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Capstone Journey

While completing this course I have used many of the skills and knowledge I gained while working through the computer science program. The program has improved my programing skills, critical thinking, problem solving and more. There have been some difficult times where I was up against the clock on some assignments during courses that really pushed me to find new ways to overcome the obstacles and has made me a much more competent developer thanks to that pressure.

With this capstone project I was asked to pick an artifact or artifacts for enhancement to demonstrate the skills I have attained during this computer science course. I believe that the event manager program contains examples for each of the requirements through my enhancements, design, and execution to create the final product.

One goal was to create a collaborative environment where I employ strategies to enable organizational decision making in my field. I believe that was accomplished with my clean command based modular code and my initial thoughts when I was designing the event program itself. I made sure that all requirements given to me where met and there is plenty of room for further changes if anyone raised any suggestions.

I have created a visual and oral code review where I went through my program detailing how it works. I then went on to look at the program and find places where enhancements would be most beneficial and any other improvements that would help the program in either end user experience or program execution. The outcome of that review created the list of enhancements for my capstone project, and I went on to make the event program much more user friendly, added better management and implemented better security thanks to that review.

Additionally, I touched on solving problems with algorithmic solutions in the case of my search bar and event sorting in the program. Though simple, thanks to the use of SQL databases, this also demonstrated that I could look at a problem and develop a sound solution that uses the features of the tools I chose or am required to use.

Finally, we have security, an ever-present goal to make all programs safe from unauthorized access or misuse. With my event program we are dealing with a personal event tracker program so the threat of a unauthorized user is slim however I did make sure to implement security wherever I could. This is evident in my SQL statements where I changed all the original query statements to prepare the incoming user data. This makes SQL injection attacks very difficult as the data is forced into string formats rather than raw data. I also have the login page where it checks users who login and make sure they have access to data that they are allowed.

As I worked through this computer science course, I developed an understanding that with many parts of computer science many things have been done already or at the very least most of the parts have been created. The trick for developers and computer scientists now is to improve what we have and combine the parts to create new things to help innovate and improve as we proceed in our lives, professions, and careers for the future.