

Bachelor's thesis

# **GRAFIT.GAMES - COMMERCIALIZATION OF STUDENT GAME PROJECTS**

**Samuel Černák**

Faculty of Information Technology  
Department of Software Engineering  
Supervisor: Bc. Ondřej Brém MSc.  
April 26, 2025

## I. OSOBNÍ A STUDIJNÍ ÚDAJE

Příjmení: **Černák** Jméno: **Samuel** Osobní číslo: **515743**  
Fakulta/ústav: **Fakulta informačních technologií**  
Zadávající katedra/ústav: **Katedra softwarového inženýrství**  
Studijní program: **Informatika**  
Specializace: **Manažerská informatika**

## II. ÚDAJE K BAKALÁŘSKÉ PRÁCI

Název bakalářské práce:

**Grafit.games - Komercializace projektů studentských her**

Název bakalářské práce anglicky:

**Grafit.games - Commercialization of Student Game Projects**

Jméno a pracoviště vedoucí(ho) bakalářské práce:

**Bc. Ondřej Brém, MSc. katedra softwarového inženýrství FIT**

Jméno a pracoviště druhé(ho) vedoucí(ho) nebo konzultanta(ky) bakalářské práce:

Datum zadání bakalářské práce: **21.02.2025**

Termín odevzdání bakalářské práce: **16.05.2025**

podpis vedoucí(ho) ústavu/katedry

podpis děkana(ky)

## III. PŘEVZETÍ ZADÁNÍ

Student bere na vědomí, že je povinen vypracovat bakalářskou práci samostatně, bez cizí pomoci, s výjimkou poskytnutých konzultací. Seznam použité literatury, jiných pramenů a jmen konzultantů je třeba uvést v bakalářské práci.

\_\_\_\_\_

Datum převzetí zadání

Černák Samuel  
\_\_\_\_\_

Podpis studenta

## I. OSOBNÍ A STUDIJNÍ ÚDAJE

Příjmení: **Černák** Jméno: **Samuel** Osobní číslo: **515743**  
Fakulta/ústav: **Fakulta informačních technologií**  
Zadávající katedra/ústav: **Katedra softwarového inženýrství**  
Studijní program: **Informatika**  
Specializace: **Manažerská informatika**

## II. ÚDAJE K BAKALÁŘSKÉ PRÁCI

Název bakalářské práce:

**Grafit.games - Komercializace projektů studentských her**

Název bakalářské práce anglicky:

**Grafit.games - Commercialization of Student Game Projects**

Pokyny pro vypracování:

Goal:

To design and test a mechanism of advancing student projects from semester or final project phase to commercial distribution with profit shared among team members.

Instructions:

1. Analyze needs of student videogame projects from potential commercialization point of view
2. Analyze faculty environment regarding advancing student projects to the business sphere. Additionally research similar mechanisms on other faculties/universities both in Czech Republic and abroad.
3. Identify exemplary project candidates for a pilot run.
4. Design mechanism of student videogame projects commercialization that will be financially sustainable without faculty's resources.
5. Choose a pilot game project and test designed mechanisms on it.
6. Document steps to make a methodology so it can be replicable.

Seznam doporučené literatury:

Czech Technical University in Prague

Faculty of Information Technology

© 2025 Samuel Černák. All rights reserved.

*This thesis is school work as defined by Copyright Act of the Czech Republic. It has been submitted at Czech Technical University in Prague, Faculty of Information Technology. The thesis is protected by the Copyright Act and its usage without author's permission is prohibited (with exceptions defined by the Copyright Act).*

Citation of this thesis: Černák Samuel. *Grafit.games - Commercialization of Student Game Projects*. Bachelor's thesis. Czech Technical University in Prague, Faculty of Information Technology, 2025.

*Chtěl bych poděkovat především sit amet, consectetur  
adipiscing elit. Curabitur sagittis hendrerit ante. Class  
aptent taciti sociosqu ad litora torquent per conubia  
nostra, per inceptos hymenaeos. Cras pede libero,  
dapibus nec, pretium sit amet, tempor quis. Sed vel  
lectus. Donec odio tempus molestie, porttitor ut, iac-  
ulis quis, sem. Suspendisse sagittis ultrices augue.*

## Declaration

FILL IN ACCORDING TO THE INSTRUCTIONS. VYPLŇTE V SOULADU S POKYNY. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Curabitur sagittis hendrerit ante. Class aptent taciti sociosqu ad litora torquent per conubia nostra, per inceptos hymenaeos. Cras pede libero, dapibus nec, pretium sit amet, tempor quis. Sed vel lectus. Donec odio tempus molestie, porttitor ut, iaculis quis, sem. Suspendisse sagittis ultrices augue. Donec ipsum massa, ullamcorper in, auctor et, scelerisque sed, est. In sem justo, commodo ut, suscipit at, pharetra vitae, orci. Pellentesque pretium lectus id turpis.

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Curabitur sagittis hendrerit ante. Class aptent taciti sociosqu ad litora torquent per conubia nostra, per inceptos hymenaeos. Cras pede libero, dapibus nec, pretium sit amet, tempor quis. Sed vel lectus. Donec odio tempus molestie, porttitor ut, iaculis quis, sem. Suspendisse sagittis ultrices augue. Donec ipsum massa, ullamcorper in, auctor et, scelerisque sed, est. In sem justo, commodo ut, suscipit at, pharetra vitae, orci. Pellentesque pretium lectus id turpis.

In Prague on April 26, 2025

## Abstract

In the thesis we explore why student-created games at our faculty are often abandoned after completion. We design a support system that encourages further development and potential commercialization of these projects. Although private investment is rising in Prague, student entrepreneurship remains low. Our faculty lacks a mechanism to support game commercialization. We examine the game development process, existing institutional support elsewhere, and possible commercialization models, ultimately proposing a lightweight cooperative-based system tailored to students' needs. As part of the thesis, we launched a recruitment website, collected over a dozen contacts from interested participants, developed association rules, and prepared a testing mechanism. While no legal entity was established, this thesis lays the groundwork for a sustainable support structure that can empower students to pursue the entrepreneurial potential of their creative projects.

**Keywords** game, game development, game launch, student support, student-led, start-up, intellectual property, university incubator

## Abstrakt

V této práci zkoumáme, proč jsou studentské herní projekty na naší fakultě po dokončení často opuštěny a navrhujeme podpůrný systém, který podporuje jejich další rozvoj a možnou komercializaci. Přestože v Praze roste soukromé investování, studentské podnikání zůstává na nízké úrovni. Na naší fakultě chybí mechanismus, který by komercializaci her systematicky podporoval. Zaznamenáváme se na proces vývoje her, existující podporu v jiných prostředích a možné modely komercializace. Na základě této analýzy jsme navrhli systém s družstvem, přizpůsobený potřebám studentů. V rámci práce jsme spustili náborový web, získali více než tucet kontaktů od zájemců o zapojení, vytvořili

stanovy družstva a připravili testovací mechanismus. Přestože nebyla založena žádná právnická osoba, práce pokládá základy pro udržitelnou podpůrnou strukturu, která může studenty motivovat a podpořit při využití podnikatelského potenciálu jejich kreativních projektů.

**Klíčová slova** hra, vývoj her, uvedení hry na trh, podpora studentů, vedené studenty, start-up, duševní vlastnictví, univerzitní inkubátor



## Contents

<b>Introduction</b>	<b>1</b>
<b>1 Game Development Processes</b>	<b>1</b>
1.1 Game Development Stages . . . . .	1
1.2 Launch Process in Detail . . . . .	3
1.2.1 Structural Requirements . . . . .	3
1.2.2 Operational Requirements . . . . .	4
1.2.3 Legal Requirements . . . . .	4
1.2.4 Marketing Requirements . . . . .	5
1.2.5 Financial Requirements . . . . .	6
<b>2 Academic Entrepreneurial Ventures</b>	<b>9</b>
2.1 The Impact of Academia-Driven Innovation . . . . .	10
2.2 Academia-Driven Innovation in the Czech Republic and the World	11
<b>3 Our Games and Commercialization Support Options</b>	<b>12</b>
3.1 Game Development at FIT CTU . . . . .	13
3.2 Example Games from FIT CTU . . . . .	13
3.3 Local Student Entrepreneurship Support . . . . .	16
<b>4 University-Based Start-Up Facilitation Programmes</b>	<b>17</b>
4.1 Start-Up Incubators and Accelerators . . . . .	17
4.2 Prominent Incubator Functions . . . . .	18
4.3 Incubation of Early-Stage Venture . . . . .	19
4.4 Prominent Game Incubators . . . . .	19

<b>5</b>	<b>Student Venture Support Options</b>	<b>21</b>
5.1	Student Partnership Formats . . . . .	22
5.1.1	Supporting a Student-Led Venture . . . . .	22
5.1.2	Employing Students . . . . .	23
5.1.3	Allowing a Form of Ownership in the Incubator . . . . .	23
5.2	University Incubator Legal Structure . . . . .	24
5.2.1	Non-Profit Integration . . . . .	24
5.2.2	University-Owned Spin-Off Company . . . . .	25
	<b>Results</b>	<b>1</b>
	<b>A Nějaká příloha</b>	<b>3</b>
	<b>Obsah příloh</b>	<b>8</b>

## List of abbreviations

CCPA	California Consumer Privacy Act
CZK	Czech koruna (Crown)
Dev	Development
EULA	End-User License Agreement
FIT CTU	Faculty of Information Technology at the Czech Technical University (in Prague)
GDPR	General Data Protection Regulation
IP	Intellectual Property
USA	United States of America
UI	User Interface

# Introduction

Each year, students pour creativity, effort, and technical skill into developing original games as part of their studies. Yet once these projects are handed in and graded, they are often left unused—despite their potential to grow into successful products. This thesis explores why that happens and what can be done to change it.

Our focus is on student-created games at FIT CTU in Prague, Czechia. While the local environment shows promising signs—especially through strong private sector investment—many student projects fail to progress beyond the classroom. We believe this is largely due to a lack of entrepreneurial confidence and know-how among students, as well as the complexity and effort involved in commercializing a game. This thesis aims to investigate how a simple, accessible support system could help bridge that gap.

This thesis examines the support currently available for game developers at different stages of the creative process. Our goal is to consider the possible mechanisms for commercialization, evaluate and propose a system tailored to our students' needs. To validate our approach, we will conduct user sentiment testing and then describe a test run, including how we will evaluate its success or failure and plan subsequent steps. Ultimately, our broader objective is to improve entrepreneurial skills and mindset within the local community, and to inspire and motivate students to launch their own game ventures, equipping them with practical tools and confidence to navigate the industry.

Rather than going deep into the technical development of games, the selection and financing required to sustainably run an incubator, or creating a functioning university spin-out company, this thesis will instead focus on preparing the conceptual foundation for future implementation. Our goal is to design a system—its processes, rules, and intended outcomes—to prepare the project for implementation. This approach allows us to test interest, gather feedback, and refine the model before any formal or financial commitments are made.

The thesis is divided into sections—each made up of several multiple chap-

ters. The research part explores the game development process, academic entrepreneurship, and commercialization models—both locally at FIT CTU and internationally. In the design part we compare options and select a model suited for our needs. Then we move to practical steps: we prepare association rules, launch a recruitment website, collect interest and prepare a validation mechanism. The thesis concludes by reviewing the results, assessing whether the goals were met, and outlining future steps. We invite you to explore with us how student creativity can be supported and transformed into real-world success.

Chapter 1

# Game Development Processes

*The game development process is a series of interconnected stages taking creatives from an idea to a commercial product. Understanding of the process allows a developer to make informed decisions, a supportive body to provide targeted assistance and an investor to assess the state and outlook of a project. The chapter breaks down each component of the process—from planning, pre-production and production to testing, launch and post-launch activities. It especially focuses on the launch phase—requiring a distinct set of competencies from marketing and distribution to niche legal and financial expertise, often underrepresented in the technically and creatively oriented developer teams.*

Game development is not a single, linear task but a series of interconnected stages, each with its own distinct goals and requirements. A thorough understanding of the entire process is essential for any student team aiming to successfully bring their game to the release stage—allowing them to anticipate challenges, allocate resources effectively, and make informed decisions at every step, from concept to completion.

## 1.1 Game Development Stages

Game development is the process of designing, creating, and releasing video games. It includes writing, sound design, project management, programming and more. The process can be divided into distinct stages that focus on different aspects of the final product. [1, 2]

**Planning Stage** In the initial stage, game developers choose the genre that fits their vision the best, select viable art styles and gameplay mechanics, plan

the game's structure, content, and more. Changing, cutting or replacing later on can be straightforward in some aspects of the game and very challenging in others. Such aspects must be decided early on. [1, 2]

**Pre-Production Stage** The pre-production stage of game development requires artists, writers and designers to finalise important decisions. Feasibility, practicality and the worth of different design aspects is considered. Will the game be fun to play and appealing to look at? Will it work properly, or do some technical limitations need to be taken into account? [1, 2]

**Production Stage** After the decision-making, production of the game can start. It is at this stage when most of the code is written, levels are designed, game mechanics are tested, models, textures and visual elements start to appear. [1, 2]

**Testing Stages** Some form of internal testing is done throughout the entire process. Before the game is finalised however, developers tend to release test versions. This practice can be roughly divided into alpha and beta.

The *alpha version* of the game already has the key mechanics and allows developers to assess playability. It might have placeholders for characters, surroundings or lack music. It is used for internal<sup>1</sup> testing between staff members but can in some cases be available<sup>2</sup> to selected, passionate fans willing to help developers with playtesting.

The *beta version* follows alpha. The game still requires a lot of work at this point but elements such as the environment and characters are approaching their final form. There still might be bugs present, glitches and exploits that need fixing, performance optimization required, and details missing. The game mechanics may still need to be balanced and server stability tested.<sup>3</sup> [1, 2, 3]

**Launch Stage** During the launch stage the game is made available for the public to play. This stage requires understanding the target market, audience, selecting a distribution channel, creating a strategy, and advertising. Additional support for players might be provided and feedback gathered. [1, 2, 3]

**Post-Launch Stage** After the initial publication, developers might want to release updates, patch bugs or even add new content, either as a free update

---

<sup>1</sup>referred to as closed

<sup>2</sup>referred to as open

<sup>3</sup>Betas can be open or closed too.

or in the form of a purchasable extension. Continuation of a successful product allows it to extend its lifespan and provides a long-term fanbase. [1, 2]

## 1.2 Launch Process in Detail

While the students at the Faculty of Information Technology at the Czech Technical University (FIT CTU) often excel at designing and programming games, the launch phase is where many projects struggle. Unlike development, which follows a structured technical process, launching a game involves a complex and often unfamiliar set of tasks, from marketing and distribution to niche legal and financial specialties, budget planning, fundraising, assessing copyright protection, trademarks, creating contracts and more. A successful launch requires careful planning, strategic timing, and an understanding of distribution platforms and promoting. Many of these steps are not immediately obvious but can determine whether a game finds an audience or gets lost in an oversaturated market.

### 1.2.1 Structural Requirements

Ensuring a smooth and successful launch requires meeting critical structural requirements that impact a game's performance, security, and compliance. Overlooking these factors can lead to negative user experiences, security vulnerabilities, and even regulatory consequences.

Before being released to the public, games need to be assessed and extensively tested to ensure stability and playability. The first thing a player interacts with is the UI—a launch screen or app—which therefore needs to be optimized. Settings such as the resolution, window size, language, subtitles, and key bindings need to work properly. Accessibility and support options need to be tested and credits/end game screens polished.[4]

For games with online components, a reliable server infrastructure is crucial. Poor server performance can lead to lag or disconnects during traffic surges. Optimizing configuration, considering scalability and running stress tests before launch helps identify potential bottlenecks.[5]

Major gaming platforms, from Steam to PlayStation, Xbox and mobile app stores, have specific technical requirements. Failing to meet performance specifications or file size limitations can lead to rejection, or post-launch repercussions.[6]

Collecting and storing personal player data is best avoided in the case of small student-led projects. If collecting data is necessary, developers must comply with regional regulations such as the General Data Protection Regulation (GDPR)[7] in Europe and the California Consumer Privacy Act (CCPA)[8]



in the USA. These regulations require data to be anonymized, encrypted, safely stored and access to it minimized. Non-compliance can lead to severe penalties.[4]

### 1.2.2 Operational Requirements

A successful game launch relies on careful coordination of tasks and resources. While technical readiness is crucial, the operational aspects of the launch determine how smoothly the transition from development to release unfolds.

Best practices include creating a detailed timeline for launch-related activities and setting a realistic launch date. Mapping critical milestones helps teams avoid last-minute chaos.[9]

Effective launch coordination requires collaboration between developers, marketers, community managers, and support staff. Clearly defining individual responsibilities and establishing a contingency plan can help prevent miscommunication or overlooking tasks. A pre-launch meeting can align all team members and prepare them for launch day chaos.[10, 9]

Preparing announcements for player communication channels (e.g., Discord, Reddit) to address potential issues or provide updates can promptly address player inquiries and provide updates.[10, 9]

### 1.2.3 Legal Requirements

From a legal standpoint, publishing a game entails compliance with intellectual property laws, consumer rights regulations, and distribution agreements. Intellectual Property (IP) protection, including copy rights, trademarks, and patents, safeguards creators' work. IP applies to a finished game, but might also restrict use of assets such as code, art, music, and branding.[11]

Ownership of IP varies depending on how a creation has been produced. If, for example, a developer creates a game independently, they generally retain full rights. In collaborative projects, or when work is commissioned, ownership can become complicated and must be defined in written contracts.[4, 11]

When incorporating third-party source material such as characters, settings, or themes from movies, TV shows, or other media, licensing agreements must be secured. Even small references to copyrighted works can lead to legal action if not authorized.[4, 11]

Beyond copyright, trademark protection can apply to titles, logos, and other branding elements. A trademark prevents competitors from using similar names or logos hence firstly ensuring that a game title and branding do not infringe on existing trademarks is crucial.[12]

To legally include music in a game, two types of licenses can be obtained. A synchronization license grants the right to use the underlying composition whereas a master license grants the right to use a particular recording.[13]

After the use of all assets has been approved an End-User License Agreement (EULA) needs to be drafted.[4] It is used to set clear expectations and legally protects the interests of both the game developer and the player. It ensures that the creator retains ownership of its software, provides a framework for handling disagreements, limits the creator's liability, and ensures compliance with data privacy laws (like GDPR and CCPA). The agreement also allows users to understand what they're legally allowed to do with the software and provides specifications such as features and the functionality. Publishing platforms such as Steam provide a general EULA that usually covers the needs of a small game.[14, 15]

Developers must also ensure compliance with data privacy laws in the targeted market—the GDPR[7] in Europe and the CCPA[8] in the U.S. Data can generally only be collected if there is a lawful basis for it, a necessity for gameplay or user management and a clear explanation why and how it will be processed—usually in the EULA.[16, 17]

Traditionally, publishers required creators to obtain appropriate age ratings (e.g., PEGI, ESRB) based on the game's content. On distribution platforms like Steam however, filling out a content survey suffices.[15]

### 1.2.4 Marketing Requirements

Marketing is the process of bringing a product to market. Successfully launching a game requires a strong marketing strategy to generate interest, attract customers, and maximize visibility.

During audience research, developers identify and attempt to understand the target audience. Different genres appeal to different player demographics, and marketing strategies should be tailored accordingly. Analyzing similar games, engaging with gaming communities or conducting surveys helps determine what resonates most.[18]

Creating a well-organized press kit is crucial for both media outreach and promotions. It should include high-quality trailers, screenshots, game descriptions, developer quotes, and release details.[19]

Building an online presence is a common strategy indie developers employ to stand out, generate excitement and cultivate a dedicated community before launch. It is usually done through active participation—posting behind-the-scenes content, development updates, and engaging with fans—on social media platforms such as Reddit, Twitter, Instagram or TikTok. A website can serve

as a central hub to direct an audience to. Its landing page should showcase press kit assets, include a newsletter signup option and other essential info.[20]

Influencer Partnerships—particularly with streamers and content creators aligned with the game’s genre—can significantly boost visibility.[21]

Finally, choosing the right distribution channel is key to a game’s launch and long-term success. Different platforms cater to different audiences, offer unique visibility opportunities, and have varying revenue-sharing models. Developers must evaluate their goals and pick the best fit:

- Steam<sup>4</sup> is the largest digital distribution platform for PC games, accounting for 50-70% of global PC game downloads.[22] It offers powerful tools for developers, including community forums, game analytics, and built-in marketing features such as Steam Wishlists. Listing a game on Steam involves submitting it through Steamworks, paying a \$100 fee (refundable after \$1000 in sales), and adhering to the platform’s content guidelines. Steam has a fixed 30% revenue split. The Steam Discovery Queue and algorithm-driven recommendations can boost sales provided the game gains enough initial traction through wishlists, reviews, and engagement.[23, 24, 25]
- Itch.io<sup>5</sup> is a flexible, developer-friendly platform known for its supportive indie community and experimental games. Unlike Steam, Itch.io allows the developer full control over the revenue split, offering a pay-what-you-want pricing model. Itch.io however lacks the built-in discovery mechanisms and massive audience of Steam, requiring developers to rely on external marketing.[26]
- Game Jolt<sup>6</sup> emphasizes community-driven engagement with social-media-like features. Developers can post updates, interact with followers, and grow an audience over time. Game Jolt offers flexible monetization options, such as one-time purchases, donations, or ad-supported releases. While good for building a player base, Game Jolt too lacks the commercial reach of Steam.[27]

For many indie developers, the best approach is releasing on multiple platforms—launch a free demo on Itch.io or Game Jolt before transitioning to a release on Steam.

### 1.2.5 Financial Requirements

Understanding the financial requirements and strategies of game development determines the feasibility and success of a project. From budget planning,

---

<sup>4</sup>accessible through <https://store.steampowered.com/>

<sup>5</sup>accessible through <https://itch.io/>

<sup>6</sup>accessible through <https://gamejolt.com/>

securing initial funding to monetization strategies, developers must navigate several financial challenges.

**Budget-Planning** A well-structured budget—commonly created through a task breakdown[28]—allocates funds across three primary areas:

- **Development** includes salaries, outsourcing (e.g., music, voice acting), and tools (software/hardware).[29]
- **Marketing** covers promotional campaigns, ads, influencer partnerships, and events.[29]
- **Post-Launch Support** includes updates, fixes, server maintenance, and customer support.[29]

**Monetization Strategy** Choosing the right monetization strategy ensures sustainable business operations, allows investment into high-quality contributors and assets and incentivises innovation:

- **Freemium** offers free access to the base game with revenue generated through ads or in-app purchases (e.g., skins).[30]
- **Premium** involves an upfront fee for the game and is sometimes supplemented by paid expansions.[30]
- **Subscription** provides access to the product throughout recurring payments (less common for indie games).[30]

**Fundraising** Larger projects often require funding, which may come from several sources:

- **Self-Funding** is commonly used by indie game developers until external funding is secured.[31]
- **Publishers** traditionally provide financial support and marketing expertise but may require revenue-sharing agreements.[31]
- **External investors** can financially back a project in exchange for equity, or profit-sharing.[31]
- **Crowdfunding platforms** such as Gamefound<sup>7</sup> or Kickstarter<sup>8</sup> allow developers to raise funds directly from potential players but rely on strong promotional efforts.[31]

---

<sup>7</sup>accessible through <https://gamefound.com/en>

<sup>8</sup>accessible through <https://www.kickstarter.com/>

- **Organizations** in the gaming (eg. Unreal Engine) or education space may offer competitive grants to support prospective indie developers.[31, 32]

Lastly, when monetizing a game, the benefits of operating as a company should be considered. Starting a company is not strictly required and might entail upfront fees but provides legal protection, simplifies tax compliance, and can improve credibility when negotiating contracts with investors or publishers.[33]

[illegible]

# Academic Entrepreneurial Ventures

*Start-ups and spin-outs are powerful vehicles for transforming innovative ideas and research into market-ready products and services. In academia, these ventures not only drive technological and economic progress but also provide students with hands-on entrepreneurial experience and alternative career pathways. However, the process of launching and sustaining such ventures is shaped by national innovation ecosystems, regulatory environments, and varying institutional support systems. The chapter notes the differences between start-ups and spin-outs, explores the support structures available within universities, and highlights the practical and societal benefits of student involvement in these ventures. It also analyzes the challenges and opportunities faced by academic spin-outs in the Czech Republic's innovation landscape and the game development sector.*

As universities continue to expand their role beyond traditional teaching and research, there is a growing emphasis on their capacity to drive innovation and contribute to local economic development. One of the broader aspirations of this work is to strengthen the local entrepreneurial ecosystem by empowering students to transform creative ideas into viable ventures. In this context, understanding the mechanisms behind start-ups, spin-outs and their potential benefits becomes essential.

*Start-up* is a business newly established by an entrepreneur that aims to develop a unique product or service to meet market needs. Start-ups are characterized by innovation, high growth potential and often low revenue. They typically operate in uncertain environments, relying on venture capital<sup>1</sup>, angel

<sup>1</sup>Capital can describe anything that has value - eg. machinery, intellectual property or financial assets.

investors, or other funding sources to support their development.

*Spin-out* is a new company created from an existing organization, such as a university or a corporation, formed to commercialize developed research, intellectual property, or technology. Spin-outs benefit from the resources and expertise of their parent organizations while functioning as independent entities.

In academia, start-ups and spin-outs translate ideas and research into marketable products and services. Universities and research institutions support these ventures through incubators, technology transfer offices, and funding programmes. Academic spin-outs, in particular, utilize faculty expertise, patents, and support to drive innovation and economic impact.

## 2.1 The Impact of Academia-Driven Innovation

Student spin-outs transfer theoretical early-stage research from universities to real-world applications. They are seen as an attractive alternative to patent licensing as they are more likely to impact the local economy. Spin-outs create jobs for highly skilled workers and provide valuable knowledge spillover for other companies.

Students taking part in spin-outs and start-ups can gain experience in entrepreneurship, practice business planning, market analysis, technology commercialization and more. Even unsuccessful undertakings provide valuable learning opportunities. Moreover, venturing offers an additional career path for students (particularly researchers facing limited job opportunities).

Academic ventures foster collaboration between students, faculty, and external actors such as industry partners. This strengthens the university's ecosystem for innovation and entrepreneurship. Successful undertakings improve the university's reputation and potentially attract more funding for research and other programmes.

Academic ventures have demonstrated the ability to adapt quickly to societal challenges. For example, during the COVID-19 pandemic, some quickly developed solutions to address urgent problems. Many also focus on solving pressing global problems, such as sustainability or healthcare challenges, contributing to broader societal benefits.

Commercial undertakings of students and academic staff offer many benefits, from driving local economic growth to fostering innovation and creating new career opportunities. Supporting these ventures is a logical step, as is encouraging the commercialization of student-developed games. Allowing finished games and projects to be forgotten is a wasted opportunity. By supporting these creations, universities can increase their impact, accelerate students' careers and strengthen the entrepreneurial ecosystem.

## 2.2 Academia-Driven Innovation in the Czech Republic and the World

The commercialization and success rates of student ventures vary significantly across the world, reflecting differences in ecosystems, funding structures, and cultural attitudes toward entrepreneurship. It is useful to examine the state of innovation in the Czech Republic, to better understand the local potential for academic entrepreneurship.

In a study conducted by the Research, Development and Innovation Council in 2021, the Czech Republic demonstrated strong economic potential and a well-established industrial and research base. Investment in research and development reached a record CZK 121.9 billion (2% of GDP). The country showed a high publication output, with over 80% of research results published in indexed journals. Increasing international collaboration has driven excellence in specific scientific fields.

The study however concluded that challenges remain. The PhD completion rates are declining, reflecting low development of researchers' skills and professional capacities. Cooperation between the private and public sectors in research, development and innovation is limited. Innovation faces hurdles such as funding shortages and administrative burdens.

The Czech students perceive entrepreneurship as an attractive option for their future career paths. Addressing the systematic weaknesses while capitalising on the existing strengths can improve the Czech Republic's competitiveness in research, development, and innovation on the global stage.

The gaming industry produces the Czech Republic's most significant cultural export according to [infiniteczechgames.com](https://infiniteczechgames.com). Data by the Czech Game Developers Association from 2023 attributed the industry a turnover of CZK 7.52 billion with more than 98% of it from abroad.

Mostly comprised of small studios, the industry employed over 2600 workers in 2023 - doubling since 2007. 71% of those workers were under the age of 35 but only 48% university-educated and only 21.4% stated formal education as a source of their know-how. These numbers suggest that the field is vibrant and growing, but that the impact of universities and university-provided support is limited.



[illegible]

# Our Games and Commercialization Support Options

*FIT CTU offers a robust Informatics program with a specialization in computer graphics, combining theoretical foundations with hands-on coursework in areas such as programming, visualization, and user interface design. The faculty regularly organizes events like GameJams and supports a range of student-driven game projects, resulting in a diverse portfolio of innovative games. While students benefit from university-wide initiatives, incubators, and career development programs that help translate creative projects into viable ventures, entrepreneurial support is not directly embedded within FIT CTU and no options are specialized for game developers. The chapter details the game development education available at FIT CTU, showcases notable student projects, and outlines the ecosystem of events and support services that nurture both technical and entrepreneurial skills.*

Game development is an integral part of FIT CTU's academic and extracurricular offerings. The Informatics programme, with its computer graphics specialization, provides students with a thorough foundation in both the theory and practice of game creation. As part of our effort to strengthen the support provided and improve the local entrepreneurial ecosystem, it is essential to understand the current opportunities available for creative development and commercialization within FIT CTU.

### 3.1 Game Development at FIT CTU

The Faculty of Information Technology at the Czech Technical University (FIT CTU) offers a range of courses and events dedicated to game development. Currently, the faculty offers a single study programme - Informatics - which includes several specializations. Of particular relevance is the computer graphics specialization, which combines theoretical foundations with practical experience. Core theoretical courses include Computer Graphics Programming, Modern Visualisation Technologies, and Machine Vision and Image Processing, while more hands-on experience is provided through courses such as Multimedia and Graphics Applications, Programming of Graphic Applications, and User Interface Design.

In addition, FIT CTU is preparing a new study programme - Applied Informatics - which will introduce three new specializations: Game Development, Graphics, and Computer Vision. This programme is expected to offer a stronger emphasis on practical experience and expand the number of study places available in game-related fields. As a result, a broader range of student-developed games is anticipated - many of which could benefit from structured entrepreneurial support.

Game development is also integrated into other CTU courses, such as Team Software Project, where students have the option to work on game-rated projects as part of their coursework.

The FIT CTU GameJam is another key event fostering game development. Held over an extended weekend, this 48-hour challenge tasks students with creating a computer game from scratch. Participants work either individually or in teams, and receive guidance from experienced industry professionals. The event cultivates teamwork, creativity, and showcases students' technical and artistic talents.

Overall, multiple study paths at FIT CTU support the creation of original games - whether through specialized coursework, faculty-led research, extracurricular events, or student-driven initiatives. The faculty provides an environment in which aspiring developers can hone their skills and bring their ideas to life.

### 3.2 Example Games from FIT CTU

Over the years, students at the FIT CTU have created a wide range of original, comical and technically impressive games. These projects often combine creative storytelling and original game mechanics and are developed as part of coursework, bachelor's or master's theses, Game Jams or independent student initiatives.



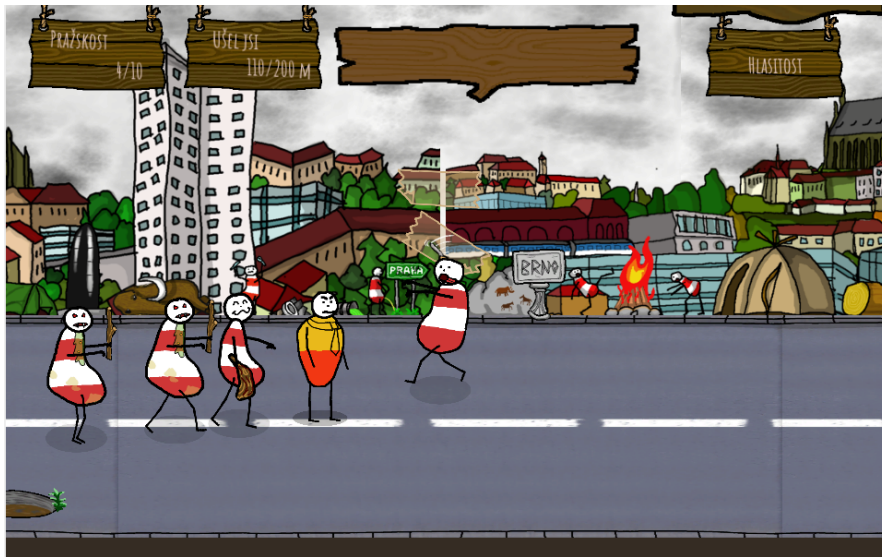
■ **Figure 3.1** Image from the GameJam's Itch.io [citation]

Encore! developed during the 2024 GameJam by Belonzik and TheMultiplexx is a dueling card game with outstanding attention to detail, exploring the theme of death. It stands out for its excellent graphics, well-crafted audio, immersive story, and even professional-grade narration.



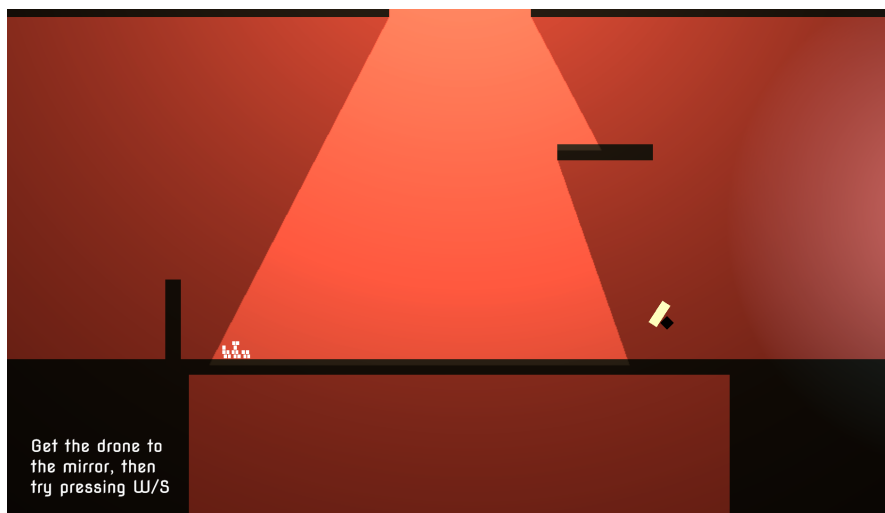
■ **Figure 3.2** Image from the GameJam's Itch.io [citation]

Liminal! by HyperCubic Studio was developed during the 2024 GameJam too. This short platform puzzle game traps the player in a twisted TV show. The game's colourful visuals are beautiful, cohesive and extensively polished. It boasts original mechanics and is full of details in the sounds, menu items and dialogue.



■ **Figure 3.3** Image from the GameJam’s Itch.io [citation]

Escape from Brno was created during the 2022 GameJam by Trampod, Sharp-FoxDev, benjaminhejl, leia12321 and VAHAnima. This side-scrolling dodger won the popular vote among the participants. Its humorous sound design, cohesive graphics, and intuitive gameplay make it feel natural and engaging.



■ **Figure 3.4** Image from the GameJam’s Itch.io [citation]

Subject 42 was created by LukyDrum during the 2023 GameHack. This game puts the player in control of a robot’s AI as they solve puzzles and navigate three intriguing levels. A fitting sound-track and a voice sarcastically commenting on the player’s performance contribute to its unique style and storytelling.

### **3.3 Local Student Entrepreneurship Support**

While FIT CTU does not currently provide entrepreneurial support, it does facilitate cooperation with industry partners and manages grants for research labs. The university takes over the responsibility of arranging access to dedicated incubators and coaching centers. These initiatives help students refine their business ideas and develop their skills.

One such initiative is InQbay, a CTU-wide programme supporting student, phd, and faculty entrepreneurs. It offers individual coaching, workshops, tutorials, networking events, and access to legal, tax, and marketing consultants.

In addition, the CTU career centre offers an eight-week long entrepreneurship course. It covers ideation, market research, business plan creating, pitching a project, gathering feedback and seeking mentors or investors.

# University-Based Start-Up Facilitation Programmes

*University incubators have become essential engines of innovation, offering mentorship, funding, workspace, and industry connections to early-stage start-ups. They bridge academia and industry, helping students and researchers overcome barriers to commercialization. Specialized game incubators have recently emerged to address the unique needs of game development teams. Pre-incubation programmes further expand the available support options, allowing students to test ideas before formal company formation. This chapter surveys prominent incubator models and their offerings in the Czech Republic and internationally. The analysis covers how the programmes are structured, select participants, and propone collaboration, as well as the challenges and best practices in supporting student ventures from ideation through launch.*

Game development ventures face unique challenges - such as rapid product cycles and fierce market competition - making commitment to a commercial project difficult. Tailored initiatives - providing targeted mentorship, initial capital, and industry connections - could help teams accelerate the journey from prototype to market-ready product and lower the barriers to entry for aspiring founders.

## 4.1 Start-Up Incubators and Accelerators

**Start-up incubators** help develop and refine high-potential business ideas. They usually operate locally and provide resources over a span of one to five years. Incubators tend to offer product development guidance, on-demand co-

working space, legal consultation, networking opportunities and mentorship.

**Start-up accelerators** are short, intensive programmes for early- or mid-stage founders. Accelerators are more structured than incubators and outline specific steps to create a scalable business. They often have an alumni and investor network and offer funding in return for stake in the company. Participants usually go through intensive mentorship from industry leaders on fundraising, product development, and growth marketing.

## 4.2 Prominent Incubator Functions

Major university-based incubators offer a variety of functions and services. Primarily, they provide some kind of mentorship - from industry experts, successful entrepreneurs, and or alumni. They run workshops or tutorials to help develop entrepreneurial skills and other relevant competencies. For example The Macquarie University (in Sydney) Incubator's mentor programme directly matches founders with experts to help them navigate the journey and share their insights.

Incubators also tend to provide free or subsidized facilities. RWTH Innovation grants access to research facilities. Lund University's VentureLab even offers free office space, coffee and fruit.

Many incubation programmes provide direct capital or help start-ups secure grants and investments. The UnternehmerTUM offers €5 000 for prototyping in their incubator, a €25 000 project budget in their accelerator and up to €250 000 in total funding. Cambridge Enterprise invested £6.47 million in 37 spinout companies (from 2023 to 2024). SETsquared helped raise £5 billion in investments.

Incubators typically facilitate connections with investors, corporate partners, and other starting ventures. For example, over 6 500 companies have participated in the SETsquared programmes and Startup Autobahn partners with companies like Porsche and Daimler.

Some incubators specialize in specific industries or technologies, support sustainability and social impact. Polihub focuses on deep tech start-ups, Wyss Zurich emphasizes regenerative medicine and robotics and Tartu University CDL-Estonia specializes in digital government and cybersecurity. EIT Climate-KIC supports climate-related start-ups.

Moreover, incubators promote global competitions and highlight successful alumni as role models for incoming students and upcoming entrepreneurs. Cambridge Enterprise supported Raspberry Pi and the alumni of Yes!Delft include Ampelmann, a maritime tech company. EUT+ Incubation Program's participants get to compete in the EUT+ Finals against the best teams from EUT+ campuses.

### 4.3 Incubation of Early-Stage Venture

Many students seek the opportunity to test and develop their ideas in a supportive environment before establishing a formal business entity.

The EIT Digital Venture programme takes entrepreneurs from an idea to investment-seeking endeavours in less than a year. It is available across 24 European countries and offers financial support (up to €30 000), MVP and business development assistance from experts and a direct connection to Europe's innovation ecosystem all without requiring immediate legal registration of a company.

CLabs were founded by the Italian ministry of education with the aim of developing an entrepreneurial mindset on a national level. The OECD recognized them as one of the best ways of supporting student entrepreneurship and innovation. They "[...] act as pre-incubators or pre-accelerators that are designed to help a growing number of university students from different backgrounds interact and develop their entrepreneurial ideas in a safe and creative environment." Emphasizing motivation and multidisciplinary teamwork over formal business directing, students are selected in a process valuing enthusiasm more than grades or the initial quality of a business idea.

The Technology Incubation program in the Czech Republic admits young start-ups, spin-off companies, students, and scientific projects with commercial potential - allowing participation without the immediate need for company formation. The programme selects participants based on the innovation potential of their idea rather than operational state.

Academic Business Incubators (by Business Centre Club) allow young entrepreneurs to save time and effort associated with establishing a company. Students who join the incubators can start their own independent venture that is formally a unit of the organisation. Owners of such companies have no obligation to pay social security contributions however are also not entitled to unemployment aid programmes.

### 4.4 Prominent Game Incubators

Game-focused incubators are beginning to emerge worldwide, aiming to nurture students and graduate creations into successful ventures.

Gamebaze is an incubator formed by a joint initiative (between Game Cluster, JIC/KUMST and the GameDev Area) in Brno. It supports gaming-related start-up projects and is part of Czechia's robust gaming education ecosystem. It also facilitates partnerships with local studios like Warhorse Studio.

Sweden Game Arena - located in Skövde - unites a game development bachelor's and master's programme with a successful incubator under one umbrella.



This ecosystem supports students by offering practical collaboration opportunities with a large number of game companies and access to industry events such as the Sweden Game Conference.

Game Hub Denmark operates in three cities - Grenaa, Aalborg, and Viborg. It includes facilities like the BizHub for secondary school students, Aalborg University Game Hub for entrepreneurs, and Roof Creative Industries Incubator in Viborg - part of one of the best animation schools in the world. The initiative also collaborates internationally - in typically EU-funded development projects - to expand opportunities for game start-ups.

When it comes to financing, The NYU Game Center Incubator grants its participants \$15 000 per team. The programme begins with in-person workshops and coworking sessions, transitioning to remote collaboration for a remainder of the year. The mentors include producers and industry professionals and the incubator partners with major industry players like Sony and Microsoft.

GameBCN in Barcelona, Spain is a 5 months long programme accommodating teams from all over the world. It includes 90 hours of training - on production, marketing, and business - and feedback from industry professionals on monthly meetings. The selected companies are not required to give up equity.

On the other hand, Carbon Incubator from Bucharest, Romania - catering primarily to indie developers from Eastern Europe - requires their incubated companies to give up 10% of revenue. The share rises to 20% in their acceleration programme and to 30% for companies receiving funding.

■ ■

# Student Venture Support Options

*While student game developers often excel at the creative and technical aspects of game creation, the transition from prototype to commercial product presents a host of new challenges - including legal and financial complexities. This chapter explores legal and organizational partnership formats for supporting student ventures, highlighting the limitations and emerging best practices.*

University incubators play a critical role in fostering student-led innovation - particularly in game development, where access to funding, mentorship, and infrastructure can make or break a start-up. Most university incubator programmes operate under the non-profit umbrella of their institutions. While this structure limits their ability to generate profit, it enables them to offer services such as mentoring, business guidance, co-working space, and financial assistance - often at no cost to students. Their primary goal is not immediate profit but rather fostering entrepreneurship and innovation.

Although some university incubators seek returns through royalties, equity ownership, or repayable loans, even large institutions often struggle to achieve financial self-sufficiency. As a result, these programmes are typically supported through a mix of institutional funding, public grants, corporate sponsorship, and alumni donations.

In many cases, incubators also manage the licensing of intellectual property created on university premises, including student projects - especially when the university retains certain rights, as is the case at FIT CTU.

Commercializing student-developed games introduces legal and organizational complexities. Students must select suitable business structures and comply

with tax and labor regulations. Incubators can simplify this process by incorporating ventures - protecting students from personal liability, facilitating profit-sharing and fair ownership.

## 5.1 Student Partnership Formats

University incubators in the Czech Republic can support students in various ways, each offering unique advantages and constraints.

### 5.1.1 Supporting a Student-Led Venture

One common method for universities to support student-led ventures is through structured partnerships, which allow students to operate independently while receiving institutional support. Common Legal Structures for Student Ventures include:

- **Sole Proprietorship (OSVČ)** - ideal for ventures conducted individually. Requires no initial capital, can be registered by filing a unified registration form and paying an administration fee of CZK 1 000. The downside is full personal liability for any incurred debts and losses.
- **Limited Liability Company (s.r.o.)** - commonly used by small teams. Offers liability protection but requires structured book-keeping. Can be created with an initial capital of CZK 1 by concluding a memorandum of association (notary approval usually costs under CZK 10 000) and listing in the commercial register (administrative fees around CZK 2 700 when done by a notary).
- **Other - Joint-Stock Company (a.s.)** or Limited Partnership (komanditní společnost) may be appropriate for large projects seeking investment. Setting them up and adhering to the tax code is complex.

University incubators can support student-led venture through several financial mechanism:

- **Loans** - repayable financing provided with agreed-upon terms and interest rates.
- **Equity Investment** - capital exchanged for partial ownership. Some non-profit structures cannot hold equity or engage in unlimited liability partnerships and need to have their business activity aligned with their defined purpose.
- **Grants** - non-repayable funding, often provided by non-profits. Can offer tax benefits to supporting organizations.

### 5.1.2 Employing Students

University incubators could employ students directly or through subsidiary game development firms and compensate them for their contributions:

- **Standard employment contracts** - developers receive a stable salary. Employers generally contribute 33.8% (2.1% towards sickness insurance, 21.5% towards pension insurance, 1.2% towards state employment policy and 9% towards health insurance) while employees contribute an additional 6.5% to social-security, 4.5% towards health insurance and 15% income tax.
- **Freelance/contractor agreements** - students work as independent contractors. They are required to register as sole proprietors, pay a 15% income tax, and after deducting expenses pay 29.2% social-security (if their yearly profits exceed CZK 111 736) and 13.5% health insurance.
- **Internship programmes** - often tied to academic curriculum and enabled by scholarships funded by universities or industry partners. They must comply with Czech labor laws.

### 5.1.3 Allowing a Form of Ownership in the Incubator

Students might also be allowed to hold equity in the incubator or its affiliated entities. This approach can minimize tax-burden and incentivize effort. Formats include:

- **Paying out dividends** - distribution of profits to student shareholders. Such an approach requires the correct legal structure (in the Czech Republic usually an a.s., but can also be done through an s.r.o.) and has to be contractually defined. Transferring shares involves a CZK 2 000 administrative fee. Corporate profits are taxed 21% and dividends an additional 15%.
- **Profit distribution** - a cooperative (družstvo in the Czech Republic) allows members to participate in governance and share profits. At least 10% of profits must be retained in a fund, with the rest distributed (subject to 21% corporate and 15% income tax). Initial costs include around CZK 3 000 for drafting statutes, CZK 10 000 for notarial certification and CZK 2 700 for listing in the commercial register.

## 5.2 University Incubator Legal Structure

University incubators in the Czech Republic can take on various legal structures, each offering unique advantages and constraints.

### 5.2.1 Non-Profit Integration

Many university incubators are structured as non-profit entities and integrated into the University's body. They are allowed to receive funding from public and private sources but focus on student development rather than profit-making. Common non-profit structures include:

- **Student Clubs or Organizations** - informal collectives within universities usually offering peer-to-peer support and networking. Operations must strictly adhere to university policies and governance.
- **Joint Ventures with Private Companies** - often referred to as Public-Private Partnerships are not a legally described structure in the Czech Republic. Universities may partner with established game studios or tech firms to provide the required services.
- **Non-Profit Organizations** - more formalized structures capable of applying for public grants and private donations. They are not allowed to be run for the sole purpose of generating profit.
  - **Foundations (nadace)** - manage assets (exempt from tax) for charitable, religious, or public benefit goals. They are established by a notarial deed with an initial endowment (no minimal amount is specified) and by being listed in the foundations register. Endowments are protected and only earnings generated by its activities are expended. Foundation disclose annual financial reports, undergo audits and are restricted from participating in unlimited liability partnerships.
  - **Funds (nadační fondy)** - provide access to the entire endowment. They focus on fundraising for specific causes or a time-bound project. Funds are registered by a notarial deed and by formulating governing statutes. They require no minimum capital, undergo lighter oversight but still disclose their activities.
  - **Registered Institutes (ústavy)** - conduct educational, scientific, or cultural activities. They are established by concluding a memorandum of association, registering in the commercial register and have to undergo annual audits if revenues exceed CZK 40 million. Entrepreneurial activities must be supportive in pursuing the institute's purpose.

### 5.2.2 University-Owned Spin-Off Company

Some universities establish separate, fully or partially owned entities. These must distribute gains to maintain the university's nonprofit status. Common formats include:

- **S.R.O. (Limited Liability Company)** - a university-owned company that partners with student teams created following the points mentioned in [chapter before].
- **A.S. (Joint-Stock Company)** - suitable for large ventures seeking external investment, requires initial capital of at least 2 million CZK.
- **Cooperative Structure** - a collective ownership model where students, faculty, and external partners share decision-making and profits. A cooperative (družstvo in the Czech Republic) is a corporate entity requiring a minimum of 3 members. It is founded by concluding a memorandum of association (notary approval usually costs under CZK 10000) and by listing the company in the commercial register (notary fee usually around CZK 2700). Profit distribution rules need to be outlined in the cooperative's memorandum and can include criteria beyond capital contributions - such as the performance of specific segments of the organization. Distributed profits are subject to a 21

# Results

This thesis set out to address a common but—at our faculty—underexplored issue: the abandonment of student-created games after their academic purpose has been fulfilled. Our goal was to design a practical and accessible support system that could help students further develop and potentially commercialize their creative projects.

We successfully launched a recruitment website and collected over a dozen contacts from students interested in the initiative. Association rules were created, and a testing mechanism was prepared to validate the model. While no legal entity was established due to time constraints, we consider this stage of the project a success in laying the conceptual and operational groundwork for future implementation.

Our goals were largely met. We researched the necessary background, analyzed comparable support structures, described a relatively concrete mechanism, and tested user sentiment. Along the way, we also gained new insight into how timing within the academic cycle and peer collaboration influence entrepreneurial outcomes and learned a surprising amount about the commercial effectiveness and usefulness of cooperatives.

However, several open questions remain. Can the initiative be sustained long-term? How should it be funded during times of financial instability? Will we be able to achieve continuity across academic years? Will the executive mechanisms work? These are important challenges that this project must address.

For further development, we recommend refining the internal processes based on feedback, gradually introducing more formal structure and responsibility and altering the rules of association if necessary. Collaboration with faculty leadership and external partners could strengthen the model and broaden its impact.

This thesis does not offer a final solution but rather a starting point—a work-

ing concept that, with continued effort and iteration, can empower students to transform their academic projects into meaningful, real-world ventures. We wish our successors the best of luck.



## Appendix A

# Nějaká příloha

Sem přijde to, co nepatří do hlavní části.

# Bibliography

1. BRAMBLE, R. *The Seven Stages Of Game Development* [online]. 2023. Available also from: <https://gamemaker.io/en/blog/stages-of-game-development>. [accessed 19. Apr. 2025].
2. STUDIO, ROCKET BUSH. *6 Stages of Game Development: From Idea to Release & Support* [online]. 2024. Available also from: <https://rocketbrush.com/blog/going-through-phases-of-game-creating>. [accessed 19. Apr. 2025].
3. ESLER, L. *Making commercially viable games* [online]. 2017. Available also from: <https://medium.com/@liamesler/making-commercially-viable-games-51d8a4a1d826>. [accessed 19. Apr. 2025].
4. SILVA, R. S. *Developer's Guide to Game Release Success* [online]. 2024. Available also from: <https://blog.anybrain.gg/developers-guide-to-game-release-success-105eb2d7e89e>. [accessed 19. Apr. 2025].
5. SENTIKA, A. *How to optimize a dedicated game server for maximum performance* [online]. 2025. Available also from: [https://www.hostinger.co.uk/tutorials/how-to-optimize-a-dedicated-game-server#Resource\\_management](https://www.hostinger.co.uk/tutorials/how-to-optimize-a-dedicated-game-server#Resource_management). [accessed 19. Apr. 2025].
6. INC., Apple. *Submit your iOS apps to the App Store - Apple Developer* [online]. 2025. Available also from: <https://developer.apple.com/ios/submit>. [accessed 19. Apr. 2025].
7. EU, Your Europe -. *Data protection under GDPR - Your Europe* [online]. 2022. Available also from: [https://europa.eu/youreurope/business/dealing-with-customers/data-protection/data-protection-gdpr/index\\_en.htm](https://europa.eu/youreurope/business/dealing-with-customers/data-protection/data-protection-gdpr/index_en.htm). [accessed 19. Apr. 2025].
8. CALIFORNIA DEPARTMENT OF JUSTICE, State of. *California Consumer Privacy Act (CCPA)* [online]. 2025. Available also from: <https://oag.ca.gov/privacy/ccpa>. [accessed 19. Apr. 2025].

9. TEAM, Edgegap. *Multiplayer Game Pre-Launch Checklist* [online]. 2025. Available also from: <https://edgegap.com/blog/multiplayer-game-pre-launch-checklist>. [accessed 19. Apr. 2025].
10. PALMER, J. *Are you ready to launch your video game with confidence? Planning the infrastructure for your game is a crucial step that should not be overlooked. In this article, I will guide you through the 9 essential steps to ensure a smooth and successful game launch.* [Online]. 2023. Available also from: <https://www.linkedin.com/pulse/9-steps-preparing-your-video-game-infrastructure-launch-jarrold-palmer>. [accessed 19. Apr. 2025].
11. SUPRA, JD. *Decoding Intellectual Property Law for Video Game Developers | JD Supra* [online]. 2024. Available also from: <https://www.jdsupra.com/legalnews/decoding-intellectual-property-law-for-1009170>. [accessed 19. Apr. 2025].
12. DRAGON. *Understanding Copyrights and Trademarks in Game Development : A Deep Look* [online]. 2024. Available also from: <https://thereactiveblok.com/understanding-copyrights-and-trademarks-in-game-development-a-deep-look>. [accessed 19. Apr. 2025].
13. ICONCOLLECTIVE. *How to License Music for Video Games* [online]. 2018. Available also from: <https://www.iconcollective.edu/license-music-for-video-games>. [accessed 19. Apr. 2025].
14. DOCUPILOT. *End-user license agreement: All You Need To Know* [online]. 2025. Available also from: <https://www.docupilot.com/blog/what-is-the-end-user-license-agreement>. [accessed 19. Apr. 2025].
15. STEAM. *Content Survey (Steamworks Documentation)* [online]. 2025. Available also from: <https://partner.steamgames.com/doc/gettingsstarted/contentsurvey>. [accessed 19. Apr. 2025].
16. DENTONS. *Practical implications for video games industry regarding EU Data protection and Privacy law* [online]. 2023. Available also from: <https://www.dentons.com/en/insights/guides-reports-and-whitepapers/2023/july/5/practical-implications-for-video-games-industry-regarding-eu-data-protection-and-privacy-law>. [accessed 19. Apr. 2025].
17. GAMOTA. *Data privacy protection has become a critical concern for game developers in today's gaming world. The General Data Protection Regulation (GDPR) and other privacy compliance measures play a pivotal role in shaping how game developers handle user information, ensuring both legal adherence and user tr* [online]. 2023. Available also from: <https://www.linkedin.com/pulse/data-privacy-protection-guide-game-developers-gamota>. [accessed 19. Apr. 2025].

18. SANTOS, A. *A Guide to Launching Indie Games, Part One: Pre-Launch* [online]. 2023. Available also from: <https://www.binpress.com/guide-launching-indie-games-1>. [accessed 19. Apr. 2025].
19. IMPRESS. *Video Game Press Kit Examples* [online]. 2025. Available also from: <https://impress.games/video-game-press-kit-examples>. [accessed 19. Apr. 2025].
20. VENKATESH, C. R. A Proven Game Launch Strategy: : Key Steps to a Successful Release. *Dot Com Infoway* [online]. 2024. Available also from: <https://www.dotcominfoway.com/blog/a-proven-game-launch-strategy-key-steps-to-a-successful-release>. [accessed 19. Apr. 2025].
21. STAFF, Game Developer. How to market a game: an introduction to game marketing. *Game Developer* [online]. 2024. Available also from: <https://www.gamedeveloper.com/marketing/how-to-market-a-game-an-introduction-to-game-marketing>. [accessed 19. Apr. 2025].
22. ZUCKERMAN, A. 75 Steam Statistics: 2020/2021 Facts, Market Share & Data Analysis. *CompareCamp* [online]. 2020. Available also from: <https://comparecamp.com/steam-statistics>. [accessed 19. Apr. 2025].
23. STEAM. *Steam Support :: Steam Wishlist* [online]. 2025. Available also from: <https://help.steampowered.com/en/faqs/view/0CAD-3B4D-B874-A065>. [accessed 19. Apr. 2025].
24. STEAM. *Steamworks Partner Program* [online]. 2025. Available also from: <https://partner.steamgames.com/steamdirect>. [accessed 19. Apr. 2025].
25. STEAM. *Steam Discovery Update* [online]. 2025. Available also from: <https://store.steampowered.com/about/newstore>. [accessed 19. Apr. 2025].
26. CARPENTER, N. On indie site itch.io's Creator Day, developers will get all the profits. *Polygon* [online]. 2021. Available also from: <https://www.polygon.com/22432939/itchio-indie-games-creator-day-100-percent-profit>. [accessed 19. Apr. 2025].
27. JOLT, Game. *Help Docs* [online]. 2025. Available also from: <https://gamejolt.com/help-docs>. [accessed 19. Apr. 2025].
28. DESIGN, Game. *Learn the best practices and methods to estimate your game development budget and timeline, based on industry standards and expert advice*. [Online]. [www.linkedin.com](https://www.linkedin.com), 2024. Available also from: <https://www.linkedin.com/advice/0/whats-best-way-estimate-your-game-development-budget-dyisc>. [accessed 19. Apr. 2025].

29. EDUONIX. How to Estimate and Manage Costs for Your Game Development Project. *Eduonix Blog* [online]. 2024. Available also from: <https://blog.eduonix.com/2024/05/how-to-estimate-and-manage-costs-for-your-game-development-project>. [accessed 19. Apr. 2025].
30. HUBKA, T. *Exploring game monetization: Traditional strategies — Game-Analytics* [online]. 2024. Available also from: <https://www.gameanalytics.com/blog/traditional-monetization-strategies>. [accessed 19. Apr. 2025].
31. SOFTWARE, Perforce. *Top Tips For Getting Game Development Funding | Perforce Software* [online]. 2020. Available also from: <https://www.perforce.com/blog/vcs/game-development-funding#indie-01>. [accessed 19. Apr. 2025].
32. ENGINE, Unreal. *Epic MegaGrants Funds Creators Using UE5 or UEFN or Enhancing the Open Source Community* [online]. 2025. Available also from: <https://www.unrealengine.com/en-US/megagrants>. [accessed 19. Apr. 2025].
33. MAGAZINE, Expats. Is it better to start a business as a company or as an individual? *Expats Magazine* [online]. 2020. Available also from: <https://expatsmagazine.org/start-business-company-or-individual>. [accessed 19. Apr. 2025].

# Obsah příloh

/	
	readme.txt.....stručný popis obsahu média
	exe.....adresář se spustitelnou formou implementace
	src
	impl.....zdrojové kódy implementace
	thesis.....zdrojová forma práce ve formátu L <sup>A</sup> T <sub>E</sub> X
	text.....text práce
	thesis.pdf.....text práce ve formátu PDF