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CS330

Final Project Reflection

When completing my various milestones, the development choices I made all had one key factor in common. My choices were made as a reflection of the requirements set in the rubric. I followed the rubric and instructions for each milestone as a blueprint for how to develop my code. With the assistance of the resources provided for me within each corresponding module, I made sure to develop my code for my 3D environment with the best coding practices to ensure clean and comprehensive code throughout. As for some of the choices I made on specific shapes, textures, and even lighting, I would always refer back to my source image as an ongoing blueprint for my project. For example, since I was unable to find a sufficient texture for the background plan that resembled the painted wall in my source image, I utilized the lighting to create a warmer color to more closely match my image. As for my object selection, as a beginner in OpenGL I didn’t want to overwhelm myself with the most complex shapes I could find. I tried to choose objects that I felt would be simpler to recreate within a 3D environment. Yet to challenge myself a little, I did arrange my items to be sitting on each other and even one object turned at an angle.

A user would be able to navigate my 3D scene by using their keyboard and mouse. I was able to successfully create code that allowed camera movement associated with keyboard and mouse input from the user. For example, if the user wanted to use their keyboard to move the camera left or right, they would simply need to type “A” and “D”, respectively. As for the mouse, the user can simply move their mouse, and the camera movement will move in conjunction with their mouse input.

I made my code more modular and readable by ensuring proper spacing and documentation was made throughout. This allowed better readability of the code and what sections of source code belong to what shape, light, etc. I also made sure to apply the same theme of sectioning off the different methods that was originally provided within the final project code file. I made to use proper annotations for each method to ensure the user would be able to see which code section correlated with which method. By being able to easily identify the different methods used, it is then easier to change and modify the code or reuse the existing code to add to the project. For example, when creating the object to render within the 3D, I saved time by copying and pasting the existing code from a previous shape I created and then manually adjusting the code to reflect the new shape and its attributes.