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CS-330

7-1 Final Project

For my scene I chose to replicate a desktop containing various objects like a pen, notepad, flowerpot, and laptop. The objects in this scene were to be created using multiple 3D shapes. For example, the pen was created by using two different cylinders and a cone. Using more complex objects to be replicated met the requirements of the project because multiple shapes were combined. For the lighting of the scene, I wanted to focus on using natural light to make the scene more realistic. I wanted to replicate a scene that is lit through sunlight via a window. To do this, I chose mostly ambient lighting in my scene. This lighting was placed near the back and top of the scene to keep the view unobstructed. The textures chosen for the objects were meant to help with the realistic approach. Something like a flowerpot that had a matte finish should not be glossy in the light, so an appropriate texture was needed.

Navigating the scene is done with the use of WADS keys, QE keys, mouse cursor/scroll, and orthographic/perspective views. A user can use the WADS keys to move forward, back, left, and right. QE keys are used to move up and down in the scene. The mouse cursor is used to move up, down, left, and right without using keys. It is hidden, so it does not interfere with the view of the scene. The mouse scroll is used to adjust the speed of the movement in the scene. These navigation functions make for a simple and clean viewing experience of the scene.

The functions for navigating the scene, lighting the scene, texturing objects are reusable and can be applied to other scenes. They were constructed using best practices to keep the code clean and organized. Commenting was implemented for better understanding of the code and the purposes behind each function. It is important to keep the code organized to minimize errors and maximize functionality. Organization helped me when moving from project to project in this course. When moving from a module project to a milestone, I was able to find code for a function and reuse it when needed.