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

This artifact is an open-source inventory system that I found. I thought that it could demonstrate both my database and data structure knowledge. I have always had a deep interest in inventory systems and the different functions that you are able to do with one.

**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 algorithms and data structure? How was the artifact improved?**

When I looked at this inventory system, I looked at all the functionality that was available for the SQL database component of it. What I noticed was there was a lot of information that was being put into tables, but there was not a lot of specific information on a per user basis. Although tables are great for managing information among a group, I really thought that it would be useful to have single use data stored as well. In order to do this I went in and created an additional sql file called SQLEnhancements. This allows for the artifact to have the ability to create a specific table for each user, group, and sale.

**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?**

Yes, I was able to show my understanding and grasp of the database functionality which is tied into the formation of SQL table structures. I was also able to enhance the ability of the program to add some new features, the single sign on table functions.

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

I learned that for this to be implemented properly it would have to be run as a second SQL file instead of coordinating with the first. If you allow it to run separately then it doesn’t confuse the user and users table. Initially when I started working on it, it was updating the users table the way that I had initialized it to update the user table. Allowing for the single use tables creates a quick and easy way to manage multiple purchases from one buyer instead of searching through all of them. It also is easier to keep track of password and login attempts for each user. I was also able to read over the existing code more closely and see how other functions were called especially how the database is utilized in the oswa SQL file.