

# 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

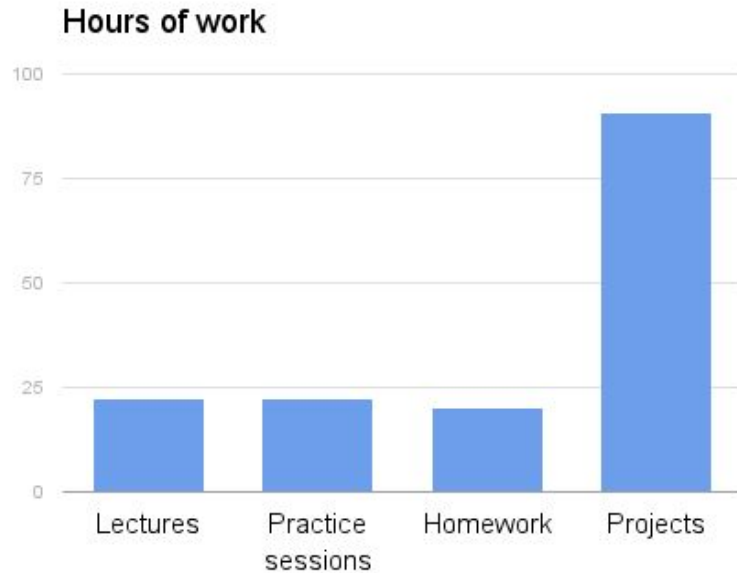
6 EAP = 156h of work

**Lectures:**  $15 * 1,5h = 22,5h$

**Practice sessions:**  $15 * 1,5h = 22,5h$

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

**Projects:** 91h



Organizatory information  
(Courses)

<https://courses.cs.ut.ee/2016/gamedev/fall/Main/HomePage>

Reading material (CGLearn)

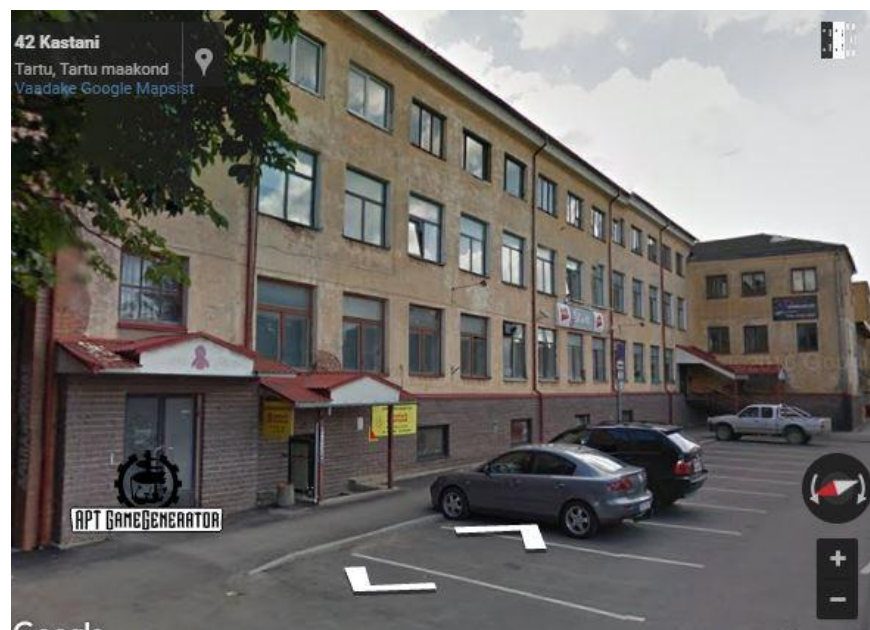
<https://cgllearn.codelight.eu>

# Mentoring

**VOLUNTARY**

**APT Game Generator** - <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

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

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

# Projects

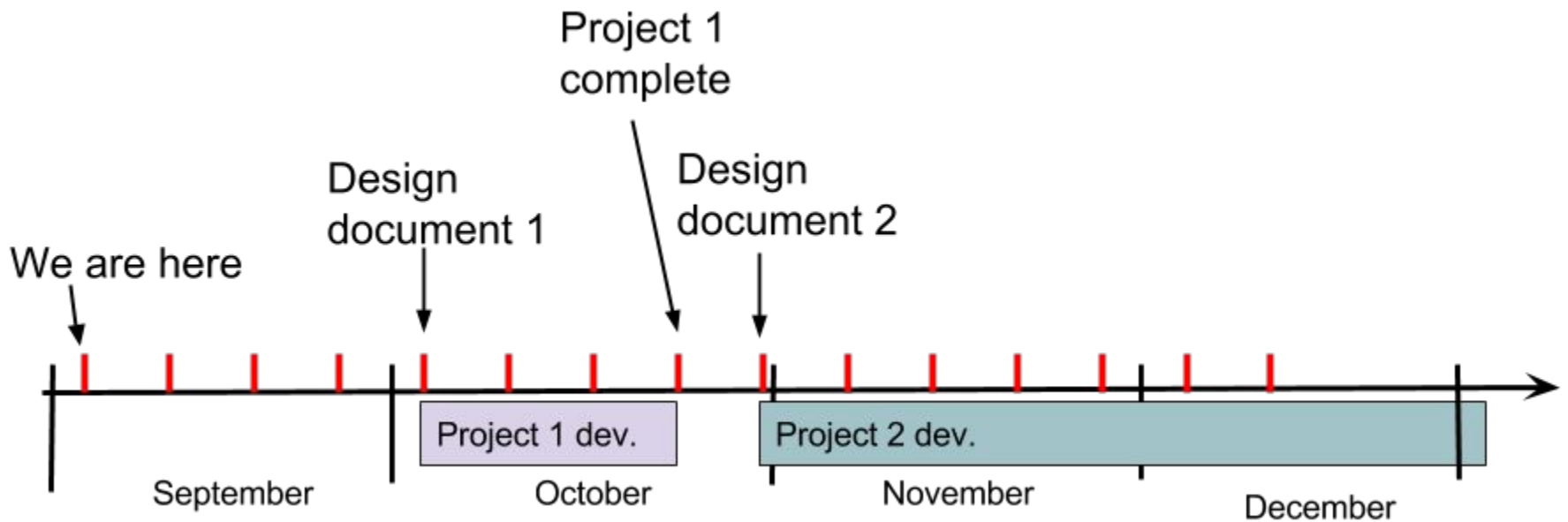
## Rules

- 2-3 people in group
- Small in scale
- First one is about the size of Ludum Dare project - <http://aptgg.ee/ludum-dare-36/>
- 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.
- 19.09: Prototyping. Game mechanics.
- 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.
- 28.11: Procedural generation.
- 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

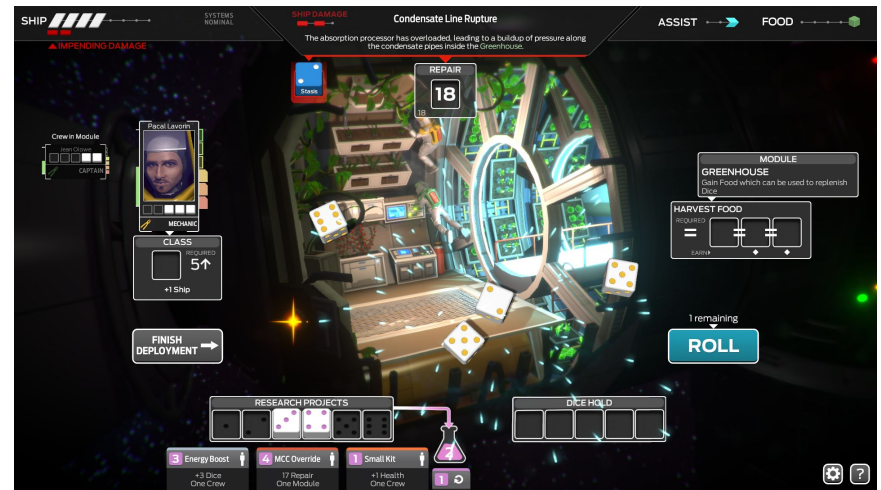
Players want:

- 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

