I found this project to be more challenging than I initially gave it credit for. I realized that I had many conceptual ideas for what I wanted to design a database and application for and really began to appreciate the complexity that goes into application design for some of the apps we use daily. I think the most difficult part of the course, besides some of the programming, was the Project Management portion. It was very informative and gave me more insight into project management, but I think this course re-affirmed that I prefer to be on the tech side of things and not the project management side. In my tech career, I am not a stranger to Project Management but the amount of work that goes into planning can be daunting and cumbersome, as projects tend to have financial ramification.

I faced many technical challenges in the development of my project. I did not find the database side too difficult, but I did have many difficulties with the web frontend. I am not the best programmer, so I used the language that I am most familiar with, C#. Many times, I found myself having to re-design my classes to avoid cyclical redundancy and to ensure that the way that I was storing data made sense. There were also things about .NET that I had to learn the hard way, and it is the way I learn best. I think that all our courses prior to taking this class help us to be well-prepared for taking this course. I have taken a few classes in my academic career that were project management and project based. Those along with professional experience helped make this course easier, it would have been more difficult if it was the first time, I had seen these concepts. We also took multiple programming classes on python, HTML etc. and they are paramount to success in this class. I don’t think that anyone walks out of those classes as an expert but rather creates a foundation should a person choose a developer career path in the future. As far as other topics that should be covered, I think database design and data theory should be taught as well. One class that I think should be taught as well is HCI(Human Computer Interaction). When designing my application, I found myself reflecting on principles of that class when making programming decisions.

I think the software engineering technique that was most useful for me was following the SDLC and conditional testing. At one point, I thought that I had my project complete and found an anomaly and had to go back to the drawing board to figure out an alternate plan. Had I not done in-depth testing, I would not have caught this issue.

One of the techniques that I found most useful was to have a Dev and Production environment. There were a few times where I was experimental and worried about breaking my app beyond the point of return or in a manner that would have required a monumental rollback effort. Having a development environment that I could test in with little repercussion was very helpful. Also, using GIT was very helpful, I have used GIT for years and appreciate its usefulness. Sometimes, I think it is easy to make a small change and not realize the repercussions of your change. Having version control and proper branching helps to see all the historical changes that I made and if I run into a problem that I was not encountering before, going back and looking at my commits has helped uncover small errors that I made. I can’t think of any techniques that I leveraged that I did not find beneficial.

I think the biggest challenge I had in my project was understanding a few bugs that I encountered in .NET framework and keeping my work in scope. In this course if we make changes to our code, we also must update our documentation. Seeing that we have created several charts, tables, business cases etc., I found it to be important to keep my reports organized as well as the charts and tables that we created as well.

I benefited in many ways from working on this project. I think the best benefit I had was learning to think more critically when designing software. My realm is being a Database Admin and have very little experience with front-end programming. I feel that this project made me more well-rounded and has made me curious to learn more best practice techniques and has made me more fluent with using C# and .NET framework. If I had more fundamental knowledge with C# and .NET it would have helped a lot.

Overall, this course went above my needs, I think that due to how hands off this course is, it challenged me to be efficient with time management as there is a balance of project work, and development.