

In this project, we managed to implement 3 main features, namely 1-1 chat, a user log in and chat history, for the chat server and was able to deploy the server on AWS in four sprints. I did contribute a lot and learn a lot in the whole process. The project is so practical that it helps me figure out what the software development does really look like and get access to a couple of new software/tools in the real development, such as Jenkins, Sonarqube, Jira, and Github.

By going through the four sprints, I got a better understanding of Agile Models and the whole process of it. First, talk with the product to figure out the requirements and set down the sprint commitments, then write down the user story and create a backlog on Jira. After the sprint starts, each developer is assigned with several tasks, team members hold meeting daily to keep in touch in the meantime. Finally, get it done with a new feature and complete a personal reflection in the end. Besides, I learned all about the roles that the product, the scrum master and the developers are playing.

In addition, I have got a deep understanding of Version Control by manipulating Github and formed a better git practice, like create a new branch for a new feature, merge after implementation, before the merge, make a pull request and ask for a team member for review. In the process of writing unit tests, I got to know the difference between functional testing and structural testing and why both are so important. What's more, I also learned how to better test with JUnit and Mockito.

If I were to do the project again, I would like to approach differently for the following aspects. Firstly, I would like to communicate with the product more often, which could make our work more compliance with customer requirements. Secondly, I intend to bring the Test-Driven Development concept in, for which, I think would improve our development efficiency. Thirdly, I will introduce more Design Patterns in the implementation to make our implementation much more organized and modularized.