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CS-330 Computational Graphic and Visualization

7-1 Final Project: Reflection

**Justify development choices for your 3D scene. Think about why you chose your selected objects. Also consider how you were able to program for the required functionality.**

A lot of the objects selected were very representative of the real-world shapes. Beforehand, understanding the program was important as I ran into a lot of roadblocks regarding how the files’ relationships are connected. Because of the selected objects I chose, the most important thing that was on my agenda to completing this project was organization, foremost. It was very important throughout the milestones when I had to add in the camera system, texture system, and lighting system. Because of how complex the starter program was, at first glance, it was overwhelming and I learned that without organization, it would’ve made the project more difficult than it was.

**Explain how a user can navigate your 3D scene. Explain how you set up to control the virtual camera for your 3D scene using different input devices.**  
I set up the navigation for my 3D scene, primarily using the keyboard and mouse. The keyboard represented camera movement from the x,y,z axes whilst the mouse emphasized dynamic camera movement of those axis but to also control the speed of the movement with the scroll wheel.

Certain views can be viewed when pressing designated keys.

**Explain the custom functions in your program that you are using to make your code more modular and organized. Ask yourself, what does the function you developed do and how is it reusable?**

The custom functions of my program were a way to be more organized because of the amount of shapes and transformations that were done to the meshes. Having comments further organized what shapes are which, what is being changed, and how it can keep dynamic objects (of multiple meshes) together.