

CSCI 431 Project One Get Taste of WebGL

Objectives:

1. Write first WebGL code
2. Preparing to render in 3D
3. Preparing the basic WebGL context

Problem Description:

Draw a red square in a webpage.

Step by Step Instructions:

Open any editor, to do the following steps

1. Create a canvas. The following code will create a canvas

```
<body>
  <canvas id="my_canvas" width="640" height="480"></canvas>
</body>
```

2. The main() function in your JavaScript code is called when your script is loaded. Its purpose is to set up the WebGL context and start rendering content.

```
<script>
  main();

  function main(){
    var canvas = document.getElementById('my_canvas');
    // Initialize the GL context
    var gl = canvas.getContext("webgl");

    // Only continue if WebGL is available and working
    if (!gl) {
      alert("Unable to initialize WebGL. Your browser or machine may not support it.");
      return;
    }

    // Set clear color to red, fully opaque
    gl.clearColor(1.0, 0.0, 0.0, 1.0);
    // Clear the color buffer with specified clear color
    gl.clear(gl.COLOR_BUFFER_BIT);
  }
</script>
```

3. Put the above code in a HTML file. You may add some extra HTML code to make your webpage will display the message such as "This is my first WebGL project", "My name is (your name here)", A sample webpage shall be like

This is my first WebGL project

My name is Your Name



Due Date:

Will be announced on Blackboard.