pauses time and acts as a way to assess a situation strategically, but it also breaks the flow of combat unnecessarily. The magic (referred to as Eleancy) is just as simple, but a lack of easy ways to replenish your magic resources means Eleancy isn't a viable way to fight every battle.

But *Final Fantasy XV* has never looked better, and mod support suggests an exciting future ahead. It's a shame that *FFXV* doesn't recapture the depth of the series' past entries, and games like *The Witcher III* and *Divinity: Original Sin II* really highlight the weaknesses in the sidequests here. This road trip,

## RATING THE ROAD TRIPPERS

From the bland hero to best chef

WORST



**NOCTIS LUCIS CAELUM**

Emo hasn't been in fashion for years now, and Noctis's brand of disinterest isn't exactly kingly.

BEST



**PROMPTO ARGENTUM**

An improvement on Noctis, Prompto is the most relatable: Unsure of himself, but ultimately always doing his best.



**GLADIOLUS AMICITIA**

Perhaps the definition of a brute with a heart of gold, Gladiolus isn't afraid to call anyone out on their shit.

BEST



**IGNIS SCIENTIA**

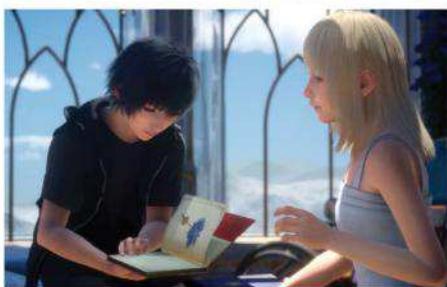
As the smartest, most cunning, and wittiest member of the gang, Ignis is the sort of person you'd rely on for anything.

**PC GAMER**

*FFXV* showcases a fantastic road trip across a beautiful world, even if it's not much of an RPG.

**VERDICT**

78



# FUSION FRENZY

Russia and Japan's finest puzzlers meet in the delightful **PUYO PUYO TETRIS**. By Chris Schilling

**O**n paper, this alliance of two evergreen puzzlers makes perfect sense. If both games are brilliant, then bringing them together would naturally seem to equal brilliant squared. Yet it's also an idea fraught with risk: There's always a chance such a hybrid might dilute their individual excellence. Happily, as you've no doubt already guessed from the score, that's not the case here. This spirited revival manages to offer the best of both worlds.

Given that it's harder to find an electronic device that doesn't play a version of *Tetris*, this grandaddy of puzzlers warrants little introduction. It remains unassailably brilliant. But *Puyo Puyo* is no brash upstart, either. First released on the Famicom Disk System and MSX2 back in 1991, it's a mere seven years younger than its Russian cousin. If it's less well-known, that's because this is the first time *Puyo Puyo* has kept its Japanese title for a western release.

For those not versed in *Puyo Puyo*, it's an ostensibly simple match-four puzzler. Blobs fall from the top of the screen, and it's your job to place them in groups of the same color. Only rank amateurs remove a paltry four blobs at once, though. The idea is to position them so that one match immediately becomes two and then three, with blobs falling neatly into the gaps left behind by the recently popped to create chain reactions.

**There always seems to be a way to wriggle out of trouble**

It's not quite as immediate as *Tetris*. It takes a little time to acclimatize, and to learn the patterns that set off those satisfying chains. But *PPT*'s surprisingly hefty Adventure mode compensates for the lackluster tutorials, giving you plenty of opportunities to learn on the job. The story's saccharine presentation won't be to all tastes, but it has a relentless, puppyish gusto that might just convince you to go with it. And if you do find it tiresome, you can skip the preamble get on with puzzling.

The broad range of challenges incorporate both games. On some stages, you'll simply have to play *Tetris* against a *Puyo* AI opponent, or vice versa. For others, you'll switch between modes. You might be battling against the clock one minute, and trying to hit a specific score target before your rival the next. After a gentle opening, the AI stops going easy on you, presenting a stiff

challenge that seems to keep pace with your own progress.

You'll need to use the hard drop (press up to make blocks crash down in an instant) and master *Puyo*'s stair patterns as opponents grow ever more ruthless. But there always seems to be a way to wriggle out of trouble. Trash blocks sent over by a rival's successful *Tetris* or *Puyo* chain won't immediately clog up your board—you can prevent them from being dumped with a quick match of your own. And when you gain the upper hand, sometimes it pays not to hold back for the perfect drop. A swift double when your opponent is setting up for a big clearance or chain can plug that tantalizing gap with the wrong type of block.

## GETTING SCHOoled

Heading online can be a chastening experience until you've had hours of practice, but there's a bundle of offline modes besides. Fusion splices the two games in a way that just about works, but it's a distant second to the thrilling Swap mode, which regularly alternates between boards—letting you rack up big points in the one game you're good at so you're better equipped to fight fires in the other. And then there are the novelty options like Big Bang, which invites you to clear preset patterns as quickly as possible, and Party, where power-ups can cause a flurry of rapid drops on your opponent's side, or leave them briefly in the dark.

There's a sense that a decent *Puyo* player will always triumph over a *Tetris* veteran, but otherwise there's little to fault here. No wonder there's a burgeoning competitive scene around a game that proves the truth of a familiar maxim: Sometimes the old ones really are the best. ■

## HYBRID THEORY

*Four more puzzling pairings we'd like to see*



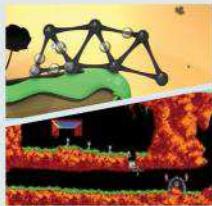
### THE WITNESS – PORTAL

Solve intricate puzzles, or just make a hole in the area to skip to the next.



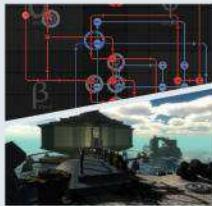
### BRAID – STEPHEN'S SAUSAGE ROLL

Grill and then plait those pork bangers. (Or rewind time and uncook them.)



### WORLD OF GOO – LEMMINGS

Build complex structures from blobs, then stop critters leaping off them.



### SPACECHEM – MYST

The increasingly elaborate adventures of an intergalactic pharmacist.

## PC GAMER

A vibrant reminder of why both games have endured, this is a near-perfect puzzle partnership.

## VERDICT

88



# DRINK UP

Time is definitely not of the essence in  
**WHERE THE WATER TASTES LIKE WINE.** By Tyler Wilde

**N**arrative games are often in danger of being hard-to-read novels, books that one ‘plays’ the reading of to the detriment of both the actual reading and the book. *Where the Water Tastes Like Wine* is a prime example of that particular danger. There’s truth and beauty to find within its choppy transcontinental trek, but only at the expense of a pair of sore eyes.

The 19th and 20th century microstories that make up the bulk of *WTWTLW* (there are over 200 of them) are encountered by plodding across a garish map of the entire United States by foot, and sometimes by train or car, and activating ugly little icons. There’s light personal upkeep to be done, managing rest, money, and health, but dying just resets you somewhere in America.

The stories are illustrated vignettes with narrated text

Those more substantial stories come from travelers you meet and make camp with. They’ll ask for certain types of tale (tragic, scary, exciting, hopeful, funny) that you can pull from your collection of encounters, and after you do so they’ll tell you something about themselves related to its themes.

Tell them the kinds of stories they want to hear and their ‘eye’ will open. Fully open it (which soon becomes rote once you have enough stories and know roughly how they’re taken), and the next time you run into them, they’ll have new responses, eventually spilling their life story over the course of several encounters.

These characters, each written by a different author, often feel general rather than specific at first. A Dust Bowl refugee camping outside of LA, for instance, tells me that, “The first thing the big owners did was shove the tenant farmers off their land with

**The stories are illustrated vignettes with narrated text**

tractors.” Simple accounts of historical details like this along with repeated aphorisms can suppress characterization. Stick with them, though, and their personalities begin to shine—especially The Beat Poet (Matthew S. Burns), The Sharecropper (Gita Jackson), and The One Who Went Upward (Demian DinéYazhi').

What emerges is an overview of experiences, in which representatives of the Reconstruction, World War 1, Jim Crow, indigenous struggles, labor struggles, and the Summer of Love appear in one-person plays to explain how they fit in, drawing from, among many others, Mark Twain, John Steinbeck, Dee Brown, W.E.B. Du Bois, Langston Hughes, Lucy Parsons, and Allen Ginsberg.

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## SLOW BURN

They tell important stories, but it takes far too much work to hear them, and *WTWTLW*'s non-written world isn't special enough to hold ten or more hours of attention. When the map's fields and clouds align just so, it has a mean strikingness, but it also ran terribly for me, stuttering often, with visible, jagged seams wearing on my eyes. And once a swath of map has been cleared of encounters, all that's left to do is chase down the campers. It's a rare game that slows down the more of it you complete.

*WTWTLW*'s stories are reminders of the stories we should seek out to understand history, to answer Bertolt Brecht's questions: "Every page a victory. Who cooked the feast for the victors? Every ten years a great man. Who paid the bill?" It's a graphic novel I'd wish to own. As it is, though, I've never had a short story anthology work so hard to keep me from reading its stories. ■

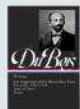
## BOOKING IT

*WTWTLW*'s stories are buried within a high-concept adventure that doesn't improve on the simple experience of reading, but its stories are still worth telling. With that in mind, here are some related books that you won't have to hold the 'W' key down to read.



### WORKING STUDS TERKEL

A collection of '70s interviews with Americans about their jobs. A captivating document about what it means to 'work,' and the most similar experience to playing *WTWTLW* that I can think of.



### DUSK OF DAWN W.E.B. DU BOIS

Du Bois' 1940 autobiography, as well as his catalogue of other texts (look for a collection!), are necessary, and powerful reading if one wants to begin to understand race in the United States.



### THE GRAPES OF WRATH JOHN STEINBECK

It's clear that much of *WTWTLW*'s inspiration came from Steinbeck and his portrait of the Dust Bowl—if you dodged one of the most-read novels of all time in school, it couldn't hurt to catch up.

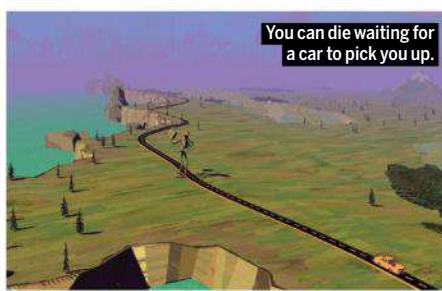
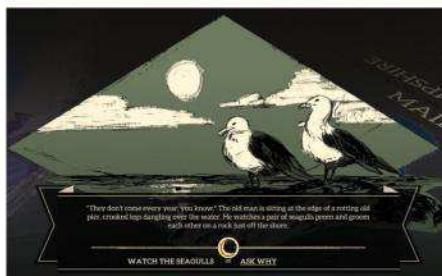
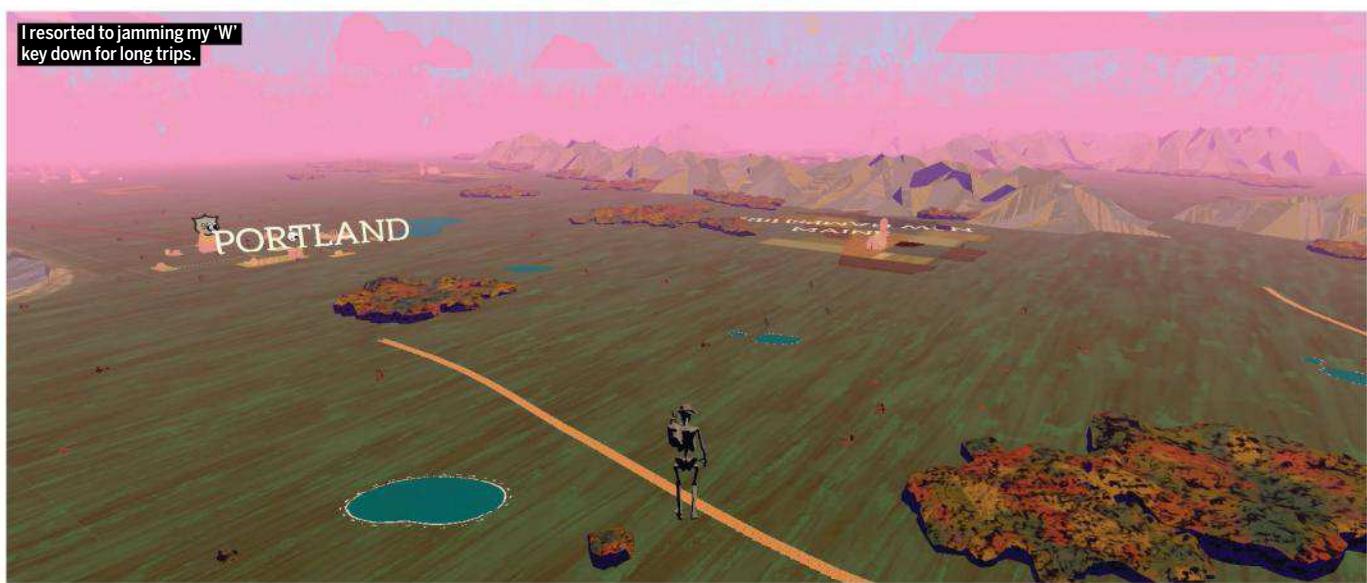
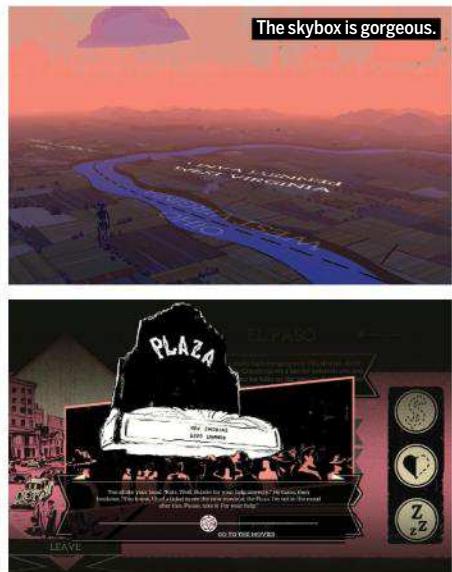
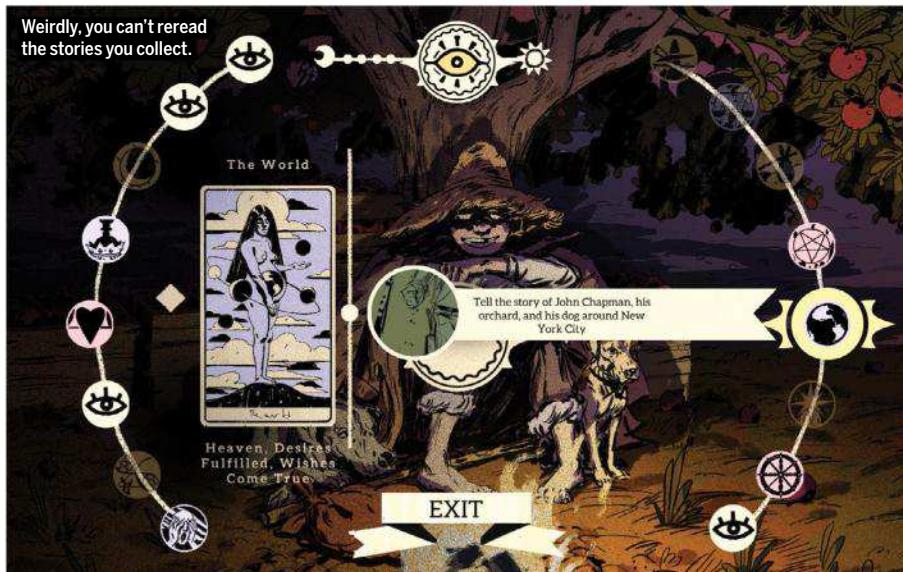
## PC GAMER

There are beautiful and tragic scenes, songs and passages to find in the journey, but they're spread far too thin.

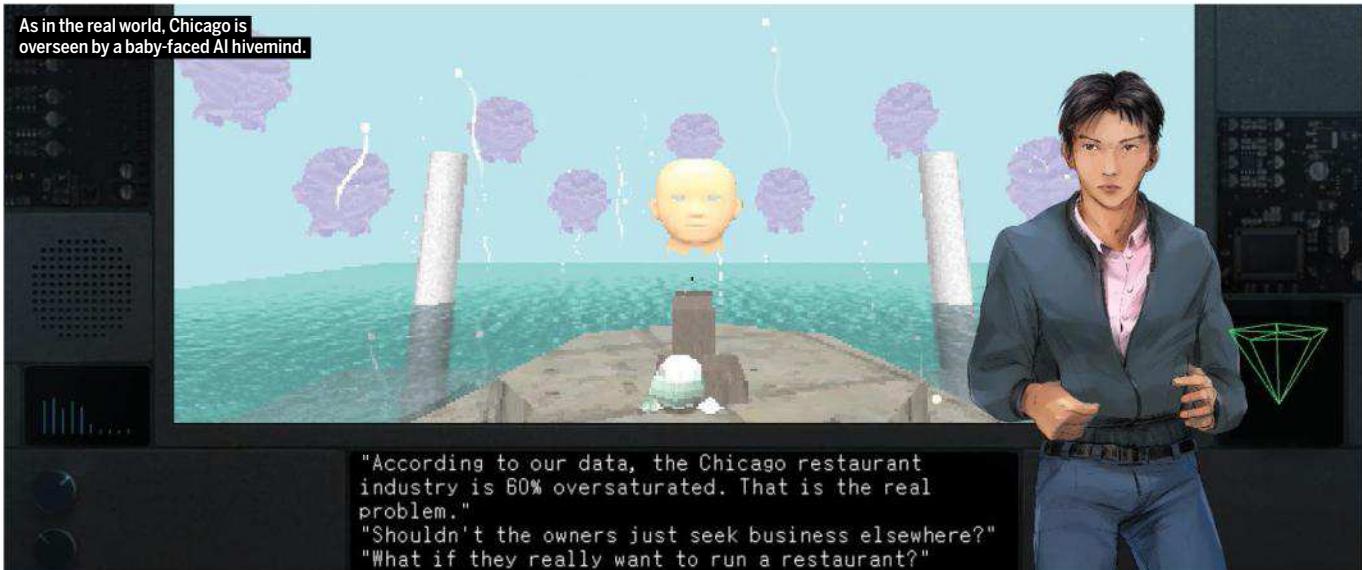
## VERDICT

58

## Where the Water Tastes Like Wine



All Our Asias



# ALL OR NOTHING

Exploring identity and memory in **ALL OUR ASIAS**. By Tom Sykes

**O**ur memories often bear little resemblance to the cold hard facts of the events in question. We overdramatize, we paint ourselves in a harsher light, while many of the finer details and much of the context slips away. You could imagine memories as small islands punctuating an endless, forgetful fog, and it's those islands—those memory worlds—that you're tasked with exploring in Sean Han Tani's dreamlike, introspective game *All Our Asias*.

Set in the near future, at a time when machines allow people to enter one another's minds, AOA's premise might immediately remind you of *To the Moon*. Like that adventure game, you're venturing into the mind of a dying patient, in this case your absentee father, who protagonist Yuito has complex feelings for. However, rather than attempting to fulfil his dying wish, you're merely trying to understand him. As you progress through your father's mental realm, witnessing abstracted memories from his existence, that world begins to crumble around you.

Part adventure, part 3D platformer, *All Our Asias* is a game where you'll wander around large environments, chatting to NPCs and leaping over obstacles (fear not, the platforming is not at all egregious).

Given that they reside within someone's mind, these locations are surreal or only vaguely fleshed-out—attributes that gel perfectly with the purposefully dated visual style.

With its low-poly 3D models and its blown-up pixels, *All Our Asias* resembles an early PlayStation or Sega Saturn game. It's a stylistic choice that's like catnip to those of us of a certain age, evoking a feeling of nostalgia that nicely supports the

retrospective narrative. Moreover, there's something about early 3D that makes it a better fit, in my eyes, for games that trade in visual ambiguity. You're given the basic building blocks of each themed environment, but many of the details aren't fleshed out, giving the player's imagination a licence to fill in the remaining gaps. Much of the joy of *All Our Asias* lies

**It resembles an early PlayStation or Sega Saturn game**

## NEED TO KNOW

**WHAT IS IT?**  
A strange adventure set in a fragmented memory world.

**EXPECT TO PAY**  
Free

**DEVELOPER**  
Sean Han Tani

**PUBLISHER**  
Analgesic Productions

**REVIEWED ON**  
AMD A4-6300,  
6GB RAM,  
GeForce GT 610

**MULTIPLAYER**  
None

**LINK**  
[www.bit.ly/AllOurAsias](http://www.bit.ly/AllOurAsias)

in exploring each strange location and trying to imagine what it represents to Yuito's father, or to the other dreamers that are collectively conjuring this subconscious universe.

## PASSION PROJECT

Despite the fictional protagonist, the story is a personal one for Sean Han Tani, as made clear in the artist's statement at the start of the game. It's a game about someone exploring their heritage, at a time when it's too late for them to learn anything concrete: Yuito sees only fleeting glimpses of a father he'll never know. It's not an especially affecting tale, but there are some interesting topics pondered here, before the game draws suddenly to its conclusion.

If you enjoyed poking around in someone's mind in *To the Moon*, or trudging through the bizarre dreamscapes of *Yume Nikki*, you'll find a game that sits somewhere between them in the thoughtful, quietly unusual *All Our Asias*. ■

**PC GAMER**

While it never takes you anywhere truly fascinating, this is a confident and considered sci-fi story.

**74**

Dord / The World Begins With You

# KNIGHT SHIFT

16-bit ghosts haunt DORD. By Tom Sykes

You play as a ghost in this cute sidescrolling adventure, meaning you can fly clear over those pesky gaps that plague the likes of *Sonic* and *Mario*. In place of platforming precision, you'll face tricky block-based puzzles, along with simpler turn-based battles against a variety of bizarre foes.

You're Midy, a friendly spirit who wants to be a knight. Your quest to achieve this sees you tracking down four primal beasties, before eliminating them in one-on-one combat. Putting its own spin on the turn-based rumbles of your average JRPG, *Dord's* streamlined battles have you flinging unconventional items, including peanut butter jars, at the enemy. If you hold the relevant key for long enough, you'll increase your damage output, however if you keep it down for too long, damage

will be halved. It's a neat idea, but in practice it's difficult to fail.

As such, there was little to hold my interest during the battles. You could strip them out of *Dord* and this would still be a fine game, thanks to its likeable characters, and the more engaging puzzles you'll butt up against now and again.

*Dord's* adorable hero doesn't exactly seem like knight material, but with his aversion to gravity and his seeming tolerance of trial and error, he's the perfect entity to tackle *Legend of Zelda*-style block puzzles. These quickly increase in difficulty—a little too sharply, perhaps, given the gentle nature of the rest of the game. Containing exploration, dialogue, battles and puzzling, *Dord* feels like a SNES RPG. It never finds its own personality, but I can forgive it that given how successfully it echoes the 16-bit games of old. ■

72



## NEED TO KNOW

EXPECT TO PAY  
NothingDEVELOPER  
NarwhalNutLINK  
[www.bit.ly/dordgamepc](http://www.bit.ly/dordgamepc)

# WORLD'S UNFAIR

THE WORLD BEGINS WITH YOU Waking. By Tom Sykes

I enjoy a verbose adventure game as much as the next person, but there's something to be said for games that drop you into a world, without a lengthy cutscene justifying your presence.

*The World Begins With You* opens in such a manner, with your character waking up in an old prison cell in an empty building. With its enigmatic protagonist, its crumbling ancient ruins and its exquisite presentation, this is a game obviously inspired by the likes of *Journey* and *ICO*. *TWBWY*'s main strength is clearly its beautiful setting, which consists of monolithic structures and angular boulders jutting out of a series of softly lit ruins. The 3D models, the cinematic camera and, above all, the lighting effects are some of the most impressive I've seen in a jam game.

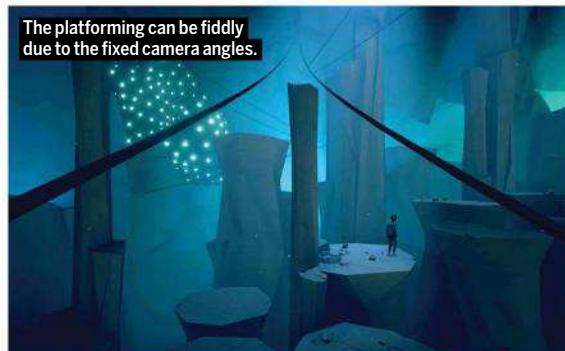
Perhaps too impressive, as the washed-out visual effect is so

pronounced that it can be difficult to decipher the scene at times. Once you've fled from your prison cell, a couple of simple maze sequences, a punishing pseudo-stealth bit and plenty of tricky 3D platforming lie between you and the abrupt conclusion, and all are occasionally made more difficult as a result of that blinding light.

I can't say that any of the challenges felt especially satisfying—in particular, those arty camera angles made leaping across chasms a frustrating affair—but when it's merely content to leave you be inside its lovingly ruined world, *The World Begins With You* feels like the start of something special.

Alas, the game is over just as it's on the cusp of offering something much more meaningful, so don't go in expecting any concrete answers to its myriad mysteries. ■

60



## NEED TO KNOW

EXPECT TO PAY  
NothingDEVELOPER  
Fabian DenterLINK  
[www.bit.ly/twbwypc](http://www.bit.ly/twbwypc)

# EXTRA+ LIFE

## CONTINUED ADVENTURES IN GAMING

Just look at the detail  
on this bee!



## “Mosquitos have been vetoed as candidates for detailed close-ups”

Insect portrait attempts in **ASSASSIN'S CREED ORIGINS'** Discovery Tour.

**S**omething that I did not expect to have a strong opinion about in *Assassin's Creed Origins'* Discovery Tour mode was the representation of mosquitos.

Mosquitos are complicated lifeforms to find interesting because they are so closely related to the transmission of disease, including malaria, yellow fever, Zika, and West Nile virus. Although they can be biologically curious, they're not (as far as I have found) in any way lovable, and they are also an active threat to so many people around the world.

Mosquitos came up because, when I loaded in to *Assassin's Creed Origins* to poke around in the

PHILIPPA WARR



THIS MONTH  
Fought (and lost) a battle with Windows 10 updates.

ALSO PLAYED  
*Cypher*, all the free games

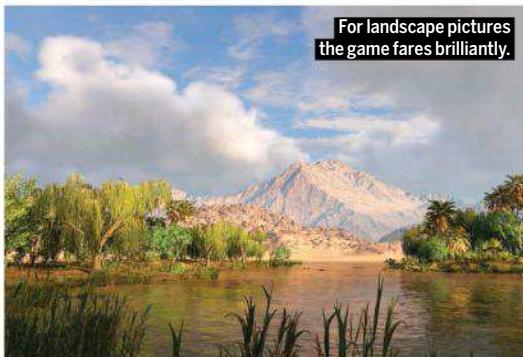
edutainment Discovery Tour mode, I found myself near water. I decided to examine the local wildlife and, as well as a couple of crocodiles, I could see a cloud of insects. From a distance they were small smudges above the water, so I decided to get closer and see how much detail the game world would offer me.

But here's the interesting thing: Mosquitos don't resolve into anything more detailed. They stay as smears

no matter how close you get. I'm used to games doing that because often it's too big an ask for developers to render the world in minute detail when only a fraction of the playerbase will notice it. You put just enough detail so the scene looks right from the distance and perspective. It's why I'm used to birdsong without birds in forests, for example.

But *Assassin's Creed Origins* takes pride in so many other little details that the mosquito decision stuck out. To take another insect as a

**ASSASSIN'S CREED ORIGINS  
TAKES PRIDE IN SO MANY  
OTHER LITTLE DETAILS**



comparison, bees do stand up to close scrutiny. They're not entirely right—my screenshots look like there's been a small explosion in a model bee factory rather than depicting purposeful insects—but they have detailed bodies and wings and legs.

#### BEE IN A BONNET

I've been thinking about why this is the case, and I assume it's a matter of prioritizing creatures the player is likely to look at. The bees I saw populated an apiary you could visit. Maybe that apiary has a plot function, or maybe it's just another venue a player can head to, but either way it's a space dedicated to the function of bees in relation to people.

Mosquitos offer none of that human value. In fact, they have been described as possibly the deadliest creature on the face of the planet, and bring the exact opposite of joy and productivity. In conjunction with *Origins'* photo mode (which is what I've largely been using the Discover Tour to tinker with), the choice to have smudges instead of insects kept coming back into my mind.

Composing an image in the game's photo mode involves choices—some are made by me, the player, but others long ago by complete strangers. In *Origins* I can choose which direction to face and whether to zoom in and crop out details. I might mess with the color options or fiddle with the depth of field slider.

By opening this box of tricks I can really build an image around a detailed flamingo or a waterlily or a cat, but—via whatever decision-making process it was—mosquitos have been pre-vetoed as candidates for detailed close-ups. That's not to say the smudges can't be put to use aesthetically. They just also represent a choice, either conscious or unconscious, over what was worth detailing and what wasn't. ■



# "Rats pour from the walls and floor"

Saying goodbye to **VERMINTIDE**

#### PHIL SAVAGE



**THIS MONTH**  
Stayed until last orders at the bar.

**ALSO PLAYED**  
*Into The Breach*

The Red Moon Inn has been a welcome stop throughout my time playing *Vermintide*. A charming, rustic hangout situated in the shipping town Ubersreik, it maintains a welcoming atmosphere thanks to the friendly demeanour of innkeeper Franz Lohner. It's also one of the few safe havens in a town under siege by hordes of Skaven—a literal tide of vermin, if you will.

The inn is your hub between missions, giving you time to prepare; tinker with *Vermintide*'s awkward crafting system, or awkward upgrade system, or awkward bounty system. It's a practice space, too. See those meats hanging from the bar? They're physics objects, and, as elven archer Kerillian, I'd pierce every sausage and drumstick, watching them swing from their hooks.

My favorite touch is the design of each playable character's room, which hints at the personality of its occupant. Kerillian's room is sparse,

the furniture upended and just a thin blanket on the floor. Sienna, the bright wizard's room, is all parchment and scorch marks. Empire soldier Markus is crafting a diorama of his family's farm. To each other, *Vermintide*'s characters are cold and adversarial. But these spaces give us an insight into their goals and desires.

#### RATS ALL, FOLKS

Given all this, it's a bit of a shock when a Skaven rat ogre digs its way from the basement and smashes the place. I'm playing Waylaid, a new mission added in a free update released a couple of weeks before the launch of *Vermintide II*. Set after the conclusion of the campaign—which ended with the hordes seemingly driven out of Ubersreik—the briefing begins with Franz claiming, "It's all gone a bit quiet around here."

But when the mission loads I'm not off in some new area of the city, but stood by the inn's central table. I'm given a moment to register my confusion. Then the tide arrives. The rat ogre comes first, instantly subverting this haven into something claustrophobic and deadly. Then rats pour in.

This is truly the end times for the first *Vermintide*, and there could be no more appropriate a finale than the destruction of this haven. Wherever my character ends up in the sequel, I hope there's more meat to pierce. ■



# “The grey, misty gloom streaking past me is authentically British”

Recreating the tedium of the railway experience in **TRAIN SIM WORLD: GREAT WESTERN EXPRESS**

I've taken the train from Bath to London hundreds of times in my life, usually to visit game developers in the capital. And while I enjoy that part of the job, the journey itself is a dispiriting chore. Rail travel in the United Kingdom is a chaos of delays, overcrowding and overpriced sandwiches. Yet when I saw *Great Western Express* on Steam—an expansion for *Train Sim World* that recreates part of that route—I felt compelled to play it. Videogames are a powerful form of escapism for me, but what if I played one to achieve the complete opposite of that?

*Train Sim World* is primarily a game about driving trains, but it's unique in that it also lets you be a passenger. Bath isn't in the game yet, so I start my journey at Reading, and I'm immediately struck by how well they've recreated the station. I've spent many hours here over the years waiting for delayed connections, and the layout is perfect—although the lack of a pasty shop is jarring. The pasty is a station staple, and I will forever associate the smell of hot pastry with waiting for trains.

ANDY KELLY



THIS MONTH  
Willingly endured the boredom of British railways

ALSO PLAYED  
*Into the Breach*

## ON-RAILS

I get on the train and it's a strange experience seeing something so mundane, so tediously everyday, replicated in 3D. I walk through the buffet cart and can almost smell the reheated bacon rolls. I go through a vestibule and think of all the times I've sat there on my suitcase because the seats were all reserved. It's a bit too clean, though. It needs a layer of grime to capture the experience, and perhaps some men drinking tins of Carlsberg and shouting.

I find an empty seat, which knocks some serious points off for realism, and the train pulls out of Reading. Next stop, London

**I FIND AN EMPTY SEAT, WHICH KNOCKS SOME SERIOUS POINTS OFF FOR REALISM**

Paddington. I watch the city give way to the countryside through the rain-spattered window, and I do what I always do when I'm on a train: I listen to a podcast and eat a Twirl. And, honestly, it's just like the real thing, which I guess is the point of any simulator.

The grey, misty gloom streaking past me is authentically British, although it's far too quiet. No one is talking loudly and no children are screeching. I think about how much more atmospheric it would be if you heard the train manager piping up over the intercom. But these minor criticisms aside, it's the closest any game has ever come to replicating being a passenger on a train in the UK. So well done for that.

Knowing that there's no manager on duty, I relocate to first class. But it feels wrong. I don't belong here. I should be in standard with the 'real' people. But before I head back down the train pulls into Paddington, which is as accurate as Reading. This isn't an experience I'll be hurrying back to, but it was an interesting one. I'm fascinated by games that recreate real life, especially if they capture the rubbishness of the UK. And I'm glad sims like *Train Sim World* exist to fulfil this very specific desire. ■

# “Of course, I don’t remember any of this...”

In **THE MAGIC CIRCLE** game development is absurd but worth doing

**T**he *Magic Circle* is a game about a game trapped in development hell. A dysfunctional dev team wrestles with the budget and technical legacy issues that come from working on a single game for over ten years, as well as the changing whims of the *The Magic Circle's* fictional creative director, Ishmael Gilder. Meanwhile, lead designer Maze Evelyn is doing her best to either finish the project, or get fired from the team so she can reacquire her name and likeness rights before the studio goes completely bankrupt.

Of course, I don't remember any of this. As a player, I've just reemerged onto a platform in the center of a white void. A portal ripped into space and time gapes behind me, while in front of me, a sketched-out, crumbling fantasy land lies frozen. The final boss is long gone, and a horde of odd creatures, apparently under my control, are staring at me. Waiting for me to do something. One is named 'SkyEffer'. Another is just named 'Mushroom Wizard'. It is a mushroom. It has a beard.

XALAVIER NELSON JR



THIS MONTH  
Experienced piercing existential nostalgia.

ALSO PLAYED  
*Bayonetta, Fable Fortune*

## I MAY HAVE MADE A MISTAKE...

Three years ago, I hadn't considered making a game beyond that pipe dream 'million-dollar idea' most players have in their heads. "Oh man, what if there was a game like *GTA* set on a ruined Earth during a war between Heaven and Hell?" That kind of thing. Then, I played *The Magic Circle*. It was the final step in a journey towards realizing that game development, in practice, is *really hard*. However, rather than sending me screaming in the other direction, the humanity it shows in the process of creation urged me to dive into the

medium myself. I returned to the game this week: Three years, ten-plus projects and less hair since I first played it. I'm finding myself stunned by this idiosyncratic game all over again. Learning how the industry works behind the scenes only deepened my appreciation for *The Magic Circle's* particular wizardry.

I started again from the beginning, and marvelled at how quickly the game brings players up to speed with its systems and world. The starting point for your journey is called 0,0,0—the central coordinates for a level in a game engine, indicated by the symbol for a movement tool I've personally spent more late nights wrestling with in Unity than I care to admit. Jokes I previously laughed at simply due to sharp writing now struck with the sting of truth, as I heard the complaints, reasoning, and sneaky shortcuts I've seen in my own career echoed through my monitor.

The devs who *actually* made *The Magic Circle* are veterans. Working on series like *BioShock* and *Thief*, they've seen it all before. Having followed them down the rabbit hole of game development myself, I can see, now—more clearly than ever—it's an adventure worth taking. ■

## JOKES I LAUGHED AT DUE TO SHARP WRITING NOW STRUCK WITH THE STING OF TRUTH



# STELLARIS

Paradox blows up the universe and starts over. *By Tom Hatfield*

In C.J. Cherryh's Downbelow Station, Earth expands to the stars by constructing a network of space stations, and ships jump from one to another. The stations are the glue that holds space together. *Stellaris'* huge 2.0 patch isn't just named after Cherryh, it practically uses her novels as a design document.

Version 2.0 is bold, changing fundamental aspects of *Stellaris*, and it all starts with the map. Before 2.0, borders were vague blobs, with empires laying claim to systems they'd never visited. But what was analogue is now digital: If you have a starbase in a system, you own that system. It seems simple but, coupled with the fact hyperlanes are now the only way to travel between systems, it has a huge effect on how the game plays. Traversing a large empire is much slower, for example, forcing you to split up your fleets and gives smaller empires a fighting chance of winning a small war before their opponent's forces can mobilize.

## NEED TO KNOW

RELEASE  
February 22

DEVELOPER  
Paradox Dev Studio

PUBLISHER  
Paradox Interactive

LINK  
[www.bit.ly/stellarisparadox](http://www.bit.ly/stellarisparadox)

Wars, too, are more binary. Before a war begins you can lay claim to systems, then if you occupy them when the war ends, you own them. It's simpler than the war goal system, but still feels fiddlier than it needs to be, as the 'War Philosophy' policy forbids the aggressive empires from imposing their ideology on others, while disallowing peaceful ones from making claims unless they are attacked. The latter is especially rough, as the AI is reluctant to attack unless they have a large advantage.

It also means that those defence stations I spent hours designing were never engaged by anything more than a few pirates. Which is a shame, because designing starbases is fun.

*Stellaris* 2.0's changes are definitely for the better. *Apocalypse*, the paid DLC released alongside it however, is more disappointing.

## SHADOW OF THE COLOSSI

*Apocalypse* brings the Colossi—planet-sized superweapons. There's a Death Star-style planet cracker, a mind-controlling laser, and even a pacifist version that encases a planet in a shield. Initially, the idea didn't appeal to me, as I rarely play as the kind of supervillain who would deploy one, but eventually I found myself falling back on them when confronted with an endgame crisis. There's nothing quite like a neutron sweep for clearing a planet of an extra-galactic world-consuming swarm. Colossi can also act as a spark to ignite a volatile political situation: Other empires feel threatened when you build one, and can go to war to force you into dismantling it.

Marauders are another addition. They're like a warlike version of the curator, artist, and merchant enclaves introduced in the *Leviathans* DLC.

## STELLARIS 2.0'S CHANGES ARE DEFINITELY FOR THE BETTER

They control a small amount of territory, but pack it full of tough fleets. Every few years they raid empires for slaves and resources. They are great characters, but they're so cheap to pay off that I was never under any threat of being raided.

Marauders get more interesting when the Great Khan event occurs. It's billed as a 'mid-game crisis', a mini version of *Stellaris'* endgame. Around 100 years into the game, there's a chance that a marauder clan will expand. What makes this different from the existing crises is that it has a time limit, the Khan will die and the empire will either shatter into warring states or convert to a democratic federation. What makes this work is that it shakes up the established order, which has gone stale by the mid game, destroying old empires and adding new ones.

There's lots of fun stuff in *Apocalypse*, but it can't help but feel underwhelming when compared to the *Utopia* expansion, or even the much cheaper *Leviathans* DLC. Unless you really, really love Death Stars, the best parts of *Stellaris*'s huge 2.0 makeover are free. ■

## APOCALYPSE HOW?

*This is how the world ends, not with a bang but with a...*

### 1 NEUTRON SWEEP

The disintegration of all biological matter.

### 2 DIVINE ENFORCER

A sudden sense of religious fervor.

### 3 GLOBAL PACIFIER

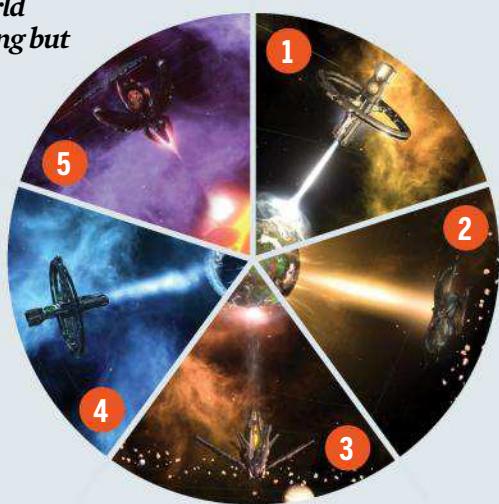
An impenetrable planet-sized shield bubble.

### 4 NANOBOT DIFFUSER

Nanomachines, son.

### 5 WORLD CRACKER

A really big bang.





**Titans are bigger battleships.  
They're not very interesting.**



**Chokepoint holding stations can  
get ridiculous.**



**Colossi have no defences, so  
it's best to escort them.**

**Khaaan!**

**The Drums of War**

For the first time in recorded history, the warring factions of the Spuxulac have united under a single Great Khan. This mysterious warlord, who according to some accounts is a powerful psychic, has emerged from their warrior caste and accomplished what most thought impossible. Through a combination of guile, charisma and military genius, the newly crowned Great Khan has won the utter loyalty and devotion of all Spuxulac factions.

Now that they are no longer busy killing each other, the Spuxulac are turning their attention elsewhere. Great fleets are mustering for war, crewed by eager warriors who are now steadfast comrades in arms despite having been mortal enemies mere months ago.

A new threat is born.



# AMADEUS

An impressive *Amnesia: The Dark Descent* story. *By Andy Kelly*

**T**he quality of *Amadeus*, an *Amnesia* mod by Swedish creator Reminiscity, becomes clear when I step into the main hall of the old house where the story takes place. It's a beautiful, grand room, with cold moonlight pouring through stained-glass windows, glass domes in the ceiling, a velvet-carpeted stairway, and eerie oil paintings hanging on the walls. It's probably prettier than the main game's Brennenburg Castle, which is quite an achievement for a free mod.

Inspired by Christopher Nolan's wonderful *The Prestige* and, curiously, the work of TV mind-wizard Derren Brown, *Amadeus* tells the story of Cornelius Campbell, a

magician trading under the name The Amazing Alduin. Cornelius' career has come grinding to an undignified halt, and where once he was able to fill the biggest theaters, he now struggles to attract even a meagre audience. This is what tips him over the edge, sending him spiralling down a path of madness as he does whatever it takes to become popular again—even if that involves something unsavory. Which, this being a mod for *Amnesia: The Dark Descent*, is a distinct possibility.

## BIG SHOT

Clocking in at four-to-six hours, depending on how cautious a player you are, there's a significant chunk of game to be found here. And it has the production values you'd usually expect from an in-house Frictional project, with surprisingly decent voice acting, bespoke animations and some stunning environmental art. Early in the game I wake up in a cell and find myself walking through an underground cave network, with waterfalls and shafts of light spilling through cracks in the rocks. It's a really impressive space, and I'm not surprised when I learn that it took Reminiscity over three years to





complete this mod. I'm sure he feels well rewarded: The game has received a parade of enthusiastic 10/10 user reviews on ModDB, and was also voted as that site's *Amnesia* Mod of the Year for 2017.

As a studio, Frictional encourages modding, and released a level editor to allow *Amnesia* players to create their own custom stories. This, however, means there are a lot of

## REMINISCITY SEEMS TO UNDERSTAND THE IMPORTANCE OF RESTRAINT

mods out there, and many of them are, honestly, pretty rubbish. But *Amadeus* is striking in that almost every aspect of it feels professional. The pacing is magnificent, leaving a good amount of tension-building space between the scares to make them count. And that's something that eludes even the creators of big, commercial horror games with Hollywood movie budgets.

Reminiscity seems to understand the importance of restraint and subtlety.

Although the mod does stick closely to the *Amnesia* formula, it also mixes things up a little—and makes some changes for the better. Some of you will disagree, but I always thought the sanity-health-lamp management side of *Amnesia* was a chore, and got in the way of the story. So I was glad to discover that *Amadeus* gets rid of the need to

constantly hunt down laudanum, sanity potions, and tinderboxes, making it feel more like divisive sequel *A Machine for Pigs*—which it also borrows some assets from. That will turn some hardcore *Amnesia* fans off, but for me it gives the story and atmosphere room to breathe.

### MONSTER MASH

*Amadeus* does fall flat occasionally, however. Although I do appreciate the decision to create original monsters for the mod, I never found any of them that scary. A lot of the puzzles are cleverly designed—particularly the one that involves playing a tune on a piano—but the difficulty of some of the trickier ones left me frustrated rather than challenged. And there's a general feeling of front-loading, with some of the later scenes lacking the finesse of the opening hours. But in light of

everything else it does well, I'd still recommend it, flaws and all. Especially since it costs absolutely nothing to play, providing you own an up-to-date copy of *Amnesia*.

Designing horror games is difficult, and for every one that nails it, there are a dozen that sink into cliche and lazy jump scares. Other mods for *Amnesia* shoot themselves in the foot by relying on things leaping out of the shadows, or sudden loud noises, too much. And that's why *Amadeus* stands out: It knows when to hold back, teasing you, keeping the tension tight like piano wire. If you want to play for yourself, *Amadeus* is available on ModDB ([www.bit.ly/amadeusamnesia](http://www.bit.ly/amadeusamnesia)) and installation is as easy as dropping a folder into your install directory and running a .bat file. Eight years later, it's great to see *Amnesia* still firing modders' imaginations. ■

## FEAR FACTOR *Other good custom stories*



### WHITE NIGHT

Created by Tanshaydar, this popular custom story is set in a hospital where you wake up as a patient with no memory of how you got there. This story has more than a hint of *Silent Hill* and Jacob's Ladder about it.



### ABDUCTION

Set a year after the events of *The Dark Descent* and once again starring original protagonist Daniel, this story by Anxt has some pacing issues towards the end, but is otherwise a fine extension of Frictional's story.



### THROUGH THE PORTAL

Another continuation of *The Dark Descent* by DamnNoHtml, this time taking you to the bizarre alien world hinted at in the 'portal' ending. Notable for featuring some very un-*Amnesia* environments.



### TROLL STORY

If you actually prefer loud jump scares to *Amadeus'* slow-burning horror style, this is the *Amnesia* mod for you. Developed by Vilperi27, the sole purpose of this mod is to make you shriek and jump out of your chair.

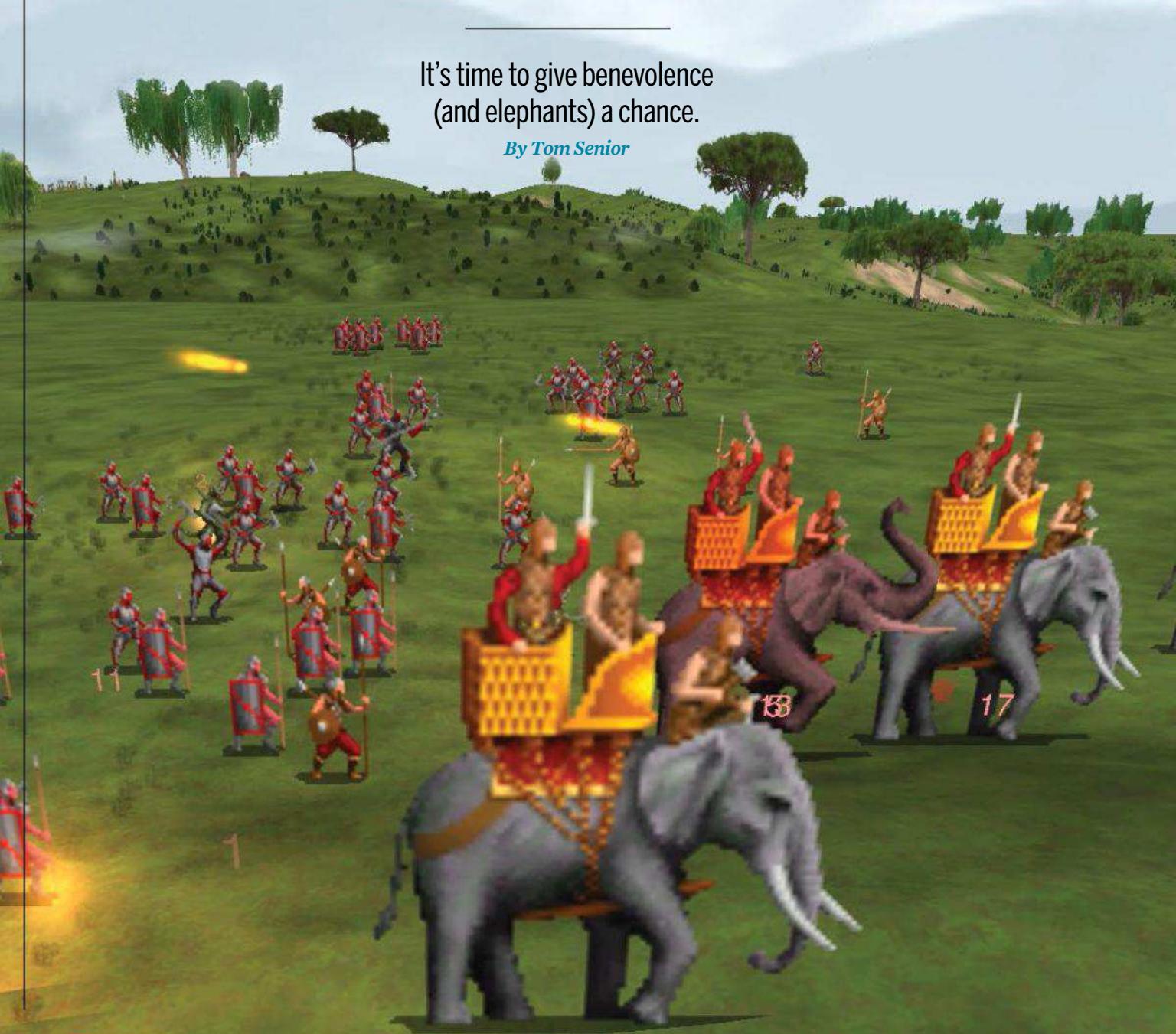


POWERFUL DEITIES FACE OFF IN...

# DOMINIONS 5

It's time to give benevolence  
(and elephants) a chance.

*By Tom Senior*



## THE RULES

**1** Form a heavenly dominion led by a nice god.

**2** Secure thousands of elephants, the best animal.

**3** Use niceness and elephants to conquer the world.

**T**he last time I played fantastical 4X game *Dominions* for a diary feature, I ended up sacrificing hundreds of blood slaves to cast the game world into a screaming eternal night. My demon apes, led by an inanimate lump of rock called Balboa, fled to a floating island where they were finally annihilated. My enemies even killed Balboa's dog, the bastards.

I think I can do better, and the release of *Dominions 5* is just the excuse I need to forge a new godly identity and lead a new fantasy race to glory. This time, I vow, I will be good. There will be no blood slaves. Instead I will woo my competitors with heavenly grace as the ruler of the old kingdom of Arcoscephale. This society is run by humble astrologers and priestesses who heal troops in battle. Compared to the other factions they are lovely.

Time to design my god.

I pick the Titan of Heaven, a noble-looking old guy with a white beard. I notice similarities to another famous fantasy wizard and, not wishing to infringe on any trademarks, I name him Gondalf. The game generates some auspicious titles for him and soon Gondalf, Holder of The Windbag, The Invincible, and Ever-Triumphant, walks the earth.

I survey my kingdom, which is a fortress surrounded by a collection of unaffiliated warriors waiting to be brutally kill—I mean, ushered into the peaceful kingdom of Arcoscephale. I check my recruitment menu and, to no one in particular, say, “It's time to build some fuckin’

elephants!” My holy decree is realized in only a few turns, and soon mighty Gondalf sallies with a dozen elephants to have words with the neighboring independents.

## KING COBRA

Gondalf's domain expands rapidly—battle elephants are very convincing. I am hemmed in by a river that loops around to the north, but I make some progress taking territory southwards and soon bump into an enemy faction. They are the fire folk of Abyssia, led by a huge crown-wearing snake called the Solar Serpent. His dapper looks and fine eye for accessorizing can't save him,

though. I meet his army and strike him down easily. Gondalf casts ‘Windrunner’ in battle which speeds up all of his elephants. The turbo-charged brick of grey hurtles across the battlefield and flattens the enemy in moments.

Encouraged, I point Gondalf at a nearby Abyssian fortress and he

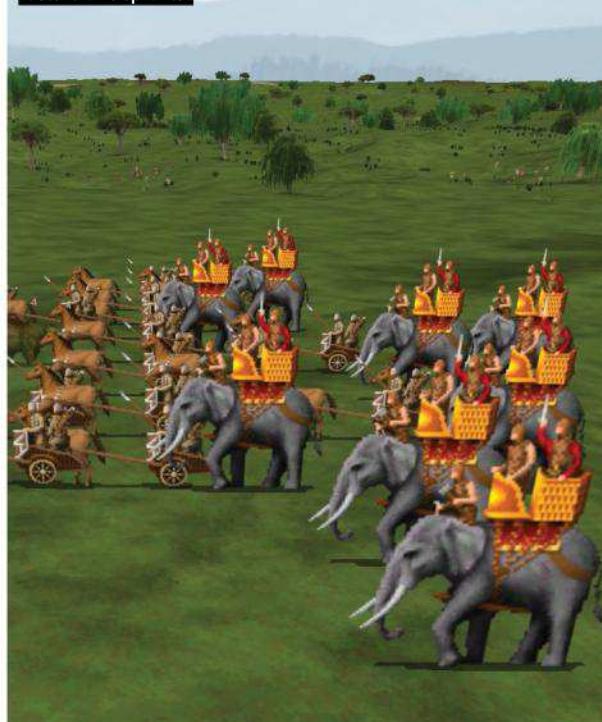
starts throwing turbocharged elephants at the walls to weaken them. Meanwhile, to the west the dark forces of Agartha start to make inroads on my territory. These cavern-dwelling folk are ruled by mysterious ‘Pale Ones’. I raise a second army and send them away to deal with the problem and start recruiting Priestesses to generate magical research and help out in fights.

Disaster strikes. My sieging force at the Abyssian stronghold is counter-charged by a larger army, and this time they have Salamanders. These lizards breathe fire everywhere, and elephants hate it. In a panic they charge back through their own ranks, crushing one another in a

## HIS DAPPER LOOKS AND FINE EYE FOR ACCESSORIZING CAN'T SAVE HIM



Confirmed: Chariots are faster than elephants.



terrible rout. Meanwhile, a cohort of Fiends of Darkness, Fiery Imps, Lava Warriors, and Spine Devils surround Gondalf and drag him down. With their god dead, the three surviving elephants run off to start a new life. To top it all off I receive a worrying message which says, "The Vale of Infinite Horror has been found." Let's figure that out later.

For now my god is gone, but not forgotten. I can order my Priestesses to pray for his return. With enough prayers and time Gondalf can reincarnate, this time with a better understanding of elephants. Now it's time for General Adamas—leading my eastern force—to hold back the Abyssians and the Agarthans, who are mustering giant scorpions on my borders.

It takes about a year for my god to reincarnate, and he returns to a smaller kingdom defended by an exhausted but now legendarily famous General Adamas. I plough my gold reserves into a new army for Gondalf, this time featuring some chariots to give the elephants something to race in battle. I send everyone south to take revenge on Abysia. On the way Gondalf swats an Agartha army featuring a Cave Drake, an Earth Elemental, a Fall Bear (a ghost bear that grows strong or weak depending on the season), and, er, a Magma Child, about which the tooltip only mentions that "they serve Rhaux, one of the Kings of Elemental Fire". Take that, Rhaux!

## DOMINIONS' FIVE COMMANDMENTS

*Stuff Tom learned this campaign*

- 1 Thou shalt rage at magic arrows of total bullshit that kill thy generals.
- 2 Thou shouldst probably not rely on elephants for absolutely everything.
- 3 Thou shalt not put your god on the front lines all the time.
- 4 Thou shalt not ever read the manual for *Dominion*, as that would spoil the fun.
- 5 However, when someone tells you they have found the Vale of Infinite Horrors, thou shouldst actually look up what that does.

## SUDDEN DEATH

I barge south and successfully take two fortresses. This secures my grip on the region. Unfortunately I then receive another of *Dominion*'s unexpected messages. "Suddenly an arrow appeared out of the sky and struck Adamas the Mounted Commander straight in the heart. He died instantly." Er...

Some amount of swearing later, I recruit a new general and redistribute my forces within the eastern wing of my kingdom. I'm pretty sure the arrow must be the result of an assassination spell. In addition to that demon hit squads start materializing to kill minor characters in my dominion. It turns out the Vale of Infinite Horror I mentioned earlier marks characters for death and then sends teleporting monsters after them. There does not appear to be any way to stop this.

I have bigger problems than magical curses. After mostly neutralizing Abysia and Agartha I meet the third faction on the map. Caelum is a society run by ice mages. They wear armor and weapons made of magical ice and can command the powers of wind and ice in battle. Now a vast army has set up in a fortress on my northeastern border and it's bad news. While Abysia, Argatha and I squabbled the ice people bode their time and grew in strength and numbers.

I didn't intentionally set out to recreate Game of Thrones, but *Dominion*'s equivalent of the White Walkers are coming from the north in force, and I'm not sure I've got the elephants to stop it. The Caelum army sweeps into my territory and destroys my god's army. I thought my elephants would hold the line, but I didn't reckon on mammoths. Caelum has tons of them, and they have Drakes and a massive cohort of winged spear warriors. The mammoths and a trio of what appear to be Yetis cancel out my elephant charge. The flying soldiers vanish off into the sky and return moments later, landing right on the head of my god. Gondalf dies again.

If Caelum chooses to press the advantage and go for my stronghold then I'm toast. Luckily, the army disperses and starts picking off territory to my east. I have an army of Priestesses in my kingdom now. Normally they are busy aggressively researching magic, but I put them right back to prayer duties. There are so many of them that Gondalf returns in just a few months, and in the meantime I have built a new army for him. I'm desperate to amass troops, so I pay a gang of mercenary ghosts to help me out.

I had plans for this campaign. In my last playthrough I cast the Utterdark to condemn the world to darkness. This time I wanted to do the world a favor and cast a powerful wind spell that summons spirits to help everyone out. Bins need taking out? Hand it to your wind spirit and it will be taken care of. Trouble is you need an army of researchers to push the relevant school of knowledge up to high levels, and it takes years to get there. At this point I might be pretty close, but my





Priestesses have been so busy summoning Gondalf back from the dead that they are behind on their homework.

It's time to shift to survival mode. I need to smash Caelum's forces with one massive strike, and I should really take that fortress to my northeast. Fortresses take a few months to knock down before you can take the territory, so act as speed bumps against incoming armies.

I build up an enormous army by the time Gondalf returns. This time, in addition to loads of chariots and elephants, I recruit massive units of javelin throwers to try and counter the threat of Caelum's flying warriors. I also recruit 100 pike warriors to try and stall some of Caelum's fiercer Drakes, Wyverns, and Yetis. I find a Traitor Prince, 15 ghosts and some 'Meteorite Guards' in my home fortress. Presumably they are part of the mercenary force I hired earlier, but it's quite possible they aren't, because I only understand about 60% of what's happening in *Dominions* at any given point.

### FROSTY RECEPTION

It's crunch time. Gondalf, accompanied by some wizards and Priestesses, marches north and lays siege to the Caelum fortress. The defending force behind the walls is slightly larger than my own, so even if I break down the walls it will be tough to dislodge them, but I have to try. I continue training elephants at home base with the hope of sending them to help the siege in a few turns. Then I

receive another message. I have come to dread these, but this one is good news. The snake god of Abyssia I killed earlier has now been completely destroyed! If your 'dominion' score goes down to zero then your god can no longer reincarnate and it's lost to the void. I wonder who did him in.

I will never find out. Suddenly, from the north, the biggest army I have ever seen in *Dominions* appears. I'm about to be sandwiched to death by Caelum, but I am so close to breaking the gates down. There might be an

outside chance that I can break the gates, storm the fortress, and then hide inside it and wait for my second army to arrive in a few turns.

It does not play out this way. Instead my army is forced to fight a bizarre force made up of 522 monsters and magical beings in the largest battle

I think I will ever see in this game. If you gave a child a bucket of blue candy and asked them to make a collage of what a war between two magic zoos would look like, you would get this battle. Yetis fight horse cavalry; mammoths fight elephants; Griffins and Ice Drakes fight chariots and the undead. My 20 elephants drag down 88 enemies. My chariots kill three times their number, but it is not enough. The army falls.

I could reincarnate Gondalf, but my Priestesses will never get round to summoning the happy wind spirits at this rate. My quest is done. Next time I'm going back to sacrificing blood slaves. ■

## FROM THE NORTH THE BIGGEST ARMY I HAVE EVER SEEN IN DOMINIONS APPEARS



# THEME HOSPITAL

Checking back into Bullfrog's management sim. *By Chris Thursten*

**T**heme Hospital has been through several stages of life. At launch in 1997 it was a big deal, the successor to *Theme Park*—the game that made Bullfrog's fortune.

*Theme Park* was an irreverent, colorful management simulator that turned the Guildford studio from a domestic player to an international contender. *Theme Hospital* adopted *Theme Park*'s tone—and great swathes of its code—and turned it to a different purpose: The running of a profit-driven British hospital where patients suffer from a variety of comedic, and fictitious, diseases. It was softly irreverent in a way that drew flack from government and the press at the time, but would entirely pass under the radar now.

Then *Theme Hospital* found a second life as a bargain-bin perennial throughout the low years of the early '00s. Visit any game shop (remember those?), and there it would be, in a number of different budget imprints. Millions have likely played it. It is kid-friendly but cheeky, lightly strategic but chiefly about having fun with your hospital, its beleaguered staff, and its comedy gadgets. It would run on your parents' PC. It has been worth a fiver for about 15 years and is still worth a fiver today.

## GAG ORDER

Indeed, it costs about that to pull *Theme Hospital* down from GOG complete with a DOSBox launcher that bypasses the Windows compatibility issues that plague a lot of games from this era. Brutal but necessary fullscreening of its

640x480 native resolution aside, the process of running *Theme Hospital* on a modern PC is relatively painless.

The flashy-for-the-time opening cutscene is a statement of intent. A helicopter arrives to rush a middle-aged superstar doctor—who is in the middle of a game of *Dungeon Keeper*—to his patient. He bursts dramatically through hospital doors, crushing a nurse. He begins to rev his medical chainsaw, but the patient fails his credit check: a button is pushed and a trapdoor opens. The patient falls into darkness, screams, and the game starts.

It's tempting to try and unpick the politics here but, if anything, Bullfrog was eager to avoid being seen to undermine the practice of running a hospital. *Theme Hospital* is too British to read as a sendup of the US healthcare system, and too playful to come across as a critique of the management of the NHS. Instead,

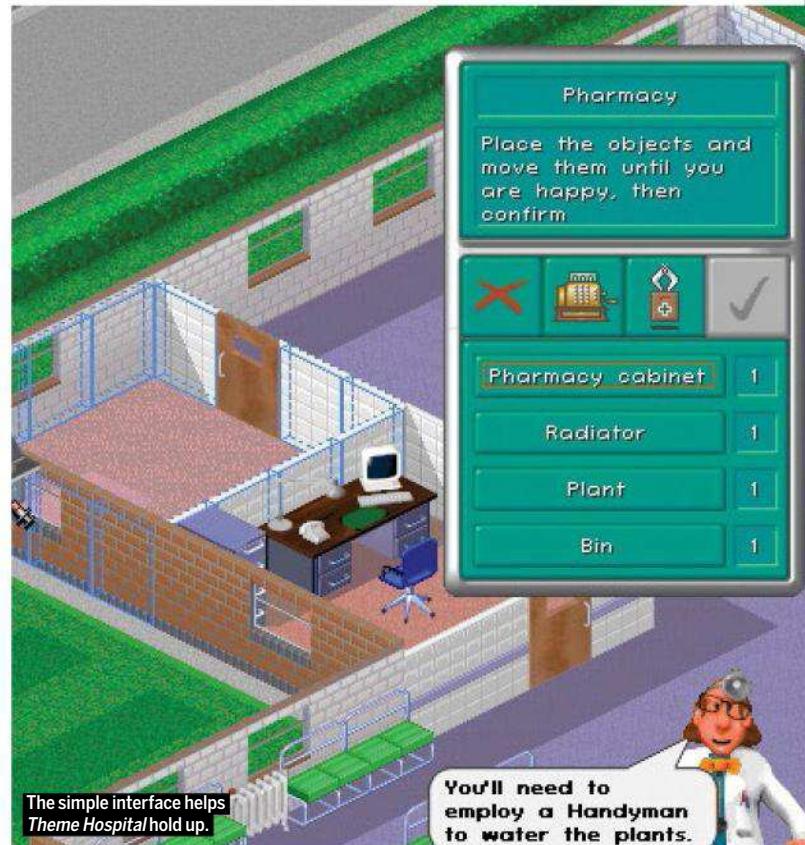
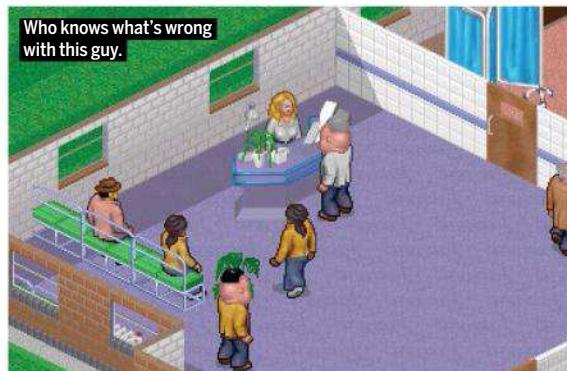
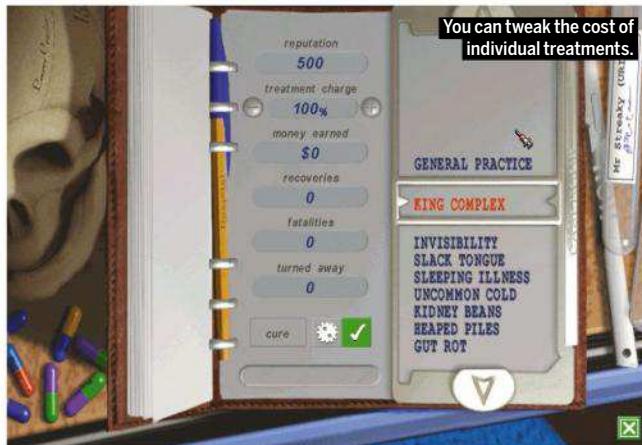
## NEED TO KNOW

RELEASED  
March 31 1997

PUBLISHER  
Electronic Arts

DEVELOPER  
Bullfrog

LINK  
[www.bit.ly/themehospitalorigin](http://www.bit.ly/themehospitalorigin)



this is best understood as a comedy management game written and designed by people who watched a lot of comedies like *The Fast Show* and *Red Dwarf*—it just happens to have a hospital theme.

### PATIENT GROWTH

Each new hospital begins as an empty shell, with new wings available for purchase depending on the level you're playing. Your first job is to create a reception area with desk, benches, vending machines, plants and so on. Then you'll need diagnosis rooms, psychiatrists' offices, and wards. After that comes treatment: a pharmacy can handle most cases, while certain daft diseases—such as Bloaty Head, or King Complex, which turns people into Elvis—require special treatment facilities. All of this comes at a cost, which is recouped as patients pay for diagnosis and payment.

You need to provide bathrooms and rest facilities for your staff, consider heating, and keep your corridors clean. You can borrow money to raise the necessary funds, or fiddle with hospital policy to boost profits: Like forcing patients to get

### ROSE TINTED

*Which other Bullfrog games should you revisit?*

BEST



DUNGEON KEEPER  
A little dated, but still a perfect coming-together of theme, design, and humor.

SYNDICATE



SYNDICATE  
This one is desperately deserving of a remake. No, not *that* remake.

MAGIC CARPET



MAGIC CARPET  
Blew minds due to its visuals and speed: Both have, obviously, been exceeded.

THEME PARK



THEME PARK  
Nostalgia will carry you a long way, but there are lots of good sims nowadays.

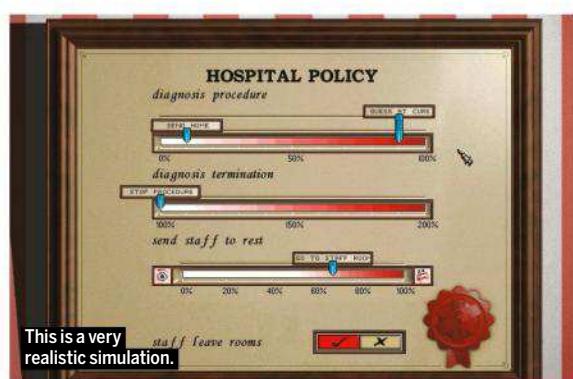
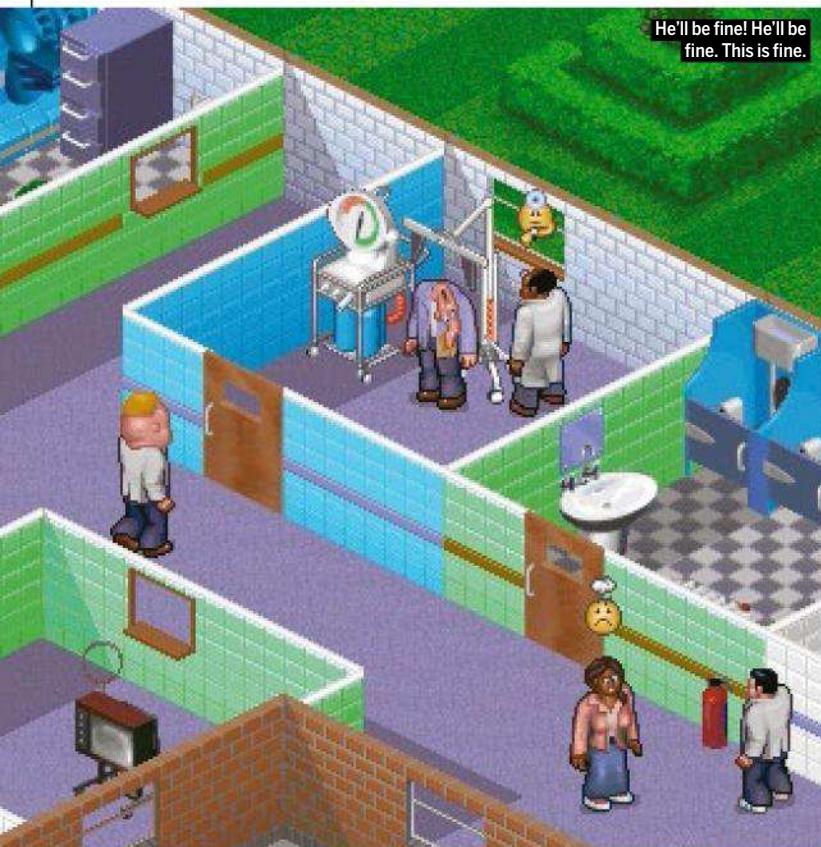
POPULOUS



POPULOUS  
An important moment in game design, but not really a lot of fun to play today.

more diagnoses than they actually need, paying every time. You're being assessed based on how many patients you cure, what proportion of your walk-ins you handle, how much money you make, and the overall worth of your hospital. Meet these criteria for a given stage, and you're whisked away onto the next right away. There are random events, epidemics, and a few Easter eggs: You might get tasked with curing a set of priority patients to a time limit or suddenly contend with an equipment-wrecking earthquake. Otherwise, that's the shape of the game. Build a hospital to spec, watch it run, move on.

You can speed up or slow down time, but you can't change anything about your hospital while you're paused. A modern take on this idea would very likely let you do your planning and building in a paused state and then click 'go' on your new hospital design: That isn't the case here. At the beginning of each *Theme Hospital* level there's a grace period where you can get up and running, but after that you're building as you go. If your receptionist is constantly saying that a doctor is needed in the



general diagnosis department, then that might be a sign that it's time to summon one from thin air. If patients are walking out in disgust because you can't do anything about their grossly-inflated heads, then it might be time to build an extra treatment room on the fly. There's a sense that you're always laying the tracks in front of the train, which is about as close to topical satire as *Theme Hospital* gets.

### BEDEVILED DETAILS

The game hasn't entirely aged well, otherwise. It was surprising to load the staff menu for the first time and realize that all doctors and janitors are men, while all nurses and receptionists are women. This isn't a case of the game falling short of modern standards: This was a glaringly shortsighted design decision in 1997, and it's embarrassing that nobody caught it at the time. It doesn't mean that you can't enjoy the game or its humor, but it does highlight why it's important to be circumspect about your nostalgia.

What endures about *Theme Hospital* is its sense of fun. It's a management sim, sure, but it's also a

toybox come to life: a little world populated by tiny people where half the enjoyment comes from setting them in motion and watching them go. It's all in the details: The agonized low-fi straining and plopping sounds that accompany a man doing a poo in your splendid new toilets, or the hearty pop that precedes a patient having their head reinflated.

As a Bullfrog game *Theme Hospital* is obviously on a continuum with *Theme Park*, but it's also a peer of *Dungeon Keeper* and *Syndicate*—

games that were all about extracting maximal interactivity from an isometrically-viewed environment. In *Theme Hospital*, a rat infestation might mean hiring more janitors: a typical management sim solution, a matter of matching the need against your balance book. On the other hand, you might hunt across the screen for the rats yourself, batting them from the sky in an impromptu game of Where's Wally-turned-Whac-a-Mole. Do this enough and you get to visit a bonus stage.

## ONLY '90s KIDS WILL REMEMBER

### *Theme Hospital's most dated details*



#### KIT-KAT VENDING MACHINES

Videogame candy sponsorship didn't survive the previous century, for whatever reason.



#### FAXES

Like a black-and-white motionless Snapchat sent to your parents' printer, with a phone grafted onto the end.



#### MULTIPLAYER MENUS LIKE THIS

Back in my day of dial-up, we earned our dozen or so minutes of functional multiplayer.



#### INTEREST RATES ABOVE 1%

How to explain this... right, so, there's this thing called a mortgage and it kind of makes you want to cry...



## IT'S NOT GOING TO WOW YOU IN 2018, OF COURSE, BUT THAT PLAYFUL ENERGY REMAINS

There's a bit of magic to this that has survived the decades. This is a game that wants to reward your purchase of a powerful, shiny new CD-ROM drive ('00s kids: Imagine a fidget spinner that is also a USB stick that you feed into a mouth on the front of your PC). Bullfrog knew what it was doing with a CD by 1997, but this is nonetheless a game from an era when designers were animated by the silly, clever, fun things that improving tech allowed them to do. There's an inherent playfulness here that is formed at the point where Bullfrog's studio culture met better, more liberating tools: If *Theme Park* was the chips-down risk that helped the team build a reputation and allowed Molyneux to sell the studio to EA, then *Theme Hospital* is the game that happens when EA's money arrives.

It's not going to wow you in 2018, of course, but that playful energy

remains—and there's still charm to its pixelated patients and chunky hospital furniture. Stare at any given part of your creation for any given time and you'll see something to make you smile, whether that's a patient's bum sticking out of their backless surgery robe or a janitor coaxing a wilting fern back to life with a watering can and happy slurping sound.

You'd want any successor to this game—*Two Point Hospital* included—to retain that eagerness to surprise you and make you laugh. Modern management games have different priorities. They've gotten better at giving you the power to customize your creations and place more emphasis on creating a sense of attachment. That aspect is curiously missing from *Theme Hospital*: This is very much a level-based game, with the predefined outlines of each new hospital wing dictating the shape of the puzzle you have to solve.

### CLINICAL IMPRECISION

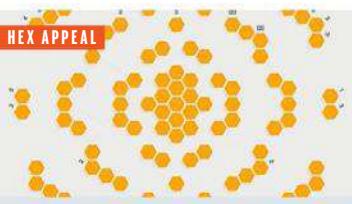
If you want your theme parks, star empires, and sim cities laid out just so then it can be a bit unsettling. Hospital rooms have minimum sizes,

and they don't always line up neatly. The ever-ticking clock punishes fiddling and, while a failing hospital might limp on for a decent stretch of time, a successful hospital—one that meets the conditions of the level—will be suddenly and unceremoniously snatched away from you as you're hurried to the next challenge. It's a toy, but one with some stringent limits on the ways you get to play with it.

The best way to enjoy *Theme Hospital* now is to load it up on the easiest difficulty setting. That way you get to play around with making your ideal hospital in your head without worrying about some of the game's deeper management elements. You can tinker with the cost of specific cures to maximize profits from particularly common ailments, for example, or tweak pay to min-max your staff morale. This is good and necessary from a management game perspective, but if that's your priority then better games have been released in the last two decades. Come back to *Theme Hospital* for the jokes, the fun pixel art, the daft little animations, and the excellent fart noises. ■

PHILIPPA  
WARR

Orchids are called orchids because their swollen roots look like testicles, and 'orchis' is Greek for testicles.



## HEXCELLS INFINITE

[www.matthewbrowngames.com](http://www.matthewbrowngames.com)

→ The third game in Matthew Brown's *Hexcells* puzzle series is the best. *Infinite* is named after the infinite puzzle generator mode it contains, but the real joy is in the handcrafted puzzles which make up the rest of the game. A must-play for anyone who enjoys minimalist logic puzzles like Picross.



## A HOUSE OF MANY DOORS

[www.pixeltrickerygames.com](http://www.pixeltrickerygames.com)

→ A wonderfully atmospheric exploration and survival adventure in the vein of *Sunless Sea*. The similarities meant it was hard for *A House of Many Doors* not to vanish into *Sunless Sea*'s shadow, but over time I've felt a growing urge to return to my metal centipede for more narrative thrills.



## GLASS MASQUERADE

[www.glass-masquerade.com](http://www.glass-masquerade.com)

→ A charming jigsaw puzzle tour through an Art Deco, stained-glass world fair. You'll spend a few hours slotting exquisite glass pieces into place to create gorgeous clock faces, each themed around a country. An odd conceit, sure, but so attractive. It's also great for playing while listening to podcasts or audiobooks.



## BURLY MEN AT SEA

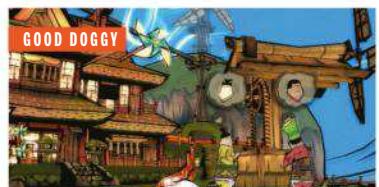
[www.burlymentatsea.com](http://www.burlymentatsea.com)

→ A tiny interactive children's book which lets you guide three brothers (the titular burly men) through a beautifully illustrated folktale. Swim with seals, boat race with Death, or just prod at objects in the environment to see how they react. The story loops back to the start, making it easy to play over and over.

# MUST PLAY

*A PERSONAL LIST  
OF THE BEST  
GAMES YOU CAN  
PLAY RIGHT NOW*

*by Philippa Warr*



## OKAMI HD

[www.okami-game.game](http://www.okami-game.game)

→ This is a case of the HD remake making it easy for me to go back to a game I never finished (it bugged out on me back in the day) rather than replaying a game I'm familiar with through and through. I'm particularly looking forward to basking in an art style I don't usually encounter in games and finally getting to the end.



## WUNDERDOKTOR

[www.wunderdoktor-game.com](http://www.wunderdoktor-game.com)

→ Take an adorably grim journey as a doctor aboard a train dealing with haunted torsos, patent medicine addiction and more. I mean, I—a fully licensed medical professional—have just teased an eel out of a shark's eye socket in order to poke a sore spot on its bum and banish it from the patient's brain. Delightful!



## THE NORWOOD SUITE

[www.cosmod.net](http://www.cosmod.net)

→ If you've played Cosmo D's earlier work, *Off-Peak* you'll... actually, no. You still won't know what to expect. *The Norwood Suite* is a first-person exploration game where you roam a surreal hotel. It's the former home of vanished musician Peter Norwood, and what remains is both legacy and astonishing interactive toybox.



## PROTEUS

[www.twistedtreegames.com/proteus](http://www.twistedtreegames.com/proteus)

→ Every visit to Ed Key and David Kanaga's gentle nature exploration experience is rife with discovery. The elements combine in different ways each time you start out on a new island, so the game can reward return visits with a mixture of new pleasures and reminders of old ones. One of my long-standing game loves.

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[ UPGRADE ]

# GROUP TEST

By Ed Chester

## Q&A

### Why mechanical keyswitches?

Mechanical keyswitches last longer than rubber membrane-type keys, and feel responsive throughout their life.

### Blue/Brown/Red?

Cherry MX has three main keyswitch types. Tactile

(Blue and Brown) have a bump as you press the key, giving you physical feedback. Meanwhile, Red provides a linear motion with no feedback when the switch has been activated.

### Which switch is best?

Blue and Brown are preferred by typists. However, for gaming, many prefer the linear type.

## Dictionary

**Mechanical keyswitch:** A mechanical keyswitch is any form of individual switch used to register a keypress.

**Keycaps:** The thing you hit with your finger. One of the advantages of most mechanical keyswitches is that you can easily pull off the caps and replace them.



1

# MECHANICAL KEYBOARDS

The key component to your gaming setup

**T**here was a time when mechanical keyboards were the talk of the town. Now, they're less of a luxury, and more of a commodity—yet some people still aren't convinced by them.

Nonetheless, there's still plenty of choice out there, so I've grabbed five of the most popular to see what they offer. Dancing digits at the ready...



2

## LOGITECH ORION SPARK G910

[www.logitech.com](http://www.logitech.com) \$80

→ The G910 is Logitech's flagship gaming keyboard, yet it costs a modest \$80, making it far more affordable than some other leading models. Unfortunately, that cost cutting is obvious when it comes to the design.

1

With a weirdly shaped wrist rest and keys, it gives off the sense of a product that has had features and design elements tacked on in the name of covering up the baseline quality of the thing.

What it lacks in design and build quality, though, the G910 tries to make up for in features. You get four gaming keys above the F1 to F4 keys, plus five more on the left. Squeezed in the top are four tiny buttons for switching profiles and media keys.

At the back is the ARX dock. This slides out to provide a place to rest your phone, which you can link up to the device via its app. This lets you control things like lighting, music and view system stats.

The G910 uses Logitech's Romer-G keyswitches, which are like Cherry MX Browns, but with a shorter activation point. They feel good and are rated to last for 90 million activations. However, you can't replace the keycaps with third-party ones.

Add in the non-removable wrist rest and lack of a USB hub and you have a keyboard that doesn't wholly convince.

70%

## CORSAIR K95 PLATINUM

[www.corsair.com](http://www.corsair.com) \$195

→ The Corsair K95 Platinum is one of the priciest keyboards around, and the most expensive in this test. That said, you certainly get lots of features and a good build quality for your money.

2

Joining the full 105-key layout you get six extra programmable keys down the left side, extra media buttons and a volume wheel in the top-right.

Also present is Corsair's signature brushed aluminium top section, which looks as good as ever. This is joined by an RGB strip that runs along the back edge and full RGB backlighting on the keys.

Overall, the design looks busy, thanks to the grey gaming keys, an RGB strip and exposed keyswitches, but it still feels nice and looks better when you switch from the default backlighting scheme to something a bit more uniform.

The keyboard's Cherry MX Brown switches are fantastic—you can also get it with other Cherry MX switches—and Corsair's excellent software makes programming the lighting and key functions easy. The only issue I had was that when placing my hands on the keyboard unsighted, I'd hit the gaming keys, rather than Ctrl, Shift, etc.

Otherwise, this keyboard is mighty expensive, but has it where it counts.

85%



3

## RAZER BLACKWIDOW CHROMA V2 [\\$130](http://www.razer.com)

→ If there's one thing you can rely on from Razer—aside from that it loves the color green—it's that it will make a great-looking product, and the Blackwidow Chroma V2 exemplifies that.

3

This minimal slab of matte black plastic is adorned with nothing more than a backlit Razer logo, which is just how I like my keyboard to look. It's a shame, then, that Razer went for a glossy section for the lock-key indicators. It cheapens the whole look.

Nonetheless, this is still one of the more stylish keyboards you can buy, especially with its magnetically-attached wrist rest in place. There are also five extra gaming keys down the left edge, but otherwise it's a standard selection. There's also a USB 2.0 and headphone passthrough.

As for the keys, Razer uses its own keyswitches, which mimic Cherry MX Blue, Brown, and Red switches. Rated to 80 million keystrokes, they claim to be well engineered and felt good in my testing. What's more, they are compatible with Cherry MX keycaps. If you're unsure which switches to go for, Razer provides samples accessible from outside the box, so you can try before you buy.

The Chroma V2 isn't perfect, but largely delivers on its premium price.

80%

## ROCCAT SUORA FX

[\\$140](http://www.roccat.com)

→ The Roccat Suora FX is about as stripped-down as mechanical gaming keyboards come, RGB backlighting aside, of course. That said, it will leave plenty of space for your desk and your own third-party wrist rest.

4

The styling isn't quite as clean as the Razer, thanks to a rather too prominent Roccat logo, but it's still a big leap up from the likes of the Logitech G910.

The downside to this minimalist approach is you do miss out on a few of the niceties of other keyboards. There's no volume wheel, no USB passthrough, and no extra gaming keys. You get four extra keys above the numpad for media options and 'Game Mode', which disables the Windows key. Otherwise you get fully programmable RGB backlighting and default secondary functions that can be activated by hitting the function key.

Instead of Cherry MX switches this uses ones made by TTC. They still offer good performance, plus they're compatible with Cherry MX keycaps, so it's easy to customize this board. Only the Brown TTC switches are available, which have the same action as Cherry MX Red switches, so Brown and Blue fans will have to look elsewhere.

All told, this is a great barebones mechanical RGB keyboard.

90%



4



5

## STEELSERIES APEX M500

[www.steelsseries.com](http://www.steelsseries.com) \$90

→ The M500 is a relatively barebones mechanical keyboard, offering a standard 104-key layout, single-color backlighting, and no other extras to speak off. And yet, there's still a lot to like here.

5

For a start, this is an attractive keyboard. In particular, having the keys mounted on a white plastic base, with a raised surround, makes for much more even, tidy-looking backlighting. The matte black finish is also nice. It's certainly not winning any design awards, but it's smart and practical, plus build quality is excellent, too.

When I say the M500 is barebones, though, I really mean it. There's no USB passthrough, no detachable cable, and nor is the cable braided. You can flip down the rear feet to raise up the back edge. Other than that, you can adjust the backlight, and there are secondary functions for media playback.

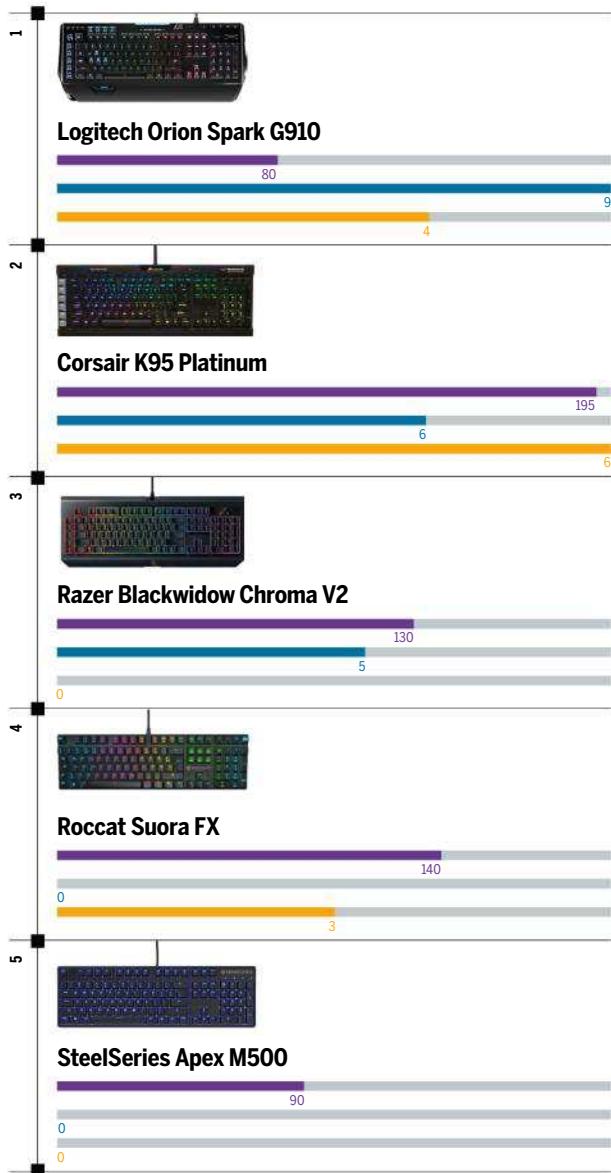
The keyboard uses Cherry MX switches, with Red and Blue variants available. As such, the typing experience is as excellent as you'd expect, and you can replace the keycaps.

It's a shame this keyboard isn't a little cheaper. It delivers, but there are equally capable keyboards for less.

75%

## STACKED UP

■ PRICE (\$) ■ GAMING KEYS ■ MULTIMEDIA KEYS



## ESSENTIALS

	Key switches	Volume wheel	USB passthrough	Software-programmable macros
1	Logitech Romer-G	Yes	No	Yes
2	Cherry MX	Yes	Yes	Yes
3	Razer	No	Yes	Yes
4	TTC	No	No	Yes
5	Cherry MX	No	No	Yes

[ YOUR NEXT PC ]

# BUYER'S GUIDE

Build the best PC for your budget



## 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.

## Advanced build

You're looking for the best PC on the market and superior components. But you still want to spend smart.



# BUDGET BUILD

Enjoy 1080p gaming without breaking the bank

**TOTAL  
\$1,120**

MOTHERBOARD	<b>Z370-A Pro</b> MSI \$122
PROCESSOR	<b>Core i3-8100</b> Intel \$113
GRAPHICS CARD	<b>GeForce GTX 1060 3GB</b> Inno3D \$280
MEMORY	<b>Vengeance LPX 8GB (2x4GB) @2400MHz</b> Corsair \$103
POWER SUPPLY	<b>500BQ</b> EVGA \$50
SSD	<b>MX500 250GB</b> Crucial \$80
HDD	<b>Caviar Blue 1TB 7200rpm</b> Western Digital \$50
CASE	<b>Neos</b> Bitfenix \$65
DISPLAY	<b>VP247HA</b> Asus \$131
KEYBOARD	<b>450K</b> Cougar \$49
MOUSE	<b>Rival 100</b> SteelSeries \$30
HEADSET	<b>Cloud Stinger</b> HyperX \$47



## MID-RANGE BUILD

Our recommended build for playing the latest games

**TOTAL  
\$1,393**

MOTHERBOARD	<b>Z370 Tomahawk</b> MSI \$145
PROCESSOR	<b>Core i5-8400</b> Intel \$180
GRAPHICS CARD	<b>MasterLiquid Lite 240</b> CoolerMaster \$60
COOLER	<b>Dark Rock 3</b> be quiet! \$60
MEMORY	<b>Vengeance LPX 16GB (2x8GB) @2666</b> Corsair \$189
POWER SUPPLY	<b>RMx 650W</b> Corsair \$130
SSD	<b>MX500 250GB</b> Crucial \$80
HDD	<b>Caviar Blue 1TB 7200RPM</b> Western Digital \$47
CASE	<b>Eclipse P400S TG</b> Phanteks \$80
DISPLAY	<b>AGON AG251FZ</b> AOC \$342
KEYBOARD	<b>Alloy FPS Cherry MX Blue</b> HyperX \$80
MOUSE	<b>Castor</b> Mionix \$60



## ADVANCED BUILD

Go above and beyond with a PC powerful enough to end worlds

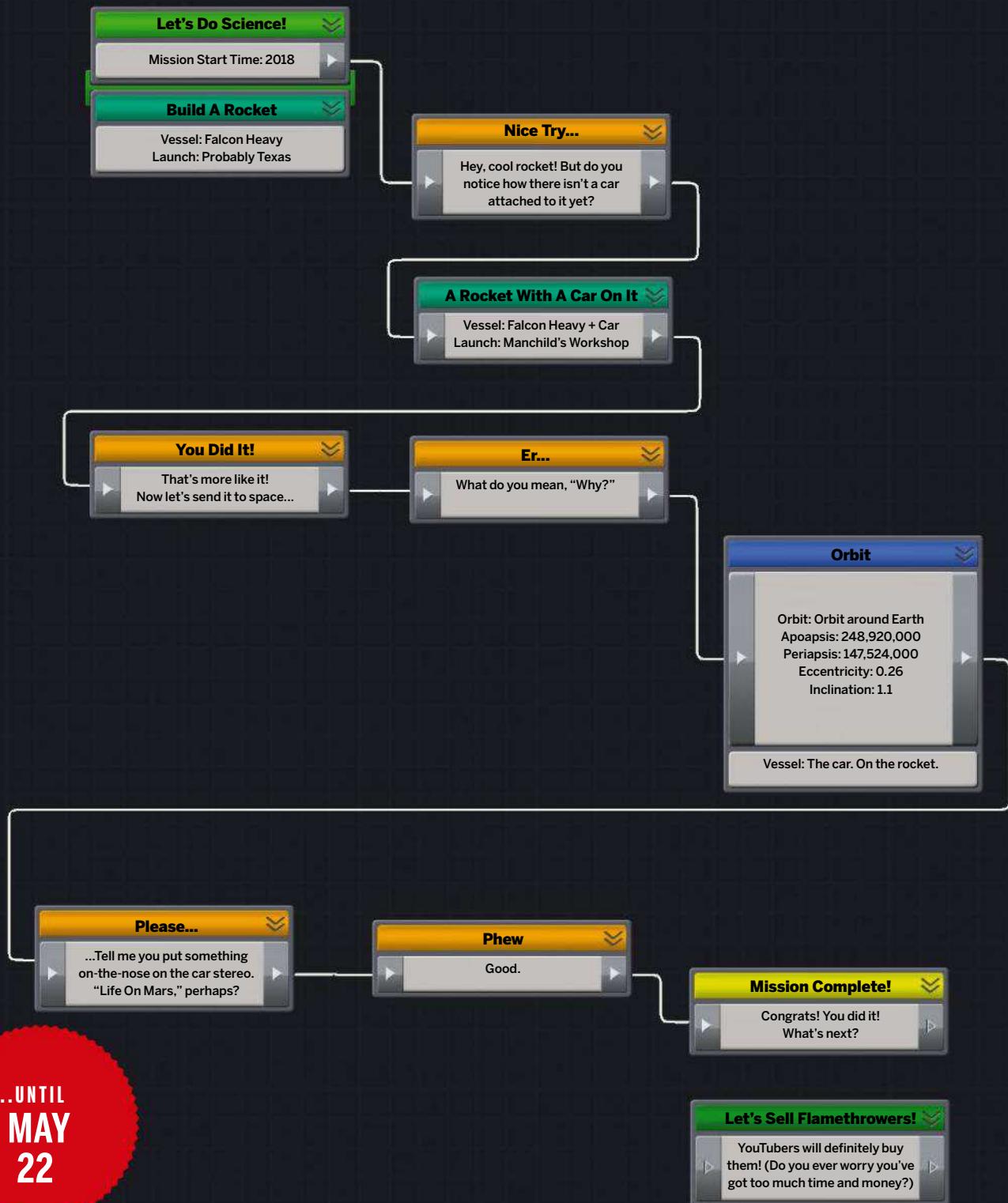
**TOTAL  
\$4,026**

MOTHERBOARD	<b>Crosshair VI Hero</b> Asus \$230
PROCESSOR	<b>Ryzen 7 1800X</b> AMD \$330
GRAPHICS CARD	<b>GeForce GTX 1080Ti Turbo</b> Asus \$1100
COOLER	<b>Kraken X62</b> NZXT \$156
MEMORY	<b>Vengeance LED RGB 32GB - 3200</b> Corsair \$420
POWER SUPPLY	<b>HX750i 80 Plus Platinum</b> Corsair \$165
SSD	<b>960 Evo 500GB M.2 PCIe SSD</b> Samsung \$302
SSD 2	<b>WD Blue 4TB</b> Western Digital \$99
CASE	<b>Enthoo Evolv ATX TG</b> Phanteks \$180
DISPLAY	<b>AGON AG271QG</b> AOC \$830
KEYBOARD	<b>K70 LUX RGB</b> Corsair \$140
MOUSE	<b>Rival 700</b> SteelSeries \$74

IT'S ALL OVER...

# MAKING HIS STORY

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