Dillon Belanger

CS 330 SNHU

Final Project Reflection

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For my objects I chose 2 notebooks, a pen holder, a single pen, and a desk clock. The reason I chose these objects was because they were a good mix of basic and complex objects. Some were easier to recreate, such as the pen holder with a single cylinder and the notebook with simple box meshes. The more complex objects were the pen, which was 2 cylinders and a cone, and the clock of 2 cylinders and a box mesh. I was able to orientate the shapes in a way that matched my project proposal picture and was more natural. Using resizing and rotations to translate the shapes the way they realistically would look like.

I set up the control for the camera through various code for the usage of WASD keys for moving around in the 3D environment with keyboard input. Also using Q and E keys for panning the camera up and down when needed. The mouse cursor was locked in the window for mouse movement to control the turning of the camera around the scene. Viewing the scene in different perspectives was also implemented with the number keys 1, 2, 3, and 4. Giving orthographic views of the scene from the side and above.

As for the program's functions, I used multiple resources throughout the modules. Adding the resources for custom textures, lighting, materials, and so on. These became modular because I was able to add my own settings to my scene using the custom functions. For example, the function to add custom textures is reusable because it can be applied to any project or any shape within projects of the same folder and libraries. So, I can keep the function through multiple projects to pull images for the use of textures. The same goes for lighting, having presets for specific lighting can be made and reused for multiple projects with the custom functions for adding them with code. If I need multiple presets, I can create them and use the same function to implement them into any project, this makes it organized and modular to all the other projects in my library.