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CS330

Project 2 Reflection

Four different objects were used for this project: plane, cube, sphere and cylinder. A majority of the objects in the original photograph were rectangles or cylinders. For instance, the tissue box, light and table were all created using rectangular (or planar) objects. The candle case, candle itself, and caps for the salt and pepper shakers were all created using cylinders. Lastly, the salt and pepper shakers were spheres. All of the shapes were rendered using triangles. However, only the rectangular objects were specified using arrays of vertices. The other shapes were rendered using additional classes that were responsible for generating vertex data with the parameters provided to them. These objects were chosen due to my familiarity with the methods required to render them, and they were the most prominent pieces in the original photograph.

This scene can be navigated via mouse and keyboard. The user can navigate throughout the xyz coordinate axis by using the A, S, D, and W keys to move left, back, right and forward, respectively. The user can control camera movements by using the mouse. The camera angle will directly follow the movements of the mouse, and the user can zoom in or out by using the scroll wheel on the mouse.

Custom functions in this project include classes to handle creating cylinder objects, spherical objects, shader programs and static meshes. In previous milestones of this project, all of this code was required in the main class. This made the class excessively long and difficult to read and adequately maintain. Furthermore, this allows for more clarity and conciseness for code to be developed and understood by outside parties and future developers. Lastly, the modular approach allows for greater reusability by future projects and future phases.