IT 697 SQL Module Seven Reflection Journal

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The seventh week of this course could have been a challenge as I tested positive for COVID-19 on Friday afternoon. Fortunately, I had prioritized this week’s learning experience and had been able to spend six hours exploring JOINS and writing my own queries to answer practice problems before the symptoms really kicked in. In the early weeks of this course, I occasionally found myself needing to spend a handful of hours on Sunday to meet the weekly requirements of this experience. If I had not learned that I am better off spending an hour or two per day early in the week, I would have struggled to accrue hours over the weekend and I would have been in a tough spot heading into the final three weeks.

It helped that this week’s topic was JOIN and I knew exactly where to find tutorial and video resources. There are many types of joins, so each tutorial had 4-6 separate pages and the Youtube series had 4 separate videos. It was important to read and watch each of these to learn as much as I could about joins. I used my go-to web tutorials, which are tutorialspoint.com, w3schools.com, and dofactory.com. Although each respective page contains similar information, I found it useful to reinforce my understanding as well as see each of the different examples of joins in use. After reading and watching the tutorials, I feel that I have a decent understanding of inner and outer joins. Almost all of the practice problems that I have tried on sqlpad.io require joins, and I noticed how much easier the process came to me later on this week. I also became comfortable with the occasional situation where it is appropriate to omit the join and instead just include the equivalency in the WHERE clause. On simple joins, this method is much faster, but I do not think it scales well to more complex joins. I am still a little unsure on how self and cross joins work. Seeing some examples of self joins helped me understand why they might be necessary, but I still do not entirely comprehend how they work. I have a feeling that I need to think about the new table that a join creates when executed, and how the query can then interact with that new table.

While exploring joins, I came across sqlzoo.net, which has a page specifically for joins that contains 13 practice problems about soccer matches, teams, and goals. I was able to successfully complete problems 1-7 and 9-12, but there were two that I could not figure out. I kept the page bookmarked so that I can return to those problems once I get more comfortable with joins.

The following day, I continued with my main form of practice which is solving questions from the sqlpad.io problem set. I was able to solve seven more easy-level problems this week, bringing my total for April to 23 problems and 46 points. According to the progress report from 4/11, I am in 11th place. I estimate based on March’s top 10, that I will need to earn 146 total points to crack the April top 10 and receive one of the prizes such as a 45-minute resume feedback. In the coming weeks, I will begin to attempt some medium and hard-level problems, which can earn me 3 and 5 points respectively. I have nearly gone through all of the easy-level problems at this point. Some of the problems I solved this week include “Top 5 cities for movie rentals” and “Total number of actors.”

Finally, I took the next step on what I have planned for my second work example in my executive brief. The project is to convert organizational database requirements into a data model and then into a database schema using SQL. I found two example database requirements that I could use for the project. The first is a company called ‘Sweets R Us’ that wants to keep track of its customers, employees, products, and suppliers. The second example is a hospital that wants to keep track of patients, locations, physicians, appointments, and pharmacies. It turned out that the first example comes from a blog that follows through on the exact steps of the project that I am planning. Since I found this out, I now plan to use the first example and the solution on the blog to attempt a practice run-through of my project, and then I will do it again from scratch with the hospital example.

References

Chegg.com. “Hospital Physician Appointment Management Database System.” Chegg. 2021.

Retrieved from: https://www.chegg.com/homework-help/questions-and-answers/hospital-physician-appointment-management-database-system-following-data-model-designed-ho-q53093611

McCaldin David. “DATABASE DESIGN STEPS / HOW TO DEVELOP A DATABASE.”

mccaldindavid.wordpress.com. 2010. Retrieved from: https://mccaldindavid.wordpress.com/article/database-design-steps-how-to-develop-a-2pr18mcjtayt9-11/

Project/Coursework Tracker

* Company requirements -> database schema
  + Started in week 4 with the database design podcast, found one example with solution and one example that I can try to solve on my own for the project
* Sqlpad.io movie rental practice questions
  + 25/90 completed
  + 11th place as of 4/11/2021