5-2 Milestone Four

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CS-499: Computer Science Capstone

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

This artifact was created back in June/July of this year to help my students learn the Security + acronyms for use in their tests. However, after speaking with our course developer, I found that they would not be able to use this program, due to fear of backlash from CompTIA. Instead, I planned on saving any upgrades for this course.

**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 decided to select this item because it is a very detailed program, and it uses SFML to incorporate a visual overlay. I believe that it shows a much larger understanding of more complex code.

I improved this artifact by incorporating a SQL database to show the top ten scores that were achieved while playing this game. I believe that by incorporating this database, the students can see what others achieved and will push them to try to score a higher score.

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

I did meet the course outcomes that I had planned in Module one exactly like I had planned. I may want to update the database more in the future to incorporate a “longest played” database as well, but I feel that may be done later.

**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?**

I have learned quite a bit as I have further improved this artifact. This was the first time that I have incorporated a SQL database into a program. Not only that, but I also have never pulled said database to be displayed in the program as well. With that being said, I had a bit of trouble initially with the database saving each game multiple times, and when it was displayed I had one name with all ten scores being filled with the same score. After some research and learning how the code should be, I have perfected the database to only save each game once, and to push the players name to that score.