As part of the group project, I was assigned the job of creating the original database for the project. The database was to be a NoSQL database, and this was created using MongoDB. The database created held the fields required for the final project such as the personal details, quote etc and was stored with the appropriate data types. Having never previously used MongoDB I first completed the tutorial provided which gave me a basic insight into using this technology. Following this, I was able to set up a basic database and continuously add to it throughout the course of the project. I then attempted to host the database online using MLAB through the cloud hosting service AWS (Amazon Web Service), but unfortunately we could not establish a connection and so proceeded to export the database into a ‘.JSON’ extension file. This file was then pushed to the GitHub repository where team member Hugh was able to download the file to his laptop. We were then able to test the functionality of the database by creating a java test connection to ensure all data was working correctly. The test involved adding, editing and removing data from the database using a Java programme to do so.

As part of my contribution to the group, I also produced research documents and conclusions on Aviva healthcare in order to provide an estimate of the mathematical algorithms we could use to determine the cost of each policy type. Additionally, I also made use of Jira as a mechanism for adding issues/tasks to the backlog so as they could be pushed to the next active sprint for completion. Jira was essential for this project due to the fact that the group wasn’t always in each other’s company and this then gave us the opportunity to keep track with each other’s progression in terms of issues completed and issues in progress. After completing a task, I would mark it as ‘done’ and in addition to this, I would push any documents or databases created to the GitHub repository so fellow team members could view all work completed.

GitHub provided us with a medium to upload files and documents to a file exchange where we were able to view all files and keep track of the project. I also forked from the repository to enable me to work in parallel to everyone else, I would then merge and commit any documents I produced to the master branch, so my fellow team members would be able to view my changes/commits. I was also able to pull all other members work from the repository to my desktop in order to view it in the appropriate format.

Overall, I felt we worked well as a group and we had no problems with communication due to holding weekly meetings, as well as keeping up to date via Jira, GitHub, email and of course during our DevOps class time. The SCRUM meetings each week provided us with an opportunity to find out what each member had done, what struggles they may have had and what they intended doing next. The next issue they were going to complete was then added to Jira as a part of the backlog. From a personal point of view, I feel I could have made use of GitHub’s features earlier on in the project such as merging, forking and committing from the command line. I also could have spent more time on the production of the database as I had several data types incorrect, this would have saved me time having to edit and reupload a new database. Despite this I felt we worked well together as a team and learned a lot from the module and now have a decent understanding into how to operate as part of a team adapting an agile methodology. Hopefully, this will bode well for all team members in the future.