July Wellman

CS 330: Computer Graphic and Visualization

Southern New Hampshire University

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**Reflection**

While developing my 3D scene, the shapes used for my objects were a box, cylinder, plane, sphere, and tapered cylinder. I had originally submitted two project proposals but chose the easier of the two. Due to my lack of experience using OpenGL, I did not want to go overboard and design a scene I could not accomplish. I was able to create the four objects on a table object fairly easily and quickly within the first four weeks. It was not until we got to the lighting portion I expanded the scene and started adding other objects, like legs for the table, a door, a window, an end table, and a lamp. The end table and lamp were to meet the two light requirements. I wanted to use natural light from the window which resulted in the walls and window. The door was added because I enclosed the scene and added the door for aesthetics.

To control the virtual camera, movement, and panning were set up to a keyboard and mouse. AWSD was traversing forward, backward, left, and right. The mouse was used to look around the scene. You can also increase the speed of mouse movement by scrolling down to go faster and scrolling up to go slower. The “O” button was used to view the scene in orthographic view and the “P” button was used to view the scene in perspective view. The enclosed scene so the user will be able to experience the scene in a fully enclosed room environment. No collisions have been added to the walls yet so the user can simply go through the walls currently.

To make my work modularized, I kept spacing in my code and proper comments and headers for new objects I created. The more objects I created, the more difficult it was for me to navigate to the proper object to edit code so proper commenting helped this process. I also separated objects that required more than one shape into the same sections so that I could easily get to all the components of the object in one spot instead of having to scroll through the code. I wrote out a longer comment line to separate objects. I also tried to comment on all the code that I added in case I need to come back and reference them.