Devin Criswell

08/18/2024

CS 330

Final Project Reflection

For my scene I selected a few items to produce out of the many presents in my original image. I chose the objects I did because of where they are located in the image and felt that it would fill the scene appropriately. A requirement for the project was to use two or more primitive shapes to create at least one object. The object I chose was the lamp, it was made with a sphere, cone, cylinder, and tapered cylinder. For all the objects I created I applied textures to best represent the original image. Multiple lighting sources were also used in the scene.

In my scene a user can use keyboard and mouse controls to navigate the 3D scene. For the keyboard movement w, s, a, and d are being used. W and S zoom the camera in and out. A and D move the camera left or right. The mouse scroll wheel changes the movement speed of the camera. The mouse can also be used to rotate the camera in any direction. An option was added to swap between orthographic and perspective views.

For the 3D scene custom functions provided a way to simplify some process and give the ability to perform operations required for the project. Custom functions helped create the navigation for the 3D scene. Being able to navigate through the scene was a requirement for the project. Being able to take the inputs from multiple sources gives the user a better experience. Functions helped to limit redundant code and reduce possible errors in the code. If more time was present or as a future project time could be spent developing more functions to implement. This was an interesting project to develop that I had difficulties with at certain points. Some parts needed troubleshooting and reworking, but I feel that I developed the 3D scene to the required specifications and matched the original scene closely with the chosen objects.