**Discussion**

**Discussion Topic 1: Collaborating Tool**

For this project, we have successfully used several collaborating tool to accomplish this team project. Tools such as Trello are really helpful when scheduling our development plan and distributing the work among team mates. Also it is a neat way to record the entire development process of this team project.

Collaboration development tool such as GitHub and DockerHub makes it really convenient and easy for us to merge our code and schedule our work time based on our own preference. Especially in our case, we have divided the work into backend and frontend. The code merge problem is one of the main issues we have to deal with. With GitHub, we now can vividly see each of the commitment made by other team member about what they have done and how far they have done. Also GitHub offers features such as contribution log and active log, which are also nice for us to check from time to time.

The collaborating tool that we have adopted for this project is very educational and can definitely benefit us in our future development working with teams.

**Discussion Topic 2: Adopting new development framework**

One of the other major lessons we have learned during this project is adopting the new development framework with the apache project. We all have experience working with the java programming language and basic backend knowledge with database manipulation and our team members that are in charge of the frontend development have experience in website design and development. However, the apache project that we have to develop on have new framework feature such as play and hibernate. It took us some time to figure out the new programming framework and how we should design and develop our project on it. Through the whole process, not only we have learned a new framework both in backend and frontend, but it also is great learning experience for us to adapting ourselves to new technology and each one of us has a complete and fun experience with the entire project.