4-2 Milestone: Enhancement Two Narrative

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SNHU CS-499

1. Briefly describe the artifact. What is it? When was it created?

The artifact is the final project from CS 330 Computer Graphics and Visualization. It is an partially interactive 3D environment based on an image I selected at the start of the course, which in my case was a table setting of a meal. It was created in June 2023.

2. Justify the inclusion of the artifact in your ePortfolio. Why did you select this item? What specific components of the artifact showcase your skills and abilities in software development? How was the artifact improved?

I chose this artifact because my interest and career goals revolve around automated and autonomous systems. 3D environments can serve as a testing ground for various automated systems in a virtual environment before attempting to push to a live model. The initial enhancements were to create a randomly generated environment for testing object detection, while this week the enhancements involved creating the intelligent agent that roams the environment and detects objects. When flagged objects are found, the object coordinates are printed in the console window. I feel this improves the original artifact by expand beyond the original static setting into a more complex animated setting with intelligent agent decision making, and it showcases an ability to create complex designs and solutions.

3. Did you meet the course objectives you planned to meet with this enhancement in Module One? Do you have any updates to your outcome-coverage plans?

I feel that I have met all plans so far. As with last week I don't have any updates yet, but I still need to reach out for further clarification on the third enhancement for databases.

4. Reflect on the process of enhancing and modifying the artifact. What did you learn as you were creating it and improving it? What challenges did you face?

Now that I have re-familiarized myself with the program I didn't have as much difficulty with this enhancement despite the increased complexity. I did have to overcome a few challenges such as figuring out how to adjust the camera to the drone's point of view, and creating the drone movement logic, but this wasn't too difficult to overcome.