186.140 Real-time Rendering
Read Me

Christoph Körner, 0726266, 932, ofice@chaosmail.at
Marc Haubenstock 1525175, 932, marc.dhaubenstock@gmail.com

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1 Read Me

1.1 Controls

- Left Shift - Rotate Camera with Mouse
- W,A,S,D - Forward,Left,Back,Right Respectively
- R - Reset Camera
- M - Toggle Wireframe

2 Technologies

For the implementation of our project, we use *C++*, *OpenGL 4*, and additional helper tools such as *Eigen* for linear algebra, *OpenGP* for geometry processing, *GLFW* for windows and inputs , *GLEW* for extensions and *SOIL* for textures. In addition, we are developing a Three.js-like framework for C++ called *ThreeC++* in the branch `feat/threecpp`. We will use it in the second stage for abstractions of scene, camera, meshes, geometry and materials in order to allow easy composition of elements and effects in the scene.

3 Effects

3.1 Skybox

Our engine features a skybox with a texture taken from
http://www.custommapmakers.org/skyboxes.php

3.2 Billboarding

Above the location of the camera there are two plane primitives with cloud textures. These use a simple view oriented billboarding.

3.3 Water W.I.P

To the bottom right of the camera spawn there is a tile with a simple reflection shader. This will be our water.

Of course all textures a subject to change.