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12/10/2023

CS 330

Professor Holbert

CS 330 Module 7 Final Project

For my project I chose Big Ben, which in idea was easy to visualize. My scene includes a cube (rectangular prism) for the base of the tower, a pyramid to resemble the top of the tower, and a plane beneath the cube to represent the foreground of the scene. I was also going to implement a cylinder to represent the face of the tower, but was focused on fixing my camera to view the 3d objects already listed. The pyramid, prism, and plane are in the code and documented specifically where in the comments. For texturing, I anticipated on using a classic brick image to texture the clock tower appropriately, however I had issues loading and texture and was returning an error in the shader in regards to the texture. However, my vertex and fragment shader ran without error thankfully. For lighting I planned on focusing on ambient and diffuse lighting for a natural scene which reflects the scene of Big Ben accurately as it is located outside. As can be seen in my code, my 3d projects that are present are placed appropriately and accurately to how Big Ben is. The base of the scene is the plane, followd by the base of the tower which sits on it, followed by the pyramid that sits on the rectangular prism representing the top of the tower.

For the camera movement, I have the input being received correctly, as the callback function returns a message in the window when the input occurs, but the function to move the camera does not seem to work. This is the same with the left, right, middle mouse input, it is received correctly but will not move. I have both orthographic and perspective displays avaiable but I do not have it set to where both can be accessed without uncommenting a section of code that allows the orthographic scene to be present.

In regards to custom functions, I have the escape key bound to close the program, and sadly that was the only custom function I was able to get to work. I also abstracted the program as much as I could to make it reusable and more organized for me to look at. I believe with my comments, and this paper, I document and speak on the main functions of the project giving an okay high level overview of what my project does, is, and issues I have an encountered along the way.