Lessons Learned

Going into this course, I had zero experience of SQL. Starting from week one, I learned quite a lot. I learned about what an entity-relationship diagram (ERD) is, how it is used in database design. I also learned the basics of SQL and how to make a good database, learning about how to follow basic design principles like consistency, normalization, and redundancy. I dived into SQL and about fundamentals of database design such as joins, functions, stored procedures, views, and permissions. Some of this is similar to Java (CSE 142), but some were very different.

The assignments were very helpful and learning how to use the SQL language to make a database was a good experience. It was also made clearer by the need to create a professional summary document every week. At first it seemed tedious but putting into words what I accomplished in a week was very helpful in making me understand what I did and why I did it.

Another aspect of the class that was useful was the data visualizations and the business intelligence aspect. Making reports/visualizations with Excel, Tableau, and Power BI was useful and I believe I will use some of those skills in the future. It was nice to take data in a database, something that can seem abstract, and make a data visualization to see how all the data is connected.

Towards the end of the quarter, I also learned about things like SQLite, NoSQL, Python, data storage, and cloud computing. Admittedly, this was impacted by the Coronavirus and I did not go as in depth into them as I did the previous topics. However, I understand some basic concepts of such topics and in the future if I ever have the desire to go more in depth on those topics, I believe I have as solid foundation to build upon.

Finally, all throughout this quarter I have been seeing how data is used in databases and how important databases are in my life. Everything in the world today revolves around data and databases, so the knowledge I have learned in this class will forever be useful in my life.