CSCD396 Project: Putting It all together: Painting a rural scene with OpenGL

Specification:

In this project, you'll create a rural scene of a village in Amsterdam, the Netherlands. You're given some application and shader files that create a grass field. You need to add additional elements to create trees, house, a windmill etc. as shown in Figure 1.

In this application, you'll use multiple shader files. For example, "**grass.vs**" and "**grass.fs**" were used to create the grass field. On the other hand, "**common.vs**" and "**common.fs**" files have been used to draw the ground. You also need to apply phong illumination model on the objects in the scene. Perform Gouraud shading as already used to draw the grass field. Apply the same directional light as used for the grass field for other objects in the scene. Hence the assignment will consist of drawing a number of objects as well as applying Gouraud shading on the objects using Phong illumination model.

The picture below is just a sample picture. Please feel free to design and create similar objects according to your own choice. You should be able to rotate the windmill at different speed.
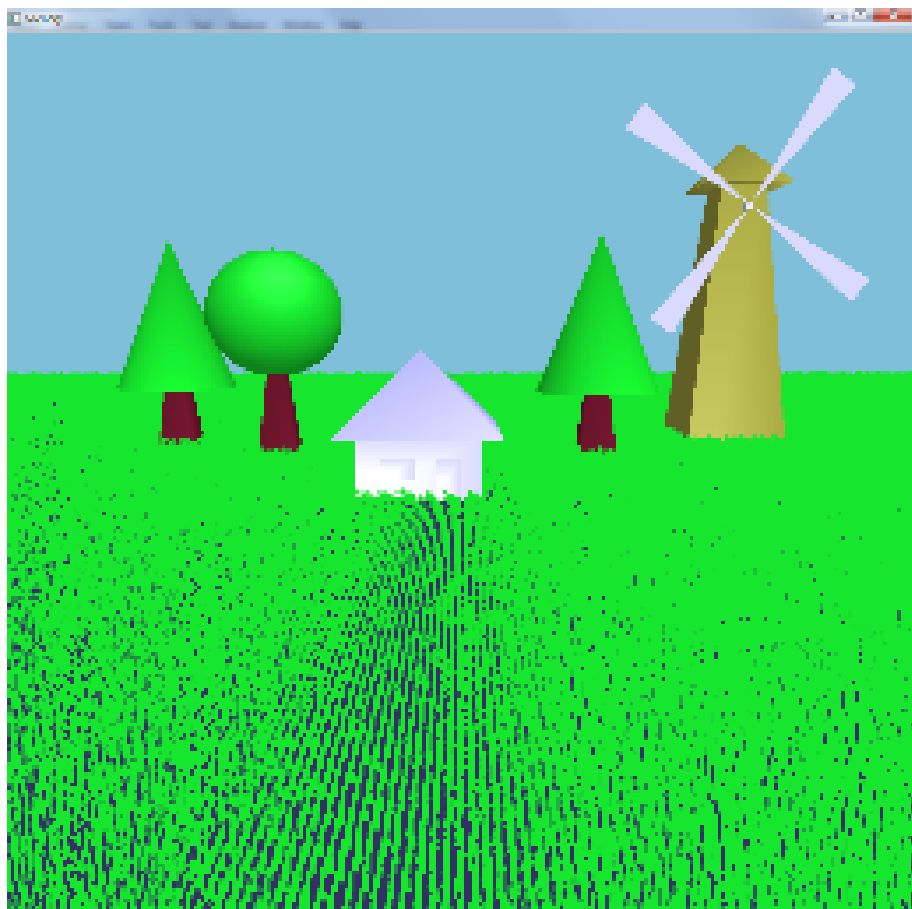

Figure 1: A rural scene of a village in Amsterdam, the Netherlands.

Evaluation:

Evaluation of the project will be performed in two phases: presentation of your work and submission of the complete code.

Submission:

Submission deadline is Monday, March 19, 2018. After submission, presentation of the project will be carried out.

Submit the project in a zipped file via canvas. Please feel free to add additional header files and cpp files as needed to draw the objects in the scene. Name the zipped file as Firstname_Lastname_Project.zip (your first name and last name).

This project carries **20%** weightage of this course.