5-2 Milestone Four: Enhancement Three: Databases

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# A

The artifact I chose for Enhancement 3 was from DAD-220: Introduction to SQL. I took this course here at Southern New Hampshire University (SNHU) in the spring of 2019 and completed the original artifact at that time.

# B

I chose to include this artifact into my ePortfolio because it shows a lot of the skills required to be a SQL developer. Though the original artifact is fictious and basic, it can be attributed to many of the current SQL databases implemented by companies today. This artifact highlights some of the Create, Read, Update, Delete (CRUD) skills needed to maintain a SQL database. Though the original data was limited, I chose to expand on the data to add additional features to make it more extensive, which highlights my skills as a SQL developer. I have shown innovative ways to manipulate a database and perform the everyday CRUD functionality to maintain it. I have also addressed the outcomes by programming a solution to solve problems involving storing, manipulating, and accessing data. Finally, this written narrative demonstrates my ability to clearly articulate my ideas and accomplishments as demonstrated by the working product.

Below is the full list of enhancements I made to this artifact:

* Since the original artifact was given to me in a third-party website and was no longer available, I had to recreate the SQL from scratch using LiveSQL from Oracle
* Once the original database was built, I expanded on its complexities by incorporating additional features such as adding another table, adding more Olympic athletes, adding additional contacts in the contact list, and adding additional messages to messages table
* I created a step-by-step guide with screenshots included to recreate this database
* I performed advanced CRUD actions such as deleting things based on a query versus row by row
* Finally, I developed a complete script within LiveSQL so that anyone who searches for my script, can easily run it to produce the same results
* Future enhancements would include incorporating a mongo database to add additional security features such as authentication to the database and a JavaScript interface

# C

I did meet all the objectives I intended to meet for this artifact. I expanded its complexity to allow for more features and performed various CRUD functionality throughout to make the product more realistic. In the future, it would like to develop a MongoDB interface with JavaScript to add certain aesthetics to the program.

# D

Reflecting on creating the original artifact was hard because I was brand new to computer science and specifically SQL. Even though I got a great grade on the original artifact, I still wanted to learn more about SQL and thought that I could improve the artifact. During Enhancement 3, I took my original artifact and improved it by adding additional features and performing advanced SQL concepts. In the end I am happy with the enhancements made to the artifact and could see myself as a SQL developer in the future. The only challenge I faced when enhancing this artifact was learning the nuances between coding in MySQL versus LiveSQL. For example, MySQL uses INT(8), whereas LIVESQL uses NUMBER(8) when creating a table. After I sorted out the language difference, it was strait forward in replicating and expanding upon the original artifact.