Exercises for INF3320

Shaders

Along with this exercise set you are provided with a program to test your shaders. The program takes vertex shader as a first and fragment shader as the second command line parameter. Simple rotation mechanism is available using keys 'w', 's', 'a' and 'd'. Different models are available using keys '1', '2', '3'. Filename - `ex14-1_shaders.cpp`.

1. Write a vertex and fragment shader that will assign a $(1, 0, 0)$ color to each fragment.

2. Write a vertex and fragment shader that will replicate a `GL_FLAT` behavior of the fixed pipeline.

3. Write a vertex and fragment shader that will replicate a `GL_SMOOTH` behavior of the fixed pipeline - i.e. Gouard shading.

4. Write a vertex and fragment shader that will perform Phong shading.