Summer Bernotas

CS-330 Comp Graphic and Visualization

Professor

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Final Project Reflection

Justify development choices.

I chose bottles because I believe them to be a good starting point of learning 3D graphics with OpenGL. The bottle shapes would include the use of combining more than one shape and allowed for good practice manipulating those shapes. I was able to program this scene within the required functionality because each bottle had a slightly different shape than one another and would require the use of more than one shape, whether on top of each other or next to each other, to create a final piece that resembled a bottle with liquid inside of it.

3D scene navigation.

To set up navigation for the scene, I utilize the “WASD” keyboard keys to allow movement around the scene. Where “A’ and “D” moved the camera along the x-axis and “S” and “W” moved inward and backward to support a zoom effect. I also utilized the “E” and “Q” keys to move along the y-axis in order to allow the user to move the scene upwards and downwards. This covered all basic movement bases so that a user could easily maneuver throughout the scene.

Custom functions.

In order to make my code more organized and modular, I took inspiration from the sample scene. I turned each separate shape into its own function allowing for the shape to be called in the main code to render the scene. This allowed for each shape to be under its own function making it easier to locate each shape being used and manipulated to create a specific object.