**Project Reflection**

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The reason I chose the objects I did for the scene was I felt it provided a good variety of shapes and designs which allowed for an interesting scene design. It wasn’t consisting of just rectangles or boxes; it had cylinders, cones and spheres as well. It also had a variety of different lengths and dimensions to, such as long and short cylinders. This allowed me to practice adding a variety of different shapes and connect some of them together to make complex objects.

I was able to program for the required functionality by utilizing the provided resources to accurately and efficiently code what I needed to meet the requirements for the scene. I utilized the code for lighting, moving objects around, and adding textures to the objects. I also used best practices by not suing code I didn’t need, commenting out lines I might use later but didn’t need in the moment, and also putting comments for the code I put in, so it was easily identified what the purpose of the code is.

The user can navigate the scene but either using the keyboard, mouse, or both. They can use the keyboard by pressing W, A, S, D to go forward, left, back, and right respectively. They can also use Q to go up and E to go down in the 3D space. If the user needs more fine control of the camera, then they can use the mouse to control the pitch and yaw of the camera. Move the mouse forward to look up, move the mouse back to look down, then move left or right to move left or right in the scene. If they need to speed up or slow down how fast the movement speed of the mouse is, they can utilize the scroll wheel of the mouse, with scrolling up increasing the speed and scrolling down lowering the speed.

There are a couple of examples of custom functions I have used to make my code more modular and organized. For example, the way the functions for the textures and materials are organized and laid out to be easily readable and added to if more textures or materials ever need to be added to the program. I also have comments for each new function to explain the purpose of what it does so as someone is scrolling through the code they will know what each function does without having to figure out the code itself.