CS 330

Project Two

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**Reflection**

I took the picture of the scene long before I was comfortable with creating scenes in OpenGL. With that being said, I still tried to keep a simplistic scene that would allow me to practice multiple facets of OpenGL’s libraries. I wanted a variety of shapes, a variety of colors, and a general sense of uniformity. For this reason, I decided to make the scene take place on my wooden side table with a perfectly symmetrical design on it, so I could easily design a symmetrical scene.

For a scene to be fully appreciated by the user, it must be traversable. In this case, the best way to make it traversable is to let the user control the camera, both its location and its direction. This can easily be done with WASD and the mouse, like many common video games the user might be familiar with. The user can also use the scroll wheel to zoom in and out, which will give them a more in-depth view of any of the objects in the scene.

Each object gets its own function where the mesh is created. This includes creating a list of vertices, specifying the stride length, creating the VBO, etc. Each function is extremely similar, and this is a fairly small project, so I am comfortable copy-pasting the create-mesh function for each shape and making the minor changes. On a much larger project a more reusable function would be needed, but I prefer giving each object its own function for simplicity. Each object is rendered at the same time, all in one frame, to ensure that they are all visible in the same environment. This is still a reusable project because everything is already set up in regards to the window and the frame. A user could easily change the location of the objects, or replace them entirely. The user could also very easily change lighting, textures, etc. The code is well commented, so it would be easy for the user to figure out where everything is needed.