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**My 3D Scene Reflection**

The scene I chose for my 3D model contained objects I am familiar with and use multiple times weekly. Using items I am familiar with was a concept I decided to use to ensure that the items I needed to recreate in my 3D model were items I could easily picture in my mind in 3D space. Programming for the required functionality took time and consideration to find the correct shapes and textures to perfect my model. Putting all these together was a challenging but fun and intriguing exercise. Finding the correct lighting and textures as well as finding the colors that would work was quite the challenge. Building the 3D shapes to form the objects in my model was a whole other challenge that required much research and time to figure out.

A user can navigate through my scene with either input from the keyboard or mouse. Using the A S W D Q E keys will move the user’s camera around the model. Using the mouse will move the user’s camera around the model as well. Using these methods will allow the user to look up and down, left and right as well as zooming in and out and around the model.

I kept the functions in my program similar to the way the functions were setup in the tutorials and the learn OpenGL resources. I was able make the code more organized by keeping the formatting of the code the same throughout. For example, I added shapes in the URender function with the same setup as my original 3D shape. I used multiple functions for each aspect of the program to ensure that it stayed modularized. I made sure that every create function such as UCreateMesh and UCreateTexture had a destroy function as well. The assignments in this course were difficult but I was able to use debugging and trial and error to fix the issues that I raninto along the way. I am looking forward to learning more about OpenGL.

**References**

CMP Educational Program. (2014). CMP 3D Plotter. CPM 3D plotter. Retrieved October 18, 2021, from https://technology.cpm.org/general/3dgraph/.