Computer game development and design

Lectures: Jaanus Jaggo
Practice sessions: Jaanus Jaggo, Margus Luik
Let’s introduce ourselves

● Who you are?
● What are you studying?
● What are you good at?
● What is your favourite type of games?
Organization

6 EAP = 156h of work

**Lectures**: $15 \times 1.5h = 22.5h$

**Practice sessions**: $15 \times 1.5h = 22.5h$

**Homeworks**: $10 \times 2h = 20h$

**Projects**: 91h

Organizational information
(Courses)
https://courses.cs.ut.ee/2016/gamedev/fall/Main/HomePage

Reading material (CGLearn)
https://cglearn.codelight.eu
Mentoring

APT Game Generator - [http://aptgg.ee/](http://aptgg.ee/) Every monday at 18.00 - Kastani 42

Introduction to blender - 27. October (Thursdays) at 12:15 and 14:15

Liivi 2 room 003
Grading

Some lectures give points: 10 points

Solve tasks: 20 points (deadline 1 week, first task given today)

Complete 2 game projects (2-3 persons):

- Project 1 (3 weeks) - 20 points
- Project 2 (8 weeks) - 50 points

Bonus points:

- Game jam bonus - 10 points
- Presentation bonus - 10 points

91+ = A, 81-90 = B, etc

You will only lose points if you miss the deadline or doesn’t follow the requirements!
Projects

Rules

- 2-3 people in group
- Small in scale
- First one is about the size of Ludum Dare project - [http://aptgg.ee/ludum-dare-36/](http://aptgg.ee/ludum-dare-36/)
- Second one is about the same size but much more polished
- No extensive violence or improper material
- Milestones with deadlines (lose 5 points for each missed deadline)
- Mandatory project presentation

For the second project you can continue the first one!
Schedule

- 15 lectures
- 15 practice sessions
- 10 homeworks
- 2 projects

Project 2 presentations are at the beginning of 2016
Lectures

- 05.09: Introduction to game design.
- 12.09: Player types and motives.
- 26.09: Game narrative and setting.
- 03.10: Design document presentations.
- 10.10: Game development lifecycle.
- 17.10: Marketing, player acquisition strategies.
- 24.10: Project 1 presentations and discussion.
- 31.10: Design document presentations.
- 07.11: Graphics design, graphics pipeline, animations.
- 14.11: Sound design, sound pipeline.
- 21.11: Modern technologies.
- 05.12: Socialization through games.
- 12.12: Game industry today. Performance optimization.
- TBA: Project 2 presentations and discussion.
Practice sessions

Ülikooli 17 (Paabel house) room 218 on Thursdays at 16:15
Practice sessions

● 08.09: Introduction to Unity 2D
● 15.09: Introduction to Unity 3D
● 22.09: Game architecture 1
● 29.09: Game architecture 2
● **06.10: Project 1 roadmap and setup**
● 13.10: Coaching
● 20.10: Coaching
● 27.10: Coaching
● **03.11: Project 2 roadmap and setup**
● 10.11: Coaching
● **17.11: Milestone 1**
● 24.11: Coaching
● **01.12: Milestone 2**
● 08.12: Coaching
● **15.12: Milestone 3**
Introduction to game design
**Gameplay**

**Gameplay** - interactivity that the game induces. How player interact with the game and how game world reacts to the choices.

In SimCity, the gameplay is laying out a city and observing the citizens that start to inhabit it.
Game Design

**Game Design** - determines the form of gameplay.
Game Designer

**Game Designer** - is the person who designs the game, thereby establishing the shape and nature of the gameplay.
What player want

Players want:
● a challenge
● to socialize
● a dynamic solitary experience
● bragging right
● emotional experience
● to explore
● to fantasize
● to interact

Group task!
What player expect

- a consistent world -> expectation of what will happen
- to understand the game world bounds
- reasonable solutions to work
- direction
- to accomplish a task incrementally
- to be immersed
- some setbacks
- a fair chance -> Tharsis problem

- to not need to repeat themselves -> no man sky problem
- to not get hopelessly stuck
- to do not to watch
Working with limitations

Designer limitations:

- Technology available
- Members in the development team
- Budget available
- Time constraints

The golden rule: **Do one thing, but do it well**
The second golden rule: **Finished, not perfect**

https://drive.google.com/open?id=0B232TQYJs91cMklpYjFfcVJDSUE
Homework 1

Deadline: next monday at 12.00 (midday)

Watch the presentation: Hearthstone: 10 Bits Of Design Wisdom

https://www.youtube.com/watch?v=pyjDMPTgxxk

Now you have to design your game!

Write down following things:
1. What genre is this game?
2. core gameplay mechanics (at most 5 sentence)
3. Value for players
4. 5 design keywords
5. Gameplay limitations
APT GG first meeting

Starting Today at 18:15