

Linneuniversitetet

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Project Specification

1DV437 Introduction to Game Programming

Unity game

The examination part of the course is that you shall design and develop a simple game in the Unity engine. The project is divided into three submissions: a game description, the actual implemented game and a technical details document describing how the game code was designed.

Submission 1: Game Description

The first submission is a document, written in English, describing your game. You can design and develop any type of game you like, but it is important that your game is of reasonable size for the course. If your game is too small or too large, you will get feedback from the Teaching Assistants about how to reduce or enlarge it.

The game description document shall include:

- A brief description of the game.
- Objectives of the game. What are the goals of the player?
- Feature list. A more detailed list about the features and functionality of the game.
- A sketch or prototype of how the game shall look like. You can draw a sketch on paper and take a photo of it, or use a drawing tool.
- Asset list. Where do you plan to get the assets (graphics models, sound effects, textures, ...) from? It is recommended that you look for free assets in the Unity Store.

An example game description document can be found at the course page on Mymoodle.

When you are ready with your game description document you submit it on the *Submission 1: Game Description* link on the Mymoodle course page. Deadline is <u>June 30 23:55</u>.

Submission 2: The Game

When you are ready with your game you compress the whole project folder using e.g. zip and upload it on the *Submission 2: The Game* link on the Mymoodle course page. If the compressed file is too large (Mymoodle has a file size limit of 50 MB), upload it to a Google Drive/Box/Dropbox folder and submit a link instead. Deadline is August 9 23:55.

Submission 3: Technical Details

At the same time you submit the game you shall also submit a technical details document on the *Submission 3: Technical Details* link on the Mymoodle course page. It shall be a 1-2 page document, in English, describing how the code was designed in your game. Deadline is August 9 23:55.

Things you shall discuss in the document are:

- What type of architecture you used for the game specific code and why (see lecture 2)
- What design patterns and data structures you used and what problems they solved (see lecture 1)
- How collisions and geometry was handled (refer to the theory in lecture 3).
- What type of textures, shaders, materials and lighting that were used (refer to the theory in lecture 5).
- How you handled animations, if you had any in the game (see lecture 5).

In other words, you shall write a technical description of your game and refer to the theory you have learned in the lectures.

Grading

You can get the grades Fail (U) or Pass (G) on each submission. If you receive a Pass (G) on all three submissions, you have passed the course.

If you get the grade *Rest/Komplettering*, there are some minor improvements you have to do to receive a Pass (G) grade. Read the feedback from the Teaching Assistants to know what to improve.