1. Challenges: I experience 2 primary challenges

- a. Big picture. It took awhile before I really started to understand how all the parts of a full stack project fit together. In particular, I had to spend quite a bit of time thinking through the flow of logic between the front end to the middleware to the back end and then back to the front end. Once I finally got the basics of that I was able to work more effectively with the different technologies.
- b. Individual parts. The second biggest challenge was understanding all the different parts of each technology, e.g., syntax, programmatic flow, logic, etc. I still don't feel very confident with the details of programming logic, so it can take me quite a while to get a piece of programming to work, or debug something that I've written. I'm getting better at it but I need significantly more practise.
- c. Another challenge was using two different middleware languages and 2 different database technologies. I'm glad we did that, as I got good experience with both. But it was still definitely very challenging!
- d. I'm still not very strong on databases and SQL, and I need to put more effort into being able to quickly and accurately write queries that do what I want them to do.

2. Successes

- a. My biggest success was finally getting the basic functionality of the project to work. I managed to get the last piece to work yesterday evening and it was very gratifying to see it working! The main method of getting that to happen was to just patiently and systematically work through every line of code until it worked. Also, I asked a lot of questions...
- b. Another success that may not be easy to see in the project was that I definitely gained a new appreciation for object-oriented-programming. I know that because we were just learning PHP that some of this had to be done procedurally, but by the end I could tell how much more complicated it can be to write, edit and maintain code that was written that way. In the future I will definitely think about writing programs in an OOP method before doing anything procedurally.

Thanks again for offering this class and all the hard work that you put into it. It has definitely helped me in my job and I'm sure it will be of benefit in my future classes.