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7-1 Final Project Reflection

**Justify development choices for your 3D scene**:

As someone who had never played around with OpenGL, or any 3D creation at all up until this point, I sought out to challenge myself by recreating my desk from a 2D image. I wouldn’t be satisfied or feel accomplished without finding out a way to do a more complicated render. I chose to do my keyboard, my mouse, my monitor, and my actual PC tower, all sat atop my desk. These objects were familiar to me. Comfortable. I knew what they should look like and felt it would be a fun push to make them come to life in a new way.

**Explain how a user can navigate your 3D scene**:

To navigate the 3D scene in which I have setup, users will use a combination of their keyboard and mouse. The mouse is used to maneuver the camera orientation, as well as pan through the scene to fully view any portion they wish. The keyboard is used for a;; directional movement of the camera, with ‘W’ moving the camera forward, ‘S’ moving the camera backwards, ‘A’ moving the camera left, and ‘D’ moving the camera right. All of these work together to ensure a full range of motion throughout the scene. I also added ‘Q’ to move the camera up, and ‘E’ to move the camera down. Pressing ‘O’ or ‘P’ will force the camera into wither a perspective view, or an Orthographic view.

**Explain the custom functions in your program that you are using to make your code more modular and organized**:

While I do not feel as though I reinvented the wheel within my code, I did make changes to the 1-2 example format by creating render functions for the larger overview of my build (monitor, keyboard, pc, mouse). This ensured my code was both easily readable and organized to further streamline my own work. These functions also serve as reusable templates for any work I may want to continue doing in this code in the future, as I now have functions and methods to take over to new works to act as a new baseline to work from. The best example of this would be the PC Exterior and interior functions. I can now go in and add new components to my build or swap out parts I was not pleased with without having to write each line over again from scratch.