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Project 1

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For my 3D scene I wanted to select objects that were reasonable choices for my experience level which was null. I went with shapes that could be mostly broken down into triangle which thereby could be broken down it’s sets of three vertices. I wanted objects that were easy and similar so that I could focus my energy on understanding the project and learning how to do basics with openGL. I didn’t feel as though trying to take massive leaps with openGL was the best strategy for the long-term understanding of how openGL functions and operates. Unfortunately, I fell short on the final project by one primitive shape. I technically should have incorporated a cylinder to demonstrate that I could draw a cube, a plane, a pyramid, and a cylinder. I couldn’t figure out how to add the cylinder and wasn’t able to get help in time to make it work for the final project. Outside of this I mostly met the required functionality. You can move around the project using the mouse and keyboard, you can see that I applied a texture to the different shapes. I technically should have had multiple textures to properly replicate the images I sent in for my 3D scene, but once again I was unable to get the help I needed in time to properly do that. I missed a few targets, but I am still incredibly happy with how my project turned out. This was one of the hardest classes I have taken and required an impressive amount of invested time to even get as far as I have. I hope one day I can be mentored one on one with somebody to gain more knowledge of this fascinating program.

A user can easily navigate around my 3D world using the mouse and the keys w, a, s, and d on their keyboard. I decided on this method of navigation because I believe that it comes the most natural to the user, and I believe that it is the most likely choice for people who would be interested in running this program. There is nothing to do besides view the world so I don’t think anyone with a video game controller, or joystick would be remotely interested. The keys I chose were selected because for most games you find online those same keys are used for navigation. It felt that this selection was the most appropriate and most user friendly which is what I hope to have achieved.

I really wouldn’t consider much of my project to be custom other than the vertex data itself, but this was done intentionally. I wanted my code to be straightforward and easy to replicate. If somebody wanted to re-use my code and create other objects, they could easily perform a copy paste situation and alter the vertex data, virtual camera, texture, and object locations. It would be extremely self-explanatory and easy to change without risking the integrity of the code. This project I created would honestly be an excellent tutorial for the module 5 milestone. This code is extremely modular and extremely organized which helps the user actually learn, understand, and replicate what is happening.