CS-330 Project

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The scene I sought out to create was my desktop which composes of a monitor with stand, desk, keyboard, mousepad, and mouse. For these objects I used different 3D simple objects to make up their object. For the monitor I used a box mesh to make the screen and then a plane mesh overlayed to display the monitor. For the monitor stand I used a box mesh to create the simple stand. For my desk I used a simple 3D box to create the desk and for my keyboard I used a 3D box with a plane on top of it to display the keys. The mouse was created with a sphere using elongated scale and the mousepad was created using a plane mesh on top of the desk.

A user can navigate the scene using the WASD keys to control the forward, backward, left and right motion of the camera. They can also use QE keys for upward and downward motion. There mouse can be used to pan the view around so you can look around your location and the scroll wheel is used to just the speed of the movement. The user can also press the P key to change between orthographic and perspective views at will.

The custom functions are the “uCreateObjectMesh” functions these functions are very important and help the code be reusable in the future due to being able to create multiple meshes of different types and then changing the mesh in the code using translate, rotation, and scale. So if I wanted to create a new scene in the future like an outdoors garden I could use the meshes I already have and just create the objects then change their scale, translation, or rotation to the desired numbers to get the expected output.