Software Tools

Individual Reflective essay

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Daniel Jameson T00158237 – Reflective Essay

This document serves as documentation for the work I did for the Software Tools Project done by our group consisting of Conor Dawson, Pawel Kaminski, Michelle Quirke, Oluwadarasimi Ayomipo Babarinde(Dara) and myself. We had the idea to create a currency conversion app whose scope was to deal with customer and account entities and facilitate transactions between them. We had initially met and decide to divide out the work according to who was best at what area. Michelle and Pawel were assigned to backend development, Conor was put on frontend development, Dara was put on deployment and I was left to do the database schema and database testing.

When the project started, I started working on the schema for the Database, designing a Schema and UML class diagrams for a PostgreSQL hosted Database. I had designed these only for them to go unused when the project switched the project over to another Database technology, MongoDB. It should be noted here that MongoDB does not support Class diagrams or external documentation, as it is not a relational database. You could design entities, but they would not be connected. This means that most of my earlier work for the project had to be canned, although copies of this work are held on Github, under my account and the Currency Conversion repos.

Later, I was assigned the responsibility of creating the database tests. I tested that the information in the database was being returned using a READ test. Then I moved on to a CREATE test to make sure the data was being supplied and wrote into the database. Further, DELETE and UPDATE statements were tested for their accuracy.

There was confusion over the project pipelines as it was nearing completion. The database tests that I wrote appear to have been mostly gutted to prevent them failing. To be fair, I was myself unable to get the tests to work, although I assumed it had something to do with the database connection, as I have cross checked the values in the database to make sure they would be inserted properly. I apparently do not have adequate privileges to deploy my own automated tests, although Dara showed that everyone involved should have had administrative privileges. This task was delegated to Pawel and Michelle who had taken over pipeline duties.

I have learned a great deal from this project that in any team setting, teamwork and communication is of paramount importance. When setting up my documentation for the project initially, it looked vastly different from what was handed up at the end. I can’t say that I’m overly happy that my workload for the project seemed to have shrunk as time went on. It makes it look like I did less than I actually did, as the workload of a Database Administrator is lessened when using a NoSQL database.

If I was to do the project over again, I think I would put a heavier emphasis on Azure and the tools we were using, although it cannot be said that

Any code used in my section as well as documentation for the database are also hosted on my personal Github page at <https://github.com/DogPope/Software-Tools-Project> , which should be a public repo by the time this document is submitted.