



# COOLDOWN

FREE INDEPENDENT VIDEO GAME MAGAZINE

ISSUE #6: OCTOBER 2023 (ENGLISH ISSUE #01)

**TWO RANDOM STEAM KEYS INSIDE!**

TOPIC: SHOULD WE BE AFRAID OF  
ARTIFICIAL INTELLIGENCE?

Great indie survival I Am Future

Fully interactive RMS Titanic

Lone Wolf gamebook on mobiles



## ARCH GATE

### UPCOMING INDIE VR MMORPG

foto: [samdosoft.com](http://samdosoft.com)

**INTERVIEW: DJNEO BRINGING NHL BACK TO PC IN 2KHS MOD**

COOLDOWN #6

This issue was published on 7/10/2023

Published by Marcel Mojžíš Jr., author of the website [freeport7.cz](http://freeport7.cz).

Contact: [redakce@freeport7.cz](mailto:redakce@freeport7.cz)

TRANSLATED WITH AI, PLEASE EXCUSE SOME BUGS.

## Dear readers,



it is my pleasure to share with you the first Cooldown magazine published in English! The fall season provides us with a great opportunity to discover new games and replenish our game libraries with titles that we may not have had time for during the summer months. Perhaps the current issue will help you with your choice. Here you will find retro pieces as well as interesting Czech and international games. For example, the Czech MMO Arch Gate will please VR fans, Lone Wolf will show old school gamebook gameplay on smartphones, and DJ Neo will present his realistic hockey simulator for PC in an interview!

In the current issue, we don't want to limit ourselves to gaming experiences only. Over the past few years, we've seen rapid advances in artificial intelligence and robotics, raising questions about the future of the job market and our place in it. Are these technologies our allies or potential competitors? These questions are extremely topical and we will try to look deeper into this issue in this issue.

We wish you a pleasant reading

Marcel Mojžíš, Editor-in-Chief   Magdulè, editor  
@moyzis92



# CONTENTS

<b>CZECH TITLES</b>	<b>5-8</b>
Polda 2 Remástr	5
Arch Gate	7
<b>INTERVIEW</b>	<b>9-11</b>
DJ NEO - NHL 2KHS	9
<b>TOPIC</b>	<b>12-13</b>
Artificial intelligence - friend or foe?	12
<b>INDIE GAMES</b>	<b>14-16</b>
Titanic: Honor and Glory	14
I am Future	15
<b>ON-THE-GO</b>	<b>17-18</b>
Lone Wolf: Fortress of Death	17
<b>TECHNEWS</b>	<b>19-20</b>
Evolution in Unreal Engine 5.3 rendering	18
<b>RETRO</b>	<b>21-24</b>
New patch for Sonic 3D Blast after 20 years	20
Jazz Jackrabbit	23
<b>GAME OVER</b>	<b>25</b>



# Pankrác the cop returns in 4K resolution with redrawn graphics



**T**he Czech studio Zima Software was founded in 1996 and has several non-adventurous ventures to its credit. The first was the dungeon crawler *Curse of Eriden*, but it ended up being a commercial failure. The real-time strategy *Mutarium* from 1997 or the 2D shooter *Hyper-Core* are worth mentioning. But the detective adventure series *Polda* (*The Cop*) brought the company the greatest fame in Czech Republic.

As founder Martin Zima stated in an interview for iDnes, the *Sleep Team* studio, the latter authors of the legendary *Bulánci*, worked hard on the first part. Towards the end of development, the authors worked up to fourteen hours a day, including Saturdays and Sundays. The goal was to catch the Christmas fever of 1998 and it was achieved. In

less than a month, *Polda* became the third best-selling game in the Czech Republic for 1998! So far, Zima Software has only published the game and taken care of the dubbing. But that changed with the second part, where the development went completely under the wings of Martin Zima's studio.

All of *Polda*'s works were characterized by a humorous concept and a parody of something. The game didn't take itself too seriously, and with the exception of the darker fourth (and best) installment, *Polda* often served up clichéd combinations of situations and sometimes illogical progression. Nevertheless, the specific dubbing of Luděk Sobota and other famous Czech actors kept *Polda*'s games afloat.

In the second part, the police

officer Pankrác sets out to investigate a seemingly ordinary hotel fire. The story gradually develops into a debate over human cloning. Compared to the first one, the plot became slightly more complicated and the number of different screens doubled, which greatly benefited the game. Although the game received a solid seven in reviews at the time and was set for further commercial success, the reviewers did not praise

"Traditionally, the weakest aspect of this Czech game is the technical state. The overall graphics doesn't look bad, but it's too simple and the authors obviously didn't have much work to draw all those backgrounds. Here you can clearly see why this game took less than a year to make. Animations are the same story."

Petr Ticháček, iDnes.cz

the technical aspect of the game.

This issues should be solved by the re-master currently in the works, which was a huge success in the crowdfunding campaign on HitHit. The authors raised the target amount of CZK 600,000 three times! According to graphic designer Ku-ba Mareš, the re-master should approach the original game with respect and add more detail to the screens and animations without making the graphics too different. The game will run up to 4K in widescreen resolution. If you once played the original two, and now you look at the images from the re-master, you will think that this is how it looked back then. Error. The game really shines through when compared head-to-head and fully exposes



the gracious nostalgia that makes us remember games so much fonder. But it also proves the truth of the main graphic artist Jakub Mareš, and the remaster respects Dan Falta's original art style to the maximum. Not only screens and objects will be improved, but also all animations will be redrawn. A pleasant addition will be a bonus epilogue set between the second and third volumes discussing how the policeman Pankrác became a private de-

TECTIVE. This information was never explained, and the inclusion of a little back story explanation is definitely appreciated. The epilogue, like the rest of the play, will be dubbed by Mr. Sobota and other well-known actors.

Polka 2 Remástr is to be released this November.

**Marcel Mojžíš**





# Czech Samdosoft Studio is working on an original VR MMORPG



**I**t is not the first time that the Czech studio is working on an original MMORPG. However, we are still waiting for a game that would be more successful or be completed. From history, we can mention three attempts at the MMORPG genre. The first was a 2D game from 2004, originally developed as a graphical chat, called Chmatákov. Game content gradually expanded until the chat program became a simple isometric MMORPG. The first three-dimensional MMORPG was supposed to be Immortal World, but it was finally canceled in 2011 after five years of development. The only modern representative of the genre from our basin remains the survival Novus Inceptio, which has been in early access since 2016.

The Prague studio Samdosoft is now working on another MMORPG, which it additionally spices up with VR support and the unique aspect of roleplay-as-a-service. This means that authors hire professional game masters and actors to take on the role of non-player characters (NPCs) and co-create the player's experience. Live Moderation is designed to create unique situations on the fly thanks to an engine that allows you to create events while playing.

## Questing

The developers are inviting non-instantiated story quests employing groups of players that aim to enhance cooperation between characters. Incorporating live moderation will allow players to organically react to situations, including the ability to betray

teammates or kill individual characters without breaking the quest chain. Completing the tasks should be free of any quest trackers or markers on the map to facilitate orientation. The emphasis here is on self-observation and orientation in space. Moderators are tasked with ensuring that important questlines are always completed.

## Fights

Let's not expect a standard WoW or LotRO style tab targeting system. The authors compare the combat system to Dark Souls. It is supposed to be a slow, action system without target lock requiring a careful approach.

## Unique items

According to the developers, game items should be mostly either one of a kind or severely limited in terms of available





quantity. So don't expect piles of loot like you would with fiends, but every dropped item is supposed to be rare for the player. This system is supposed to support the possibility of auctions similar to the classics of WoW.

#### Policy

The game also implements a political system allowing players to become a politically exposed person with direct influence on others. Details of this system have not yet been released.

#### Permadeth

The currently popular hardcore gameplay in the form of permanent death will also be represented to some extent in Arch Gate. The developers promise permadeth regions with strong bosses, the defeat of which should be a real

event and bring glory to the player among other inhabitants of the virtual world.

#### VR

Arch Gate will be a 3D third-person RPG compatible with PCVR and hopefully PSVR for PS5 in the future. The game will thus allow a free view of the surroundings with the camera behind the player for better orientation in the terrain, which should be indented and vertical. The atmosphere of being drawn into the story is to be enhanced by 3D surround sound. The authors even state that the sound is calculated in real time based on the surroundings and is so plastic that it will allow navigation through space even in total darkness.

#### Subscription

The game will not be free. On

the official website (QR below), the FAQ section states that a monthly fee will be required to play, but should not exceed "monthly gym

„We despise loot boxes, pay-to-win mechanics, and any form of monetization menacing the integrity of the game design. Therefore, we will be charging a monthly subscription so that players can be assured we are focusing on the game development and not on the development of various psychological tricks designed to squeeze out every last penny.“

samdosoft.com

membership". We don't know what fitness the authors have in mind, but we estimate something around three hundred crowns, similar to other paid MMO games. The plus is the absence of any pay-to-win mechanics.

Samdosoft definitely didn't take a small bite. We wish the authors much success. Arch Gate can be a new phenomenon and the dream of all roleplayers, not to mention the attractiveness for streamers.



Marcel Mojžiš





# DJNeo: "2KHS has unmatched presentation and physics"



**W**e featured 2KHS 0.8 on the web 2 years ago. Now we present you the interview with DJ Neo.

Hello! Thank you very much in advance for the interview. Could you please introduce yourself to our readers and briefly describe your current game project?

Hi, really in a nutshell. About 8 years ago I started working on a hockey simulation-mod, which I am still developing for PC.

As a base I used NHL 2K11/ NHL 2K3 from 2K Sports, the Dolphin emulator and called the whole project 2KHS (2K hockey simulator) or 2KHS lite.

In addition to vastly improved graphics (4K textures, materials, normal mapping, real-time lighting, self-shadowing, etc.), 2KHS now features the most

realistic "TV broadcast" presentation and physics you'll find in a hockey game. And from any manufacturer in the world.

In addition to 2KHS, the hockey fan community around the world may know me as Gamechanger from EA Sports' NHL, where I worked for three years.

My specialization was precisely realistic physics, sliders and high-quality real-time presentations, which I tried to promote during my work. After EA Sports went the pure arcade route, I resigned from my position in protest and began to devote myself full time to 2KHS.

You have a successful career as a DJ, you played hockey when you were young. How did a promising hockey player become a recognized DJ and what made you return to hockey in its video game form?

I mean, you're informed (laughs). Well, maybe not completely over yet, but the truth is that now I'm mainly producing. Djing at the time I started had a lot of charm and charisma. Today, when I take a look at what has become of it, one would slowly become ashamed of that profession (laughs).

But seriously, the path was basically completely natural. I've had three really big loves since I was little, and that's music, hockey and computers. It's always interwoven and complemented me in some way over the years. Well, when an injury came at the beginning of a decent youth career in the 90s, there was finally enough time to devote to music and later to hockey in a virtual form.

What software do you use in your work at 2KHS?

This is part of the "production

secret" and I apologize for keeping it to myself. But in principle, it's not a dissimilar process to what software companies use when updating software or games.

On Facebook, you list two versions of the game - 2KHS and 2KHS lite. How do they differ from each other?

That's for hours of storytelling. On the other hand, it's unbelievable how much code, animations, and even textures 2K3 and 2K11 have in common.

From the user's point of view, it is mainly demanding on PC hardware, and this is noticeably lower in the lite version.

For example, I wouldn't say at all that the lite version looks worse than its big brother, in a certain way it's the other way around. For both games, I put a lot of emphasis on realistic skating and puck physics and real-time presentation. This means that what you see on your monitor while playing is essentially identical to what a

real NHL telecast offers.

You can already see a significant progress in the graphics. What graphical improvements have you implemented in the game, and is there anything that hasn't been achieved technically yet?

Yes. Both games are completely retextured. To be honest, it's not like you take the original texture and upscale it in photoshop. Each texture is drawn "from scratch". It really is months and years of work that has to be put into it to be satisfied with the quality.

Another big thing in terms of graphics was the implementation of normal maps. Please let everyone find what it means (simulation of surface irregularities without changing the geometry, editor's note). When you find a way to do that, it's like skipping the 3rd generation of consoles the game was originally developed for. But then again you have to make at least four textures for each object instead of one if you want each

material/object to have realistic lighting.

I will give an example. The jersey or the leather on the gloves reflects light differently than, for example, steel, and if you really put a lot of effort into it, the result is that the game no longer looks like it's from 2002, but like it's from 2020, where the lighting is dynamic.

Also very important was the improvement of the LOD model of the players (level of detail, editor's note), I could go on like this for hours, there is really a lot.

As for the second part of your question, I'm a perfectionist, I'll never be completely satisfied, and there's always room for improvement.

Do you modify character models or arenas in any way?

Yes. Both models and arenas are completely redone.

An important aspect of hockey simulation is physics. What changes would you sug-



Early Access build





gest in this area?

Definitely. My goal is to create gameplay that is completely physics-based, controlled by physics. For this, you really need high-quality puck physics and an appropriate AI that can realistically react to the constantly changing events around. When you play 2KHS side by side with, for example, the latest hockey from EA Sports, the difference in the overall concept of the game is glaring.

EA is obviously betting on scripts where you feel that the puck is bouncing in pre-defined lanes. The result is a very predictable game that will start to bore you, if you are at least an averagely intelligent being, after a while. What 2K used to do and I continue to do with 2KHS is the opposite concept.

Do you modify the animations of players and goalkeepers somehow?

Yes. 2K had many animations in their hockey, even three ti-

mes faster. Some again in slow motion. As a result, the impression of hockey was strangely choppy. A friend of mine used to say that he thought 2K hockey was weird and unfinished, as if some amateurs were doing it at home (laughs). I try to fix as many animations as possible and smooth the transitions between them.

Has hockey from 2K in your mod undergone any changes in controls or gameplay?

Certainly. Again, if you put the original NHL 2K3 and 2KHS lite side by side, the games are practically completely different. Aside from the obvious technical improvements, the added skating (momentum) and puck physics have fundamentally changed how the game is played, what works and what doesn't.

Additionally, I've mapped all of the player's movement to the LS analog, meaning that you now have complete control over how the player accelerates or decelerates with

just one analog joystick.

Which of course is much more natural than pressing an extra button to sprint.

Are you planning to add any new game modes?

I don't think it's necessary at this point.

Where can fans follow the progress?

On Facebook, on Twitter or even on YouTube.

Where and when will it be possible to try 2KHS?

You can download the Early Access version right now via Patreon.

Thank you very much!



Facebook:

YouTube:



Patreon:



Marcel Mojžiš

# Umělá inteligence — strašák nebo pomocník?

**T**he English mathematician Alan Turing created what we might call artificial intelligence today, albeit on a very limited scale. In 1943, the first model of a neuron was created, and seven years later, Turing came up with an imitation game, the so-called Turing test. It is an experiment where a person writes with another person and with a computer and has to distinguish who is who. Another important scientist in the emerging field was the American computer scientist John McCarthy, who introduced the term "AI", i.e. "artificial intelligence" at a conference in 1956. Ten years later, the first chatbot Eliza was created from MIT University, which imitated human conversation and could respond to user input. In 1979, an artificial intelligence beat a backgammon grandmaster for the first time. Since then, some degree of AI has become so widespread that artificial intelligence is practically impossible to avoid, if we use computers or smartphones or GPS navigation at least marginally. Just writing this article, the text editor is correcting me, trying to offer relevant words and complete broken sentences. When searching, Google similarly offers me content corresponding to the entered passwords. The mobile phone

can recognize faces in photos and group photos into albums. It's all artificial intelligence. But what is AI really and is it really intelligent?

Artificial intelligence began to be used to a greater extent about 30 years ago, mainly as a model for speech recognition. This is an algorithm that tries to predict what the next word in the started sentence will be or, based on the entered password, offers the most likely occurrences. Word processor and Google search engine are typical examples. In practice, this is a kind of probabilistic model of the occurrence of strings of words based on the sample sets provided to the language model for machine learning. The complexity of language models has increased so much over the last 30 years that classic search engines or word processors are overwhelmingly accurate. Thanks to the number of words and phrases that artificial intelligence has now accumulated over the decades, it can already fairly accurately return the most likely answer to the user's input.

Jan Šedivý, head of the Big Data and Cloud Computing department at the Czech Institute of Informatics, Robotics and Cybernetics of



foto: DALLE (AI)

the Czech Technical University, names machine learning as one of the biggest weaknesses of these AI bots, because even though they can work well with accumulated data, they don't really understand this data. It only tries to select the most likely match to the user's input from what it has already seen. Jan Šedivý illustrates the absence of context and true understanding of the situation on Alquist's own chatbot. This Czech CTU model, while performing for the children of Amazon employees at Christmas, said: "Santa is dead," showing his ignorance of the context in all his nudity and causing mild consternation among the children present.

## AI in the labor market

Despite all the mentioned limits of artificial intelligence, the possible disappearance of some jobs and their replacement by robots is becoming more and more likely. A survey by the NMS



Research agency shows that 15% of Czechs fear losing their jobs due to being replaced by artificial intelligence.

Although the latest International Labor Organization (ILO) report states that AI will transform rather than eliminate jobs, certain fields are more at risk than others. Previously, it was believed that the first fields to be replaced by AI would be manual professions – workers, drivers, etc. However, according to the ILO, it is mainly office work. In addition, the change will affect women more.

AI is doing very well in the field of programming. Knowledge of programming languages and their syntax already makes it possible to write code according to verbal input or to find an error. Programmers are already happy to use this option, and artificial intelligence is thus replacing the soon-to-be-obsolete Googling. However, it will be difficult for AI to replace programmers yet, but it will significantly change their workload. The programmer will need to be able to correctly assign tasks to the robot so that the resulting code meets the client's requirements. AI will speed up development and people will have to adapt to the new coding speed requirements in order not to lose their jobs.

Another vulnerable group are copywriters and marketers. Thanks to the knowledge of

millions of marketing turnovers, e.g. ChatGPT can write a decent advertisement or post on social networks. Their workload will thus also have to adapt, and some form of cooperation with AI seems inevitable for survival.

Slowly but surely, AI is starting to dabble in the craft, thanks to increasingly sophisticated image generation, including graphic artists. The topic of video game AI graphics appeared with the arrival of the successful FPS High on Life, in which the author Justin Roiland made it easy to generate posters on the walls thanks to AI Midjourney. Artificial intelligence thus allowed the author to focus on more important aspects of development. And that might be the right way.

Czech developer Petr Fismol also used artificial intelligence in his adventure game Král Jister 3, where the main character was "dubbed" by an advanced text-to-speech generator. It must be noted that very successfully. You can find more information about the game in Cooldown No. 2 and on the freeport7.cz website.

Thus, artificial intelligence does not yet replace people, but rather makes their existing activities significantly more efficient. The job market is likely to demand a new capability, that of working effectively with AI and processing its results. In the future, thanks to this, a number of professions that do

### Practical use of AI

On the Internet, AI tries to optimize our search and offer the most likely match, offer online advertising based on browsing history, and on mobile, AI works in the form of virtual assistants such as Siri, Google Assistant or Cortana.

Significant progress has been made by artificial intelligence in machine translations of text. Thanks to large amounts of data and the use of neural networks, online translators like DeepL are more accurate and natural than ever before.

AI is increasingly being used in households. Intelligent thermostats learn the rhythm of our behavior and can save energy by adjusting the temperature in the house, intelligent refrigerators recognize open doors and reduce the cooling intensity, autonomous vacuum cleaners vacuum and mop the floor for us when we are not at home...

not yet exist can open up, such as Artificial Intelligence Operator, etc.

Reseller Magazine in an interview with researchers spol. Gartner suggests that the role of artificial intelligence will be in optimizing routine activities and improving customer satisfaction, rather than eliminating positions in the labor market. As a result, according to the researchers, more positions may open than disappear.

So if we really learn to use AI to our advantage, we are not in danger of extinction.

**Marcel Mojžiš**

# Titanic: Honor and Glory will feature an interactive model of the Titanic



**I**ndependent developers often come up with projects focused on a specific event or mechanic and often reap success. We were lured to the sea by, for example, the excellent Return of the Obra Dinn, and the Titanic: Honor and Glory project, which has been in development since 2012 and is to include a complete digital reconstruction of the RMS Titanic, will also take us to the water.

The developers present the game as a medium on the border between a computer game and an interactive museum, where players will have the opportunity to explore a fully interactive 3D model of the Titanic, including the real fates of passengers and crew, and experience the last moments of the voyage, including the sinking of the

ship in real time. The authors from Vintage Digital Revival want to offer a powerful experience and the most faithful appearance of the Titanic in video game history.

On the third of March, the last demo called Project 401 was released, where we can walk around 50% of the ship, and judging by the trailer below, it's a really good look, because Demo 401 runs on the new Unreal Engine 5. This goes hand in hand with the HW demands that they are not among the lowest in terms of graphics cards.

#### RECOMMENDED HW:

CPU with four cores

16 GB of RAM

GPU with 8GB RAM

45 GB of space on the SSD disk

The developers built the scenery really opulent, now they have to fill the ship with life, stories and little things to discover to make the experience worth it. The game will be in development for some time, the date has not been announced, but the authors do not skimp on news, they are available both on Youtube and Patreon, where you can contribute financially to the development of the work.



Marcel Mojžiš



# I am Future is a new game of the cozy survival genre



The survival game genre has been experiencing a fruitful period recently. Games like Rust, Valheim, The Forest, Green Hell and others are played by thousands of players and other game studios are trying to survive. Low-poly survival Ylands from Bohemia Interactive looks interesting, for example, which plays on a slightly lighter note. The level of danger varies significantly between survival games, and players can choose whether they want uncompromising danger or rather a sandbox where

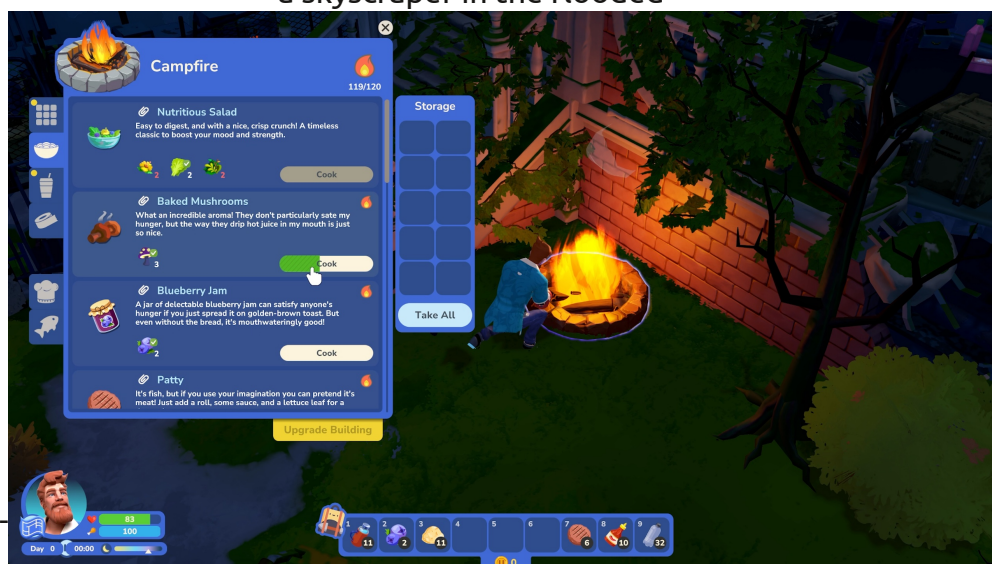
re they can let their imagination run wild.

Publisher tinyBuild (Hello Neighbor) and developers from Mandragora Studio, authors of the relaxing survival game I Am Future: Cozy Apocalypse Survival, which recently arrived in early access on Steam, think so.

In this "cozy" survival game, players wake up on the roof of a skyscraper in the flooded

and deserted metropolis of Cosmopolis. The rooftop becomes the home and main base from which players explore the world around them, trying to figure out what happened to the once vibrant city and what is behind the main protagonist's sudden awakening.

Graphically, the game is pleasant and colorful, in no way obscuring the casual nature of



I am Future. The main character is controlled by the keyboard from a third-person perspective, and the world is stylized in low poly graphics.



Exploration of the surroundings, collection of various materials and subsequent production of items necessary for survival play a role here. The player will receive a small robot, with the help of which he will turn the barren roof of the skyscraper into a new home.

### Manufacturing and AI

Found objects can be disassembled into parts, and to make things you need to know the necessary blueprints, which are scattered around the world and need to be found. While in classic survival the player is the only one to produce things, here it is possible to upload AI to production buildings and with the help of automation, production can be made significantly more efficient. There is also the classic trio of skills Cooking, Farming, Fishing, which is in almost every survival game. The roof can thus also serve as a small farm, and the gameplay can thus be close to the popular relaxing hit from Nintendo, Animal Crossing.

### Enemies

Even if the game bets on a relaxing note, even in I am Future we will not run around the world without pitfalls. The player thus encounters strange mutated creatures that have adapted to a world without humans and which often attack the player's defenseless structures at night. When furnishing a dwelling, the player must also think about defensive elements to protect his home.



Early access has been available since August 8, and a full release date has yet to be announced. The game can be purchased on Steam for €14.79, and the developers welcome feedback on the official Discord channel. The game currently has very posi-

tive reviews and boasted more than two thousand concurrent players just a day after launch.



Marcel Mojžíš



# Audio „DnD“ Lonewolf: Fortress of Death comes to smartphones

**R**emember the days when computers weren't in every home and role-playing games took place in the hands of readers? The so-called game books were popular in the nineties, and with a book and a dice, readers could experience adventures similar to later RPG games on computers.

The Lone Wolf book series was started by Joe Dever in 1984 and after his death in 2016, his son Ben took over.

Developer Sound Realms is now resurrecting John Dever's special work, which has never been available on modern devices, thanks to a very successful ongoing crowdfunding campaign. It is a 1989 PhoneQuest called Lone Wolf: The Fortress of Death. It was played over a telephone line. All you had to do was dial a phone number and the



narrator would recite the story, much like a book, and the player would select individual options on the telephone number keys.

Now Fortress of Death returns in a remastered edition for smartphones and tablets, complete with 3D

fallen knight for two centuries. It's not an original setting, but the gameplay and the actual design are more important.



surround, realistic sound effects and simple text graphics. It is practically a DnD for one player where the narrator is represented by a mobile application.

## Story

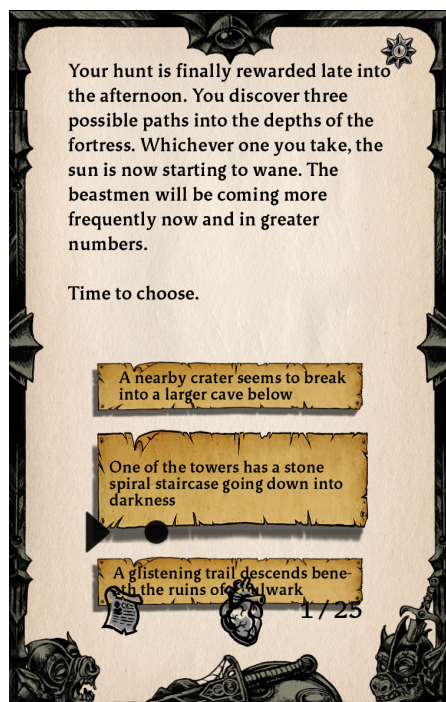
Players try the role of fallen knight Qel Dhormos, who must recharge his honor. So he sets out to the old fortress of Kazan-Oud to defeat its dark lords and retrieve the ancestral sword that has been lying there with the



## Gameplay

This is a gamebook converted to audio, so we can expect simplified RPG elements. The





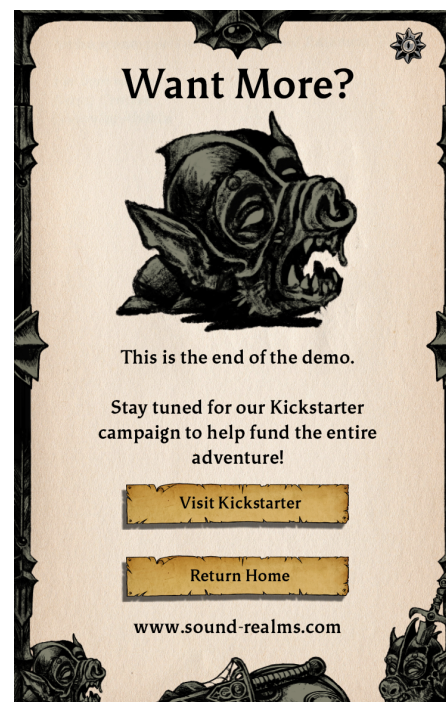
player has an inventory with items that can be used in predetermined locations and with food that provides the necessary healing after a tough fight. At the beginning of the game, the knight has only one weapon at his disposal - a sword - but as the game progresses, he can expand his arsenal. As for skill leveling, there is Combat, Stamina, and Will. Combat ability directly affects damage dealt, Stamina modifies damage received, and Will determines options in non-combat situations. The listener-reader is introduced to the situation by the narrator, and then various options for the next passage are shown on the screen. Some choices require a roll of the dice and this further affects the possible outcome. The player starts with 27 life points, which he loses both when fighting with enemies and when exploring dangerous surroundings after an unlucky roll of the dice. The degree of randomness here is



great, but the variety of results entices you to play repeatedly and try different paths.

### Fights

The player fights by simply pressing one button and waits for the evaluation of the damage given and received depending on the weapon used and the individual statistics of the player. If the health drops to zero, the game ends, if the player defeats the enemies, he



continues the story further.

If the description enticed you and you are not sure if you will enjoy this game, you can download the demo on Google Play and App Store. You can back the full game with a Kickstarter contribution ending on October 15th.

The base game is available for \$20, but the authors have promised expansion in the form of additional playable characters or additional stories thanks to a higher amount collected.



Marcel Mojžiš

# Unreal Engine 5.3 represents a breakthrough rendering method

**T**he first version of Unreal Engine was released by Epic Games in 1998 and used it for Project Unreal, an FPS with breathtaking graphics for the time, vast game maps and decent artificial intelligence of enemies. Since the second version of the engine in 2002, it was possible to use the Unreal Engine for genres other than first person shooters, the code was completely rewritten. For many years, the engine has been synonymous with technological progress, and the 2022 serial number 5 version is no different.

What exactly is a game engine?

First, we should answer the question of what an engine actually is and what it is good for. There are many game engines (Unreal, Unity, Frostbite, Game Maker...) and some of them specialize in a certain genre, others are universal. In short, we can say that the engine provides the developer with a set of already pre-programmed tools so that he does not have to write the entire game from scratch. The developer thus immediately has access to texturing of objects, lighting effects, physics and collisions. Similar to, for example, when editing a video, we don't have to program how each transition will look like, we simply choose from a list.

## Unreal Engine 5

Epic Games released the fifth version for free in 2022 and they are constantly working on new features. The fifth Unreal Engine introduced a revolutionary way to render objects while preserving details, improved volumetric effects such as fog or smoke, or optimized lighting thanks to Lumen technology.

## Better details thanks to Nanites

The most striking new feature of the fifth version of the engine are the so-called Nanites, which redefine the rendering of objects moving away from the observer. By default, an object in a video game is modeled in several variations depending on how far it is rendered. Objects closest to the viewer are smooth, detailed, and drawn, while distant objects are angular. As the camera zooms in, the objects change the variations from the simple to detailed one. This is called Level of Detail, LOD for short. This principle is intended to save performance by simplifying remote objects.

But Epic Games came up with a different solution. In UE5, there is no longer any need to have ready-made variants of the object, the new technology changes the geometry dynamically. Thus, the developer can put the most detailed version into the game, and Nanites will take

care of dynamically simplifying the parts that are needed to increase performance. Optically, it is impossible to tell that the object is changing in any way, which significantly improves the visual experience without losing performance. The current version 5.3 made it possible to apply Nanites to the landscape as well, which should save up to 20% of computing power when shooting in the open world.

## Surface tessellation

The tessellation, i.e. the undulation of the surface based on the used texture, was also improved. It is no longer necessary to model every stone on the road, it is enough to use a texture with stones and tessellation will already take care of their three-dimensionality and give flat roads realism.

## Volumetric effects

Realistic fog or smoke were already represented in Unreal Engine, but in version 5.3 their appearance has been improved even more. In the past, more complicated formations like explosions were replaced by two-dimensional animations, but they didn't look the best. It is now possible to import into Unreal three-dimensional simulations of smoke or explosions from other 3D applications and thus achieve a realistic effect, including correctly cast shadows and



light scattering using path tracing. For now, these innovations are focused on the film industry and pre-rendered animations, as rendering complicated volumetric effects is hardware-intensive, but it's only a matter of time before it reaches video games and is fully utilized here as well.

#### Skeleton editor and clothing simulation

The current version of the engine allows developers to fully animate characters, including a skeleton editor, which was unavailable until now, and external applications such as Blender or Maya were used for animation. The new fabric editor then allows you to test how which fabric will be simulated during animations, so there will be no need to use third-party applications for animating scenes, everything will be available inside the engine.

#### Lumen

Lumen technology represents a graphical leap in lighting effects. This is dynamic global lighting to create realistic light reflections. Each object reflects light and thereby secondarily illuminates the room. UE5 allows rendering of global lighting and realistic light reflections and shadow generation in real time. By default, the shadows in the game map are so-called baked - they are rendered to the surfaces in advance, in order to save time and performance. The drawback of this solution is the need to render the scene and anchor the shadows to one place. Then, if the developer wants to move the shadow-casting object, he has to re-render the entire scene. Real-time global lighting eliminates this ailment, but at the cost of increased hardware requirements.

Unreal Engine is still free and thus allows anyone interested

to penetrate the secrets of video game development using current technologies. The competition has a lot to do. Unity introduced a pricing model that stirred the bile of almost everyone who uses this engine. In this way, Unreal can see an influx of new users over time.

**Marcel Mojžiš**



foto: unrealengine.com



# After 20 years, Sonic 3D Blast gets a new patch from the creator



**I**t's 1996 and Sega is expanding its repertoire with a new game title from the developers of Traveller's Tales, the isometric platformer Sonic 3D Blast. Although this is the first 3D platformer with our favorite blue hedgehog, which we could take as one of the major steps forward in this game series, the game itself met with very mixed reviews. Many players and reviewers blamed the game mainly for complicated gameplay, slow pace and lack of action. Let's be honest, even die-hard fans have to admit that the game has its flaws. Most of the time, the controls feel like the character is wading through the ice, the camera is confused during the faster sequences, a lot of hitboxes just don't make sense, and running around the level here

and there to find the last monster and get the flicky to advance to the next part of the level, doesn't add much to the gameplay. What about the thought that we have to go through all these difficulties for 21 levels in a row to reach the end!

But luckily for us, the year is 2023, and even the most die-hard retro gamers will certainly not disdain the irreplaceable Sonic 3D Blast: Director's Cut patch from developer Jon Burton, founder of Traveler's Tales studio and programmer of the original Sonic 3D Blast game. What exactly does this patch bring and to what extent does it change the original gameplay?

## New Features

**World Map:** players can see a progressive chain of levels

they progress to. At the same time, this feature allows the player to visit any of the previous levels.

**Super Sonic Form:** This feature will be unlocked after collecting all seven Chaos Emeralds. Super Sonic has the following properties: Power Sneakers (so-called fast shoes), Homing Attack (homing attack) and Invincibility (invincibility).

**New game mode: Time Challenge.** Players don't need to collect "swim" birds to progress, the main task is to complete the given level before the time limit expires.

**New game mode: Score Run Mode,** which is accessible to players with 100% completion of the game. This mode challenges players to get the highest possible score in one uninterrupted game session.

Level Editor: players can customize each level by adding/removing/removing various objects.

Save option: the game now saves progress thanks to a generated password, which players enter in the menu under the "Load Game" option when they next start the game.

Completion percentage: located on the world map.



Players have the option to play the game in its original form without any changes.

Gameplay improvements

Sonic's speed has been increased, adapting the sense of speed to match the other games in the series.

Sonic now turns faster.

The camera zooms out during the faster segments of the game.

Sonic doesn't lose momentum when he hits a wall, allowing him to climb stairs faster.

If Sonic has any rings collected, Sonic will only lose

one bird when he collides with an enemy. Without the rings, all the birds jump away from Sonic. Without rings or birds, Sonic dies.

Flicky birds now act as a shield against shooting attacks.

When the Power Sneakers effect is activated, the Sonic character will only bounce off the object without losing rings when it collides with an enemy or other danger, which makes using the fast shoes less risky.

During the boss fight, the camera tries to keep both Sonic and Robotnik in the shot, which makes orientation easier and the entire fight easier.

Sonic head medals now function as a collectible item, collecting which increases the player's completion percentage. It no longer serves as an excuse for players to continue on death.

A player can only get one chaos emerald per zone. Some levels (Gene Gadget Zone and Panic Puppet Zone) in the original version do not have Tails or Knuckles, so they were added to these levels to give players a higher chance to collect all the emeralds.

The crab badnik (an enemy robot monster), which was removed from the enemy list when the original game was planned, has been added to the game with this patch.

Various enemies and interactive objects have had their hitboxes enlarged to simplify gameplay.

Fixed various bugs.

Sonic's graphical enhancements

now have a lighter shade of blue to keep his appearance consistent with newer games such as Sonic Mania.

When a patch is lost, the icon of the given bird jumps, with these jumping movements it alerts the player to the loss of the corresponding bird.

If a flicky bird appears off-screen, a flashing bird icon will appear on the edge of the screen to alert the player in which direction the off-screen bird is located.

The display now shows the score and time. If there are multiple objects on the screen at one moment (eg when Sonic's rings are scattered), the game will hide the time score and temporarily prioritize those extra objects (called "sprites") until it has enough VRAM available.

In Level 1 (Green Grove Zone) the colors have been changed slightly to make the location more closely resemble the iconic Green Hill Zone.

The waterfall in Level 1 (Green Grove Zone) has been changed to a shade of blue so that it doesn't interfere with Super Sonic's color palette.

Special levels have a customized color palette to correspond with the location from which we entered it.

This patch was released on PC back in December 2017 and is available both on the project's official website and on Steam in the workshop under the



name Official Sonic 3D Blast Director's Cut. If you own the original game on Steam, applying the patch is very simple. To activate, just click on "+ Subscribe" on its respective page in the workshop, which completes all the work on our part. If we then want to play the game with the new patch, we have to take a few simple steps when starting the game.

Starting the game

choose the first option, not the simplified launcher.

Running the patch

In the games collection, we will find Sonic 3D Blast, but instead of "Play" we will choose the "Mods" option, where our patch will be shown to us. Now we go to this mod and click on it, which will launch the patched game.

How do we know we've launched the game correctly?

"Director's Cut" will appear on the initial screen under the name of the game, and in the subsequent menu we will find a lot of other options that the patch offers.

Well, now all you have to do is start a new game and go for it! We hope you enjoy this patched old classic enough, for us this patch is undoubtedly a "must have" :).



If we launch the game in the traditional way or through a simplified launcher, the initial screen and menu



Původní menu



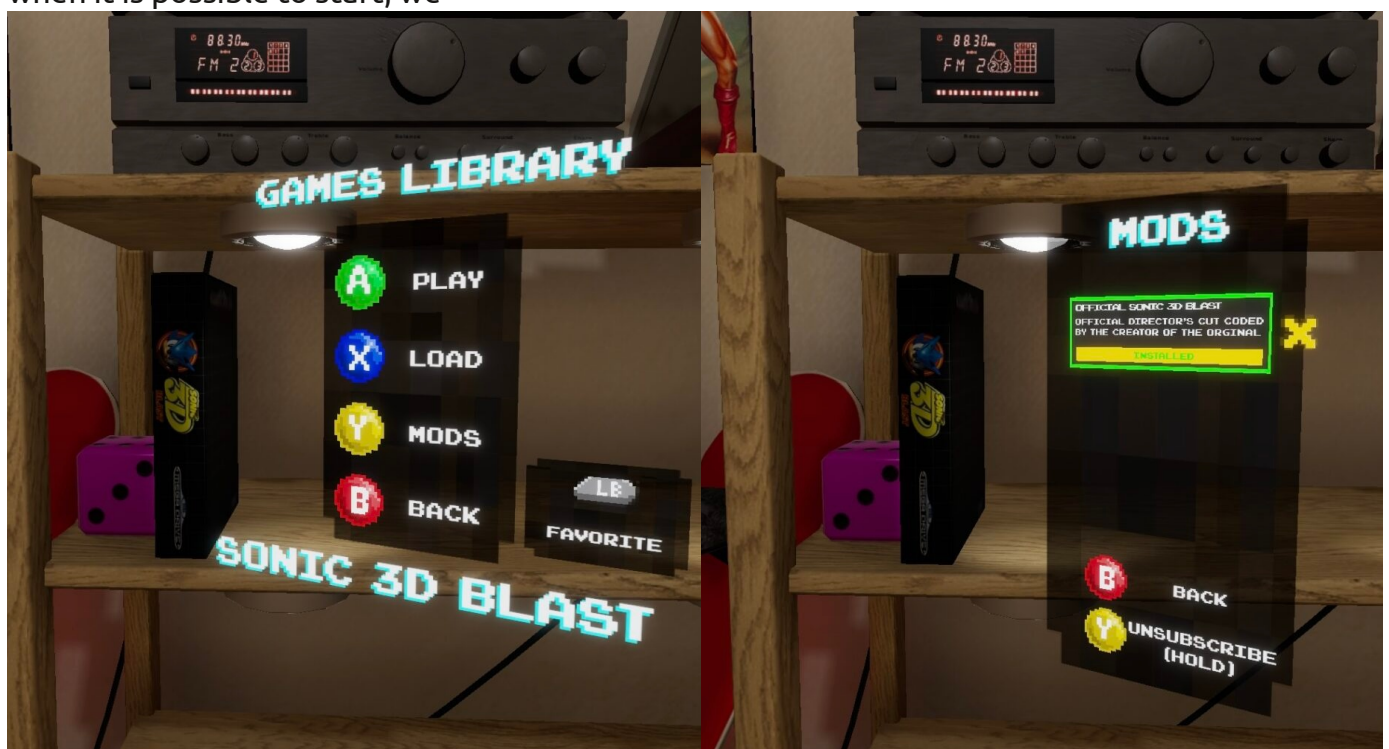
Director's Cut

In order to be able to play the game with the new patch, we start SEGA Mega Drive and Genesis Classics on steam, and when it is possible to start, we

will look as we know them well...

When launched via the mod option, the inscription

Magdulė



# Jazz Jackrabbit



Jazz Jackrabbit is a 1994 side-scrolling action-platformer developed and published by Epic MegaGames. The main character is the green hare Jazz, who must go on an adventure to save Princess Eva Earlong from the turtle terrorists.

The game takes place on the planet Carrotus, home to the hare and turtle races. The turtles decided to attack the hare kingdom and kidnapped Princess Eva. Jazz is sent by the king to rescue the princess and ensure peace between the two races.

The game is played from a third-person perspective, with the player controlling Jazz using a keyboard or joystick. Jazz can jump, run, shoot and use various power-ups.

The game consists of six levels, which are divided into

three worlds. Each level is full of obstacles, enemies and bonuses. Jazz must pass each level and defeat the boss to progress.

The game is quite difficult, but it is also very fun. Jazz is fast and agile, and the game offers a variety of ways to deal with enemies.

The game has 2D graphics, which are very high quality for the time. The characters and environments are detailed and the game has vivid colors.

The game has a pleasant soundtrack that completes the atmosphere. The ambient sounds and effects are also well done.

Jazz Jackrabbit is a great platformer that still manages to entertain today. The game is difficult but also very fun and has quality graphics and sound.

In 1998, a sequel was released called Jazz Jackrabbit 2. The game is even better than the first part and offers a number of new features, such as the ability to play in two players.

You can play Jazz Jackrabbit on a variety of platforms, including PC, consoles, and mobile devices. The game is also available for free on the Internet.

Rating :

M1m1nk0 for RetrohryCZ5/5  
pluses:

low HW demands a lot of  
funstory

minuses:

Emulators or  
Dosbox are  
needed  
nowadays



M1m1nk0



# Let us know how you enjoy the magazine

If you've read the magazine this far, thank you very much for your support and we'd love for you to subscribe to us on the platforms below and let us know how you like the magazine. We welcome any feedback!

By the way, the editorial in this issue and the translation to English was 80% AI generated, did you recognize it? Write to us on the sites or to the email below.

**web:**

<https://www.freeport7.cz>

**e-mail:**

[redakce@freeport7.cz](mailto:redakce@freeport7.cz)

**facebook:**

Freeport7.cz

Moyzis

**instagram:**

@moyzis92

**youtube:**

Moyzis

For now, have fun and see you soon!

Marcel "Moyzis92" Mojžíš a Magdulè

