Enhancement 3 Narrative

This artifact is known as the Treasure Hunt Game from the CS 370 Current/Emerging Trends class here at SNHU. It is a machine learning project that had us implement a Deep-Q Learning process to train an agent known as pirate to solve a maze as efficiently as possible.  
 I selected this artifact for my ePortfolio because AI and machine learning is becoming increasingly prevalent as time goes on. That’s why I thought it would be a valuable addition to an ePortfolio. The reason I chose this specific artifact for all three of my enhancements was because there is a lot of room for change, improvement, and learning. For this enhancement, I successfully implemented a MongoDB database that stores the experience buffer after a set amount of epochs. I believe this is a great enhancement because it opens the door for multi-agent machine learning or other kinds of collaboration. Something that I believe is valuable in a professional setting.  
 In terms of course outcomes, I believe I have met the ones I outlined in Module One. To be specific the two outcomes I met are “Employ strategies for building collaborative environments that enable diverse audiences to support organizational decision making in the field of computer science” and “Develop a security mindset that anticipates adversarial exploits in software architecture and designs to expose potential vulnerabilities, mitigate design flaws, and ensure privacy and enhanced security of data and resources”. And, so far, I don’t have any changes in terms of updating my outcome-coverage plans.

In terms of the overall process of enhancing this artifact, I will admit it was easier than the other two but challenging in its own way. The only real problem for me was actually integrating the MongoDB C++ with my visual studio as I’ve never done something like that before with C++ or visual studio. It took me some time and effort, but as a result, I learned a decent bit about how to link external libraries and make sure everything plays nicely.