EE 267 Virtual Reality: Lab 2

Instructions

Students should complete this lab before starting on Homework 2. Completing the lab will give you useful information that will aid in completing the homework assignment.

Task 1: GLSL

In this week's homework you will start working with GLSL, which is the OpenGL/WebGL shading language. It is a C-style language, so you will have to shift gears a bit from JavaScript. There are multiple GLSL versions that have different compilers and support different functions, directives, and types so you must be careful when searching online. In the class we are using WebGL 1.0, which is based on OpenGL ES 2.0, which uses the GLSL ES version 1.0. Read through the GLSL tutorial to understand some of the nuances of the language, https://webglfundamentals.org/webgl/lessons/webgl-shaders-and-glsl.html. You will find this knowledge very helpful in this and the following homeworks. This tutorial is meant for WebGL, which we are abstracting away with THREE.js in this class, so you don't need to worry about anything involving `gl.insertFunctionNameHere()` function calls. We handle the vertex arrays and attributes for you, so only worry about the GLSL code in this tutorial.