Enhancement One:

The artifact I created is a scene of a countertop with several glasses and a vase created in C++ using OpenGL. This artifact was originally created in the summer of 2024. This project was included in my ePortfolio due to its stark distinction from the other projects. It includes visual elements that are not showcased in other projects which allows me to expand my showcase and its versatility. While the use of OpenGL isn’t the only way to create visual elements, it represents an important skill for games or other visual focused projects. The artifact was improved by streamlining the lighting sources and removing a redundant light source. The main light source was softened to create a less harsh brightness as well. In addition, textures were created for the cups to make them feel more realistic and tangible than their bright, single-color predecessors. The glass cup was also made more transparent using a proper alpha channel. I believe this project meets a majority of the planned enhancements in module one, however, I want to spend additional time working with the lighting and seeing how I can improve it. One thing I learned while creating and improving this artifact is how hard it can be to revisit old projects when comments are not clear. Without the many comments I left in this code, it would be nearly impossible for me to remember its function. Thankfully through the use of these comments, I was able to relearn many of the things I knew in OpenGL and could work towards successful revision.

Enhancement List:

* Added textures to all cup objects
* Simplified light sources
* Modified light values for better parity
* Added texture to mail object
* Increased transparency of glass object

Instructions for Testing:

1. Open the 7-1 FinalProjectMilestones Solution file in Visual Studio
2. Compile and run the MainCode.cpp file
3. Use W to move forward and S key to move backwards
4. Use A to move to the left and D to move to the right
5. Use Q to move up and E to move down
6. Use O to enter Orthographic projection and P to enter Perspective projection
7. Scroll up to zoom in and scroll down to zoom out
8. Manuever around the scene and view the objects
9. Press ESC to exit