Elizabeth Walko

8/18/2024

Final Project Reflection

A group of fruits and a candle

Description automatically generated

1. **Justify development choices for your 3D scene**. Think about why you chose your selected objects. Also consider how you were able to program for the required functionality.

The image I was given by my client contained a candle and several pieces of fruit. (Image shown above). Most of the objects are recreated in my 3D scene. The only one that does not appear is the nectarine. I made this choice because nectarines have notches in them that would be difficult to recreate with the shapes I had access to. Without it, the scene looks less cluttered while still portraying the client’s overall message.

1. **Explain how a user can navigate your 3D scene**. Explain how you set up to control the virtual camera for your 3D scene using different input devices.

I set up control of the virtual camera by programming functionality for the keyboard and the mouse. Pressing different keys causes the scene to react in various ways such as zooming in or out, moving, or changing perspectives. The mouse can change the direction of the camera and the mouse scroll wheel can change how quickly the other actions work.

1. **Explain the custom functions in your program that you are using to make your code more modular and organized**. Ask yourself, what does the function you developed do and how is it reusable?

The custom functions in my program are used to render each object. These functions are reusable because an object that appears multiple times can call the function rather than rewriting the entire code block. In this project, the RenderApple function is called twice with different position coordinates. This renders the two apples that are seen in the image.