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Database Project Reflection

We used an actual company fully functional and running for our database project. Understanding the scope of our project, we were able to allocate our time effectively to complete the work. We started early and given that the three members in our team are working on a consulting project in the pharmaceutical industry, we were relatively confident that we knew enough about CVS as a PBM to build a database for it. We used Microsoft Visual Studio and based it off of what we had learned in class. We reviewed how to do the code and accordingly made tables for the database design. Building the database did take some time, but mainly because we did around 8 tables. We created Order, Orderline, Doctor, Customer, Cashier, Prescription, Supplier, and Product Category tables.

In terms of our project process, we created the database first, and did research on any of the code that we weren’t able to complete. After creating the table, we simultaneously delegated the tasks of database design (relational database design) as well as the SQL queries on Visual Studio. Each of the queries and subqueries were worked out well. We played around with the aggregate functions, as initially we made the average prescription cost at CVS through the SUM function from Prescription, later we decided to go with Average. We sorted the products and the suppliers through product name in ascending order and used Inner Join as instructed. In the one in which we executed a query with the most sales generating doctors, we noticed that full outer join could and does include values that are not linked to both tables. Through this Query, while not all doctors had provided a prescription medicine at the pharmacy, they’re still a part of the database which ensures that they are included and denoted through ‘NULL’.

Our self-study included going through previous assignments, and in class activities that could help us throw the coding of the database. It was challenging at first but everyone in the group had their own strengths. For example, Andrew was good with Queries, so he walked us through some of the queries we might be struggling to understand. The team believed in allocating tasks and delegating work, be it the relational database or database design or even putting together everyone’s views on the reflection. Andrew did work with the queries and the database design, Ansh worked on the relational database and the writing the introduction. Upasana edited parts of the code by working with Andrew and take charge of collating viewpoints and churning out the reflection. We used each other’s strengths to learn from it. We managed our time well so we weren’t overwhelmed by the end of the project.

If we were to do something differently, we might have added pharmacists to our tables, but this time we had already done quite a few of these tables so we decided to work on the ones we had. Also perhaps individually going through the visual studio in-class activity all over again would have helped as we wouldn’t have moments where we felt like we had to refer to old activities or the internet. However, in terms of learning, actually building the database taught us quite a bit, and we learned a lot from doing the hands on work.