

Project 5-Render Buffers

- **What was implemented:**
 - Texture loads correctly on a cubic plane.
 - Plane rotates as expected along with the texture rendered on it.
- **What you could not implement.**
 - Texture distorts slightly when the plane is vertical(don't know if this is intentional) the texture also seems more pixilated than it should be.
- **Additional functionalities beyond project requirements.**
 - No additional functionalities at this time
- **How to use your implementation.**
 - Right click and scroll to zoom in and out
 - Left click and scroll to rotate. Left and right rotates left and right, up and down rotates up and down
 - P switches between orthogonal and normal transforms
 - F6 recompiles the shaders.
 - ESC exits the window
 - CTRL and left click slightly moves the lighting
- **What operating system and compiler you used**
 - Operating system: Windows 11
 - Programmed in Visual studio: used VS internal compiler(gl????)
- **External libraries and additional requirements to compile your project.**
 - Same as previous projects:
 - Required libraries:
 - FreeGlut
 - Glew
 - CyCodeBase
 - LodePNG

In addition, FreeGlut.dll and Glew.dll were required to be put in System 32. Libraries were put in folders next to the project along with the associated headers. Both LodePNG.h and LodePNG.cpp need to be included in the headers as well.

A header file with the functions in the program is also included. Main.h

In addition, I used:

```
#include <string.h>
#define _USE_MATH_DEFINES
#include <math.h>
//I had to put this to make it work...for some reason
#pragma comment(lib, "glew32.lib")
```

Figure 1: The Render

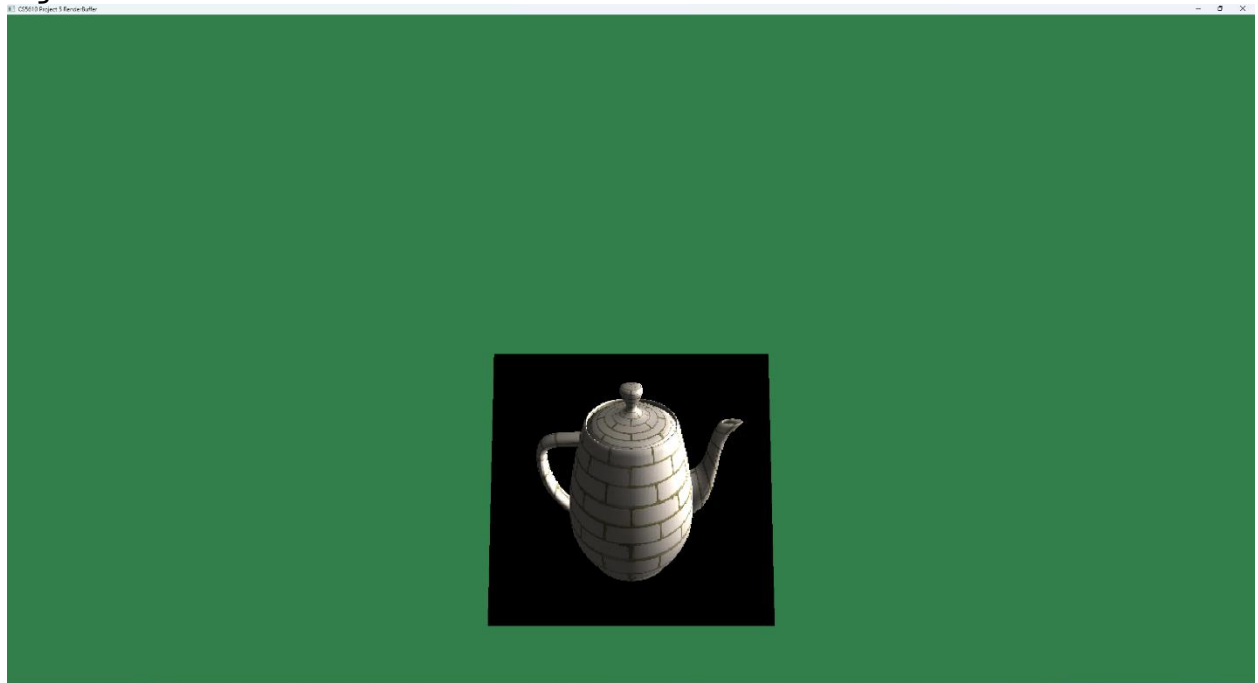


Figure 2: Rotated

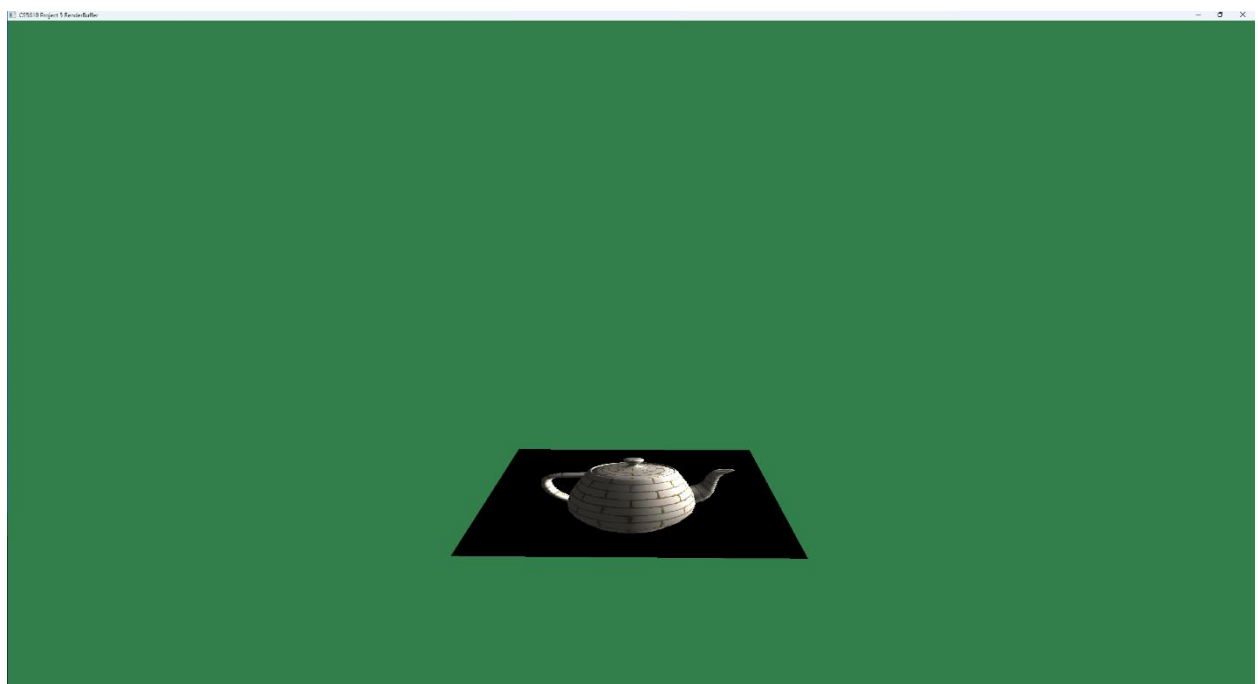


Figure 3: More rotation

