

Introduction to Computer Graphics Project – Overview

1 About

The class project is your opportunity to apply what you learn in class in and deepen you graphics programming skills. The project is done in the same groups as the homework. The teaching assistants provide support in the practical session. In case you run into difficulties, write a detailed email explaining your problem and what you have tried to solve ti so far to icg14@groupes.epf1.ch, so that the teaching assistants can prepare the session and provide the best advice.

The project is split into three stages: Geometry generation (2 weeks), Textures and Particles (2 weeks), Interaction and editing (3 weeks). At beginning of each stage you will get a more detailed handout, describing the minimal requirement to get a grade 4. Implement some proposed advanced tasks or your own ideas to get a better grade.

You can get started with any of the exercise or practical frameworks from the class. At the end of each stage you have to hand-in your current source code and a report, at the end of the project a final report and short video.

2 Framework

To do the project, you have to use the framework we have provided. No additional libraries (except OpenGP, Eigen, GLEW and GLFW) should be used.

You may copy code from external sources; however you have to port them into the provided framework. In addition, you must understand thoroughly the codes you copy. Do not forget to mention this in the report and provide references to the sources. Undeclared code will not be accepted.

When submitting your c++ source code, make sure to include all resources needed to reproduce your results together with a working cmake file. Note that your code must compile out-of-the-box and run on one of the lab machines.

3 Grading

The grade of your project is per group and composed by 70% by your implementation, and 30% of the intermediate and final reports and the final video. Regarding the implementation we grade the difficulty of the implemented methods, coding style (readability, structure, code-reuse), runtime performance, visual quality and your creativity. In the reports we grade clarity, technical correctness and completeness of references.