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CS-330-T2832

Comp Graphic and Visualization

SNHU

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Final Project Reflection

![A picture containing text, businesscard, building material

Description automatically generated]()

For this project, I have displayed a desk, as a flat plane with a wood texture. On top of the desk sits several items. First there is a flat piece of paper, also a flat plane, with a paper like texture. On top of the paper sits a blue pen, with a blue colored texture. The pen is made up of sixteen triangles to create a rectangle and a pyramid, which combine to form the pen. The final object on the desk is a laptop, with a silver texture. The laptop is also made up of twelve triangles to form a laptop shape.

The scene can be navigated using the camera object I’ve built in. The camera can be moved using the W, A, S and D keys to move forwards, left, back and right, respectively. The camera can also be moved up with the Q key and down with the E key. Finally, the camera perspective can be changed between a 3D perspective view or a 2D orthographic view using the P key. The speed the camera moves at can be adjusted as well using the scroll wheel. Scrolling up will increase the speed the camera moves at while scrolling down will decrease the speed instead.

In order to create each object, a different UCreateMesh() function is created. For example, the pencil is drawn using a UCreateMeshPencil() function and the paper is drawn using a UCreateMeshPaper() function. In addition, each object has its own gMeshId. The pencil is called gMeshId\_pencil and the paper is called gMeshId\_paper. Each texture also has its own texture id. So the blue pen texture is textureId\_blue and the papers white texture is textureId\_paper. These principles apply to each object that is drawn.