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CS 330

1. I chose the objects for my scene based on how difficult I believed it would be to create the shape, as well as ensuring that I would be able to meet the criteria of four different primitive shapes in the scene. Having the final project require for there to be multiple textures required me to actually learn how to insert multiple objects into the scene. Since from what I could see, the vertices of a mesh would be assigned one texture only, which meant if I decided to just have write the vertices of all the objects in the scene under one mesh then they’d all have the same texture. I turned out to be not as difficult to do, and I’m glad that I was pushed to put more effort into researching and using OpenGL more proficiently.
2. At the moment, a user is able to navigate the 3-D scene using specifically designated keys, as well as a mouse. In order to setup movement in the scene, the use of Callback functions were implemented so that the program knew to look out for user input. Next, the Camera header file was used to do the heavy lifting and perform the math required to update the scene as the camera moved. Lastly, keys were designated to perform specific movements.
3. While I don’t think I really created any custom functions, because there were multiple sources and multiple ways to create the scene, once I chose a way to create the scene I was forced in a way to ignore some resources. I began to grow comfortable with the use of glDrawArray, which meant that when I saw a resource that used glDrawElements, it wouldn’t be an easy copy and paste. This was prevalent in Module 5 when the github tutorial went to using glDrawElements, when in the previous two modules glDrawArray was used. As a result of wanting to keep my current progress, I kept researching and was able to adapt the resources to fit a different style.