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Final Project Reflection

My first idea for this project turned out to be too ambitious, so selecting my objects the second time was based primarily around what could realistically be accomplished by the end of the term. I also had an issue with my project files for most of the term where I was unable to import the needed libraries. This prevented me from building or testing my code and made the code analysis features of Visual Studio useless. Despite these challenges, I believe I was able to implement most of the required functionality by following the provided guides.

Navigation in the 3D scene is accomplished through the WASD keys. Upward and downward movement can be performed with E and Q, respectively; scrolling the mouse wheel will increase or decrease the movement speed depending on the scroll direction.

This project uses two custom functions: DefineObjectMaterials, and SetupSceneLights. DefineObjectMaterials handles declaration of each OBJECT\_MATERIAL and sets their properties, including unique tags for each. These tags are later used when applying the material to an object using SetShaderMaterial. SetupSceneLights configures the OpenGL scene to use built-in lighting and sets the properties of the lights in the scene. These functions encapsulate functionality that is usable in a variety of different circumstances, and any project which requires assigning materials to an object or configuring built-in lighting for a scene could reuse them.