

CS 432 – Interactive Computer Graphics

Assignment 1 – WebGL Intro

Objectives:

1. To make sure that you can run the sample code provided.
2. Make minor changes to the sample code.

Getting Started:

- Download from BBLearn the zip file `1_Basic.zip`. This file contains:
 - `index.html`
 - The basic html file hosting our WebGL canvas and including necessary files
 - `app.js`
 - The main application that sets up WebGL, instantiate a Square, and makes calls to render it.
 - `square.js`
 - This contains the Square class.
 - `vshader.glsl`
 - A simple vertex shader that just passes through vertices and has a uniform color to pass to the fragment shader.
 - `fshader.glsl`
 - A simple fragment shader, respectively. The vertex shader just passes through vertices and has a uniform color to pass to the fragment shader.
 - `/Common`
 - This directory contains helper scripts including `MVnew.js` and `initShaders2.js`
- Extract this file, then open a prompt, navigate to this directory and start your webserver via:

```
python -m http.server
```

- In a browser, go to

```
http://localhost:8000/index.html
```

- Assuming you see the basic red square, you are all set to get started! If you don't, reach on out slack or see the TA/Instructor.

Assignment

Now your turn! Create a new class *Pentagon* that, when instantiated, can be used to draw a shape with five (5) vertices. The exact location and color of the vertices are up to you. In addition, modify the `app.js` script to instantiate this class, and render it to the screen.

What to submit?

Submit a single zip file containing all the files needed to run your code.

We should be able to extract your file, navigate to your directory, run an http server there and run your code in a browser.

Grading:

1. Something is displayed: 2 points.
2. That something is a pentagon: 8 points.