Reflections On Learning

Ryan Devlin

Franklin University

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Professor Crawford

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When I began Comp 281 at Franklin University in the Fall of 2016, I had been an ETL developer for over a year and a half. However, despite working with databases as a professional, I was excited to take a class on them. I joined my team as an automation test developer, picking up the database portions of my job along the way. Although I have gained much knowledge dealing with databases, such as SQL, I always felt the lack of a proper foundation of knowledge would hinder my ability to grow in this field. The purpose of this paper is to look back on the course and see where I have grown, and where I can grow more.

Before the class began, the areas of my database knowledge that were the most lacking were database design, database networking, and diagrams. Because I do not use these in my day-to-day tasks at my job, I did not have much of a chance to cultivate these skills. This class was able to increase my knowledge of design and diagrams. Even though I do not use these daily at work, this clearer understanding allows me to better take advantage of the diagrams I do encounter, along with a better understanding of some of the choices made by designers and architects. For networking, I have a much better understanding of the different options provided by networking, along with the pros and cons of those choices. However, I did not learn as much practical information, such as the difference between service name and SID, that I encounter in my daily routine.

One of my favorite parts of the class was learning about the different types of relationships between tables. Before returning to school at Franklin, I set out to learn programming on my own. The language I chose was the Ruby programming language, and with it, the Ruby on Rails framework for creating web applications. In Rails, I was introduced to the concept of associations. These were ways to tell Rails that tables were related to other tables. Some of these associations were One-To-Many, One-To-One, and Many-To-Many. At the time, I understood joins in SQL, but did not truly understand these associations; that is until Comp 281. Through the assignments and reading, I finally understood what these associations look like when implemented. I also gained a better understanding of the value these designs provide, such as a single record for each student, part, vehicle, or store. These single points of data reduce the amount of work that must be done to update the records, along with reducing the number of opportunities for user error. The concept of a bridge table was fantastic to learn, as I had come across those at work, but never realized the significance of the design.

The increased understanding of associations helped me develop an insight to how database design works. One of my biggest opportunities for growth at work is what I call “learning to speak data fluently”. When I began learning Ruby, many conversations were spent translating ruby-speak in my head, trying to make sense of it all. This required many sessions before I could process what I was hearing verbally into abstract thought in real-time. I have the same problem when listening to talk about databases. Learning about associations, database design, and keys (specifically composites) helped solidify those concepts, so now I do not have to process as much information when going through design and development meetings at work. Along with that, I have noticed that I think in terms of database design at times, and it is fun to try to design a database around things I enjoy, such as a hockey game, baseball game, or Magic: the Gathering. This should come in handy when developing web applications that require turning real-world objects into database ones.

When I started this class, I knew some of the practical elements of database management. However, I always felt behind, because I lacked a proper foundation of knowledge. After taking Comp 281, I feel that I have a good breadth of knowledge. While I would not classify any of my new-found knowledge as deep, I do believe it sets the table for me to continue learning about these different subjects, both in school and in life.