

Course Overview

Tvorba a dizajn počítačových hier (FMFI)

Návrh a vývoj počítačových hier (FIIT)

19. 9. 2024

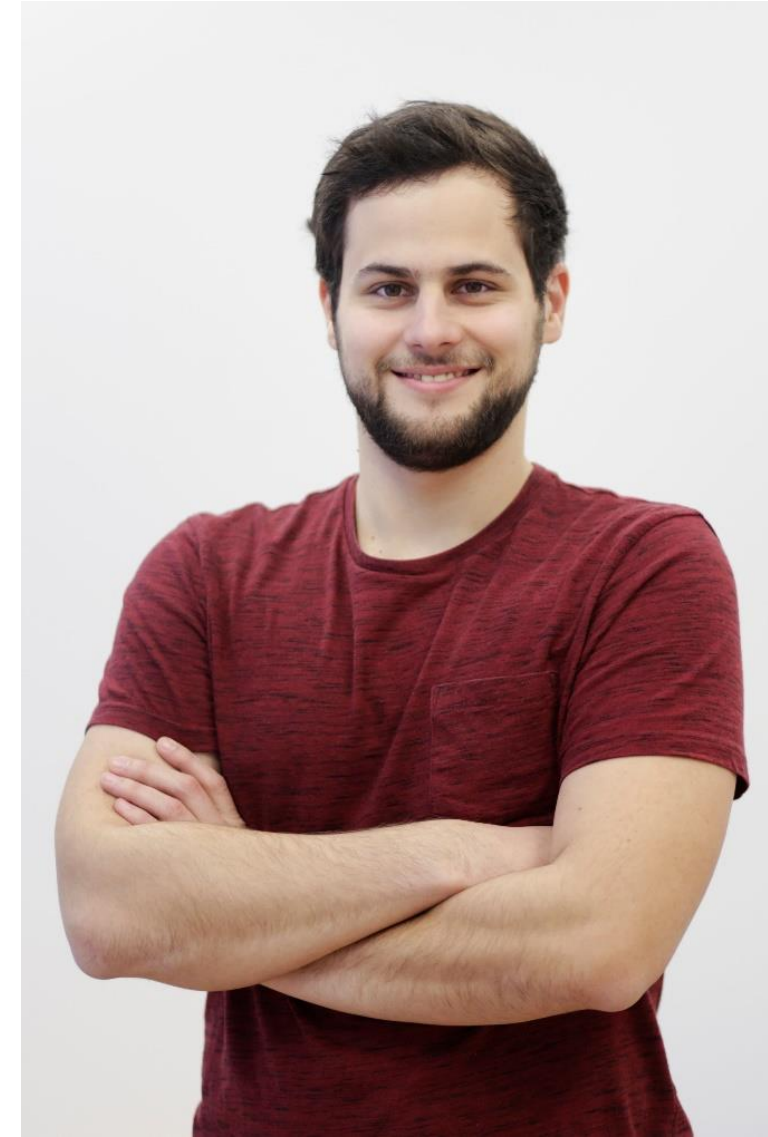
Michal Ferko

Michal Ferko

- Senior Unity Programmer @Crazy Labs
- Mentor @Summer Game Dev
- Lecturer
 - @FMFI UK (since 2013)
 - @FIIT STU (since 2018)
 - @VŠMU (since 2023)

Previously

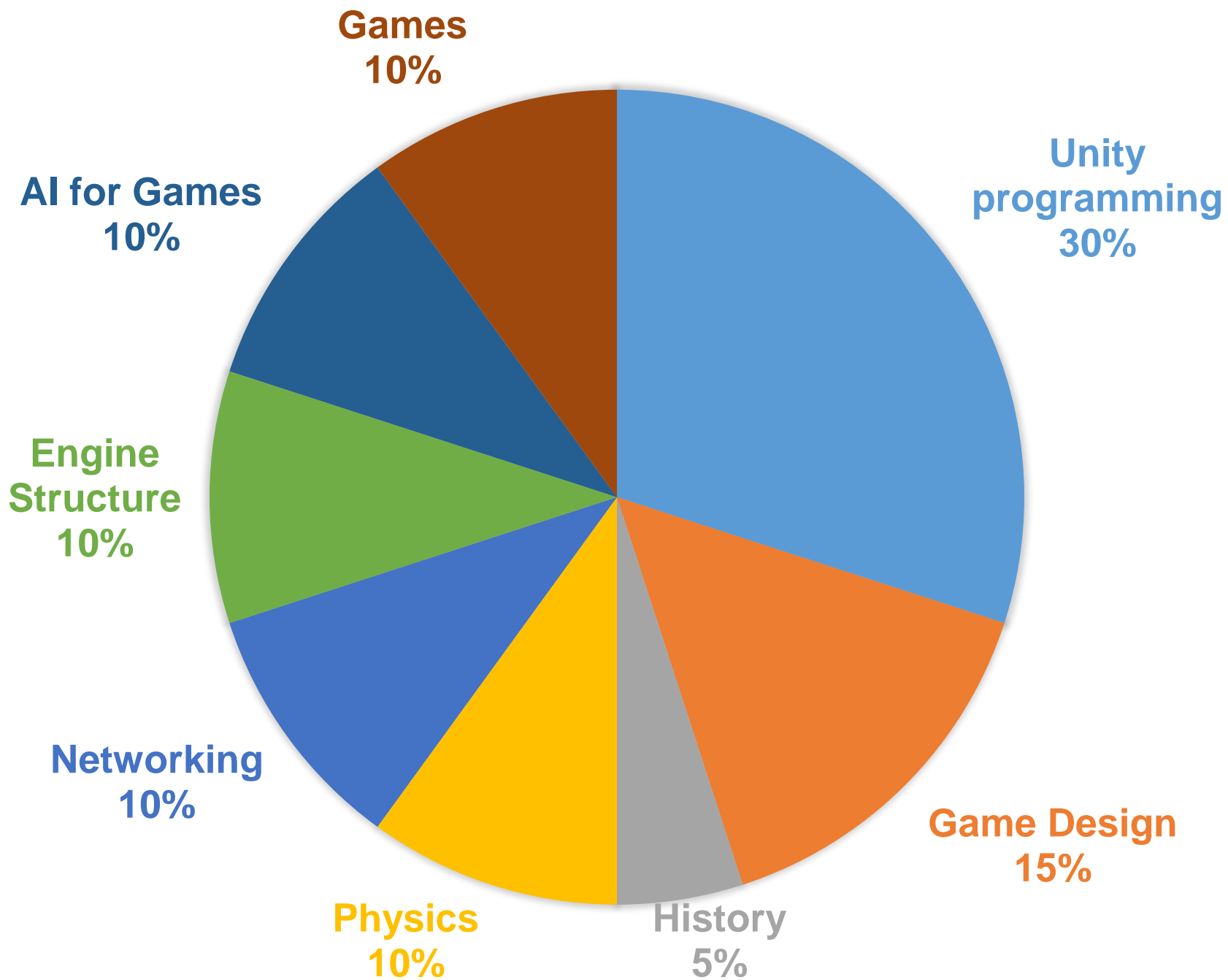
- Lead Unity Programmer @PowerPlay Studio [4y]
- Founder & organizer @Summer Game Dev [4y]
- PhD in real-time rendering @FMFI UK [4y]
- CEO & Co-founder @eof studios [5y]
- Games Lab Master/Mentor @Butterfly Effect [3y]



Course Info

- Lectures Thursday 14:00 – 15:40 @-1.58 (U120) FIIT STU
 - Michal Ferko
- Labs Thursday 16:00 – 17:40 @1.31a FIIT STU
 - Michal Ferko
 - Tibor Sloboda
- Labs Thursday 18:00 – 19:40 @1.31a FIIT STU
 - Tibor Sloboda
- Website: <https://gamedev.flamingchain.com/>
- Contact: michalferko1@gmail.com

Math for LECTURES



Invited Talks from the industry

- Part of Labs – last 2 labs
 - Is 16:00 – 17:40 OK for everyone?
- Topics
 - Game Design
 - Game Programming
 - Business & Project Management
 - Art/Content Creation
- People from the industry
 - Previously:
 - Global – Larian Studios, Funcom, Ten Square Games, Crazy Labs...
 - SK - PIXEL FEDERATION, PowerPlay Studio, Nine Rocks Games, SuperScale...

Evaluation

FIIT	FMFI
Project (70pt)	Project (100pt)
Game Design Document (10pt)	Game Design Document (10pt)
Presentation (5pt)	Presentation (5pt)
Prototype (50pt)	Prototype (80pt)
Gameplay video (5pt)	Gameplay video (5pt)
End of year test (30pt)	-

0 Idea Approval [Opt]

- Send your game idea for approval via email to michalferko1@gmail.com
 - You will get a response with approval or suggestions to adjust the idea
- Deadline: **Sunday 20. 10. 2024 23:59**

1 Game Design Document [10pt]

- Describe game mechanics of your game in the form of a GDD
- More info next week
- Deadline for the GDD: **Sunday 27. 10. 2024 23:59**
- Send PDF via e-mail (FMFI), upload PDF to AIS (FIIT)

2 Idea Pitch [5pt]

- Short presentation of the game idea (**ONLY 2 minutes**) with slides
- Send slides: **Sunday 17. 11. 2024 23:59**
 - PPTX with everything embedded (careful with Google Slides & embedding)
 - PDF as a backup
 - Via email (FMFI)
 - Via AIS (FIIT)
- Presentation: **Thursday 21. 11. 2024 16:00 & 18:00** (during Labs)

3 Prototype [50pt FIIT, 80pt FMFI]

- Create a game prototype as you described it in your GDD
- Deliver **all project files** and final build of the game
- Deadline: **Sunday 22. 12. 2024 23:59**
- Project discussion (exam): **Thursday 16. 1. 2025 10:00**

Prototype (2)

- Due to a huge variety of possible games, **no strict requirements** regarding gameplay/functionality are set
- Commented source code and the whole project
- Short presentation of the game
- Platforms: Windows (preferred), Android
- Using external tools, code and assets is **allowed**
- Large parts of the gameplay must be done by you
 - **Code you did not write must be marked with comments**

Prototype (3)

- **Must be in Unity C#**
 - Unreal can be approved on a case-by-case basis
- Work in a group is **strongly** recommended!
 - You must **have a GIT repository and send us access**
 - We recommend GitHub for free private repo hosting
 - highest limit for storage – 10GB for Git LFS, unlimited for small files in private repos
 - Alternatives: GitLab, Bitbucket
- Submission – **1 person from your team is enough**
 - FMFI: Send a link to Google Drive or Git via email (no speed-limited hosting!!!)
 - We will download it immediately!
 - FIIT: Upload to Google Classroom
 - You will get an invite in December

Prototype - Evaluation

Part	Points	Note
Minimum Viable Game (must have this!)	20	Can play the game, but it's rough, no extra mechanics, bad architecture, spaghetti code, looks ugly, playing it is frustrating, can finish content in 5min...
Good Architecture/Code	+10	The code makes sense, it follows SOLID principles, is clean, readable, with comments where needed
Extra Mechanics	+5	Extra mechanics on top of the absolute minimum for the game to be able to function
Original Game Design	+5	The game is not just a copy of an existing game, there's something original in it
Implementation of difficult systems	+5	E.g. more complex AI, procedural generation...
Game Feel + Polish	+5	Game feels good and plays well, has animations/effects for basic interactions...
Finished up game	+5	Has main menu, settings, enough content for at least 10min of gameplay, no obvious thing is missing...
TOTAL	55 (Max is 50)	

FMFI students: max is 80, so we just multiply by 1.6

MAKE A GROUP PROJECT!

You will learn more

You will create a bigger game

You will create a more finished game

Game Design **is** Communication

Communication is a must at work

4 Gameplay video

- Upload a gameplay video with commentary/subtitles to YouTube
- **At least 3 minutes long**
- Deadline: **Sunday 22. 12. 2024 23:59** (Same as prototype deadline)
- Send a link to the unlisted/public YT video
 - In the ZIP file you send your project in

5 Exam test

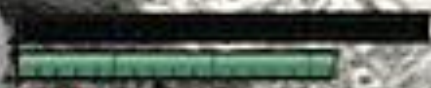
- Only for FIIT students
- 30 questions = 30 points
- **Must have at least 10/30 points to pass the exam**
- In AIS
- Questions from lectures & labs (not invited talks!)
- **Thursday 16. 1. 2025 9:00**

Prototype presentation (@SGDA)

- We will select 4-5 prototypes after submission
- They will present at the **monthly meet-up of game developers in Bratislava**
 - SGDA meet-ups
 - SGDA = Slovak Game Developers Association
 - <https://www.facebook.com/svkgda>
 - <https://www.facebook.com/groups/SGDAGroup/>
- SGDA meet-up: **TBA, Around March 2025**
- **Completely optional and you can refuse** (but should not!)

What if I miss a deadline?

01



YOU DIED

3 Flash Sweat



4 Estus Flask +1

Chaos Witch Quelaag

610

Evaluation

Points	Grade
100 – 92	A
91 – 83	B
82 – 74	C
73 – 65	D
64 – 56	E
55 – 0	Fx

Evaluation Summary

Assignment	Deadline	Points (FIIT)	Points (FMFI)
Send game idea via email	20. 10. 2024	-	-
Submit GDD	27. 10. 2024	10	10
Send Idea Pitch Presentation	17. 11. 2024	5	5
Present your idea	21. 11. 2024		
Submit gameplay video	22. 12. 2024	5	5
Submit project	22. 12. 2024	50	80
Project discussion	16. 1. 2025 10:00		
End of term test	16. 1. 2025 9:00	30 (need 10)	-
<i>(Optional) Present prototype @SGDA</i>	<i>TBA (Mar 2024)</i>	-	-

Optional Homework

- Install Unity
 - <https://unity.com/download>
 - Use Unity Hub, install Visual Studio as part of it
- YouTube
 - [Game Maker's Toolkit](#), [Extra Credits](#), [Unity](#), [GDC](#)
- Unity
 - Start with a beginner's tutorial for Unity: <https://learn.unity.com/pathway/unity-essentials>