

# CSE-170 – Computer Graphics

## Final Project

**Project Demonstration Deadline:** Until your last lab of the semester!

**Project Submission Deadline:** As per the date in the assignment on CatCourses.

### Description

**Your final project has 3 main parts:**

**Part 1: Show your initial results in a lab by the Checkpoint deadline:** You have until your last lab before the Checkpoint deadline to tell us the following: a) define your chosen topic, b) show some first results and c) tell us what each member will do (if a group project). More information follows below:

- First results: It is ok if you do not have much to show but you have to show something already done (some application running) and demonstrate that initial steps have already been implemented. Your project will most likely be in a group and each member will have to present some initial results and explain exactly what features each group member is expected to do. Note that the TA will have to agree that your proposal is reasonable before you move forward.
- Implementation: Each member has to be responsible for at least one “significant feature” of the project. This “feature” has to be related to what we saw in class and has to be implemented completely by the member. External support code can be used but each member is expected to implement a significant feature of the project by himself/herself. Projects have to be implemented in C++ and OpenGL without immediate mode.
- Groups: Groups can have 2 to 4 members. Individual projects are also possible.
- Changes: If for any reason the plans for your project topic or group membership change, please communicate immediately to your TA, who will make sure we know what to expect from each project.

**Part 2: Presentation:** As with the PAs, you must demo your project in lab before the end of the semester. **This means you have until your last lab of the semester to demo your project.** Do not forget to do this, as we will **not** be accepting late demo's or submissions for the project.

At the demonstration you will run and explain your project to the TA. You can use your own laptop or any other computer in the room, just be sure your application will run fine in the presentation day.

**Part 3: Submission:** The submission has to be a zip file with: a) representative image, and b) your implementation code. Only 1 member of a group needs to submit.

a) Representative Image: as part of your submission, in addition to uploading your code, you will also be required to supply one .png or .jpg snapshot of your project. This image should be the best representative image to highlight your project. Please name your picture in the following format:

**proj\_[last name of a member or project name].jpg/png**

b) Implementation: all your implemented code has to be zipped and uploaded to CatCourses in a way that we can recompile your project ourselves if needed, so be sure no files are missing. Before submitting, test to unzip your package in a different directory in order to make sure it can still be compiled with no errors and every texture can be loaded. If the project is too big please notify us and you may upload just the .cpp files.

## **Project Topics**

A few suggested topics are provided in the Final Project Topics pdf document. You may also come up with your own project topic but it must be approved (to be neither too easy or too difficult). Read the instructions in the Final Project Topics pdf document for details.

## **Grading**

We will use the features you proposed to develop in your project for the grading. We will basically check how well they were implemented when you present the final result. Overall grading:

- 10% - Checkpoint presentation (5% for project and group definition, 5% for initial results)
- 15% - the final presentation/demonstration of your project works and is interesting
- 30% - the main goal of the project was achieved
- 30% - good implementation of the features identified by you
- 5% - correct submission of the project with nothing missing
- 10% - overall quality of your project