# DM842 Computer Game Programming

### Fall 2017

Department of Mathematics and Computer Science University of Southern Denmark

September 27, 2017

#### Introduction

The purpose of this project is to learn to apply the concepts from the course during actual programming, using a 3D library and programming language of your choice.

The project is to be done in groups, preferably of size two. Groups of size one and three are allowed.

## Requirements

You are to implement a simple game-like application, which includes several elements (lighting, textures, model movement, camera movement,...) from the graphics part of the course, and at least one element from each of the subjects AI, physics simulation, and collision detection.

Examples could be (rudimentary prototype versions of):

- First person shooter/adventure game.
- Car chase game.
- Space battle game.
- A 3D version of a board game.

You are free to come up with other project ideas yourself. The requirement is simply that the above issues are covered.

#### **Formalities**

You should hand in: An executable program or installer (must run on either Windows, Mac, or Linux [in the latter case on the machines in the IMADA Computer Lab]), source code, and

a report of 10-15 pages (excluding any appendices) in pdf-format. The main aim of the report should be to describe the design choices made during development, the reasoning behind these choices, and the structure of the final solution, as well as give a simple user manual for the program.

The project will be evaluated by pass/fail grading. The grading will be based on:

- The clarity of the writing and of the structure of the report.
- The ability to apply the concepts of the course.
- The amount of work done.

The material should be handed in using "SDU Assignment" in Blackboard.

You must hand in the material by

Friday, December 22, 2017, at 12:00