# **Final Report for Attendance Portal**

Group AD\_2
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Time for reflection! The purpose of this document is to capture student experiences — both positive and negative — during the semester long team project. What are the key events that are to be remembered? What are the key lessons that you learnt that you can carry over to future projects. Think back starting from the time the teams were assigned, then project proposals were made, screenshots developed, requirements, architecture, framework demo, test plan, and finally the demo. What would you do different if you were assigned the same team and the same project again?

Each team member is to record his/her thoughts on a separate page. Thanks! Note that you are NOT limited to a page.

## FOCUS ON LESSONS RELATED TO

- 1. Working in a TEAM
- 2. Software Development processes
- 3. Technical Issues

### 1.1 WHAT WENT WRONG

Something that went wrong was definitely communication. Some team members wouldn't communicate with others about how they were divvying up work, so they thought the other person was doing it and then it ended up not getting done until the last minute which caused issues for the other two. Also, some team members wouldn't respond for hours on end and the server wasn't up 24/7 so other group members were stuck doing nothing because they couldn't do testing. I would say another thing that went wrong was putting off things until right before demos. Whether this was caused because of communication issues or not, I would say this badly impacted us. I believe we could have done a lot more with this app.

### 1.2 WHAT WENT RIGHT

Things that went well were that we got a lot of features that were able to work, some that I wasn't even thinking we were going to do in the beginning. I think we all did a good job communicating with the TA or getting other help to finish the project. And if we couldn't get in contact with a TA, I think we did a good job researching the problems on our own and solving them that way. Another thing that went right was communication when it came to communicating about what the frontend wanted, the backend telling them what they needed, and the frontend telling them what they needed as a response from the server.

### 1.3 LESSONS LEARNT

#### Team Work

One thing I learn was that as fun as it may seem to work with a group of friends for this project, I was wrong. Although it did make it easier to talk to them, I felt like the frustration at times with each other was putting a strain on the friendships. I think it would be a lot better to at max do this project with one friend. I would say that I learned further what it's like to be on a team that's frustrating to work with. Although this was not always the case, I still learned more about how to communicate my frustrations and how to handle other's in a calm manner.

## • Technologies use

I learned how to use Android Studio and how to develop an app. I had never used Android Studio before so learning how to design activities and how to pass information between activities was a new challenge for me. I also learned how to get the location of the phone as well as tell if the phone screen was on or off and if the user was on the app or not. I learned how to make and use String and JSONObject requests as well as working with WebSockets.

• Processes (Reqs, Design, Coding, Debugging, Testing)

I learned how to design apps and how to format the activities to look nice on both the emulator as well as the tablet that I was using. For coding, I had never coded with Android Studio before that so that took a little bit of time to get used to but was fairly easy to pick up. There were a lot of features that I learned how to do with software as well, such as getting the user's location, seeing if a user had their phone on or off and if they were on the app, creating a WebSocket connection between two user's to see how long a user was either not on the app or had their phone turned off, creating a chat feature using WebSockets, and using the RECAPTCHA API to verify if a user was a robot or not. For debugging and testing, I learned how to properly use Log.d to see what values I was getting. I also learned a little bit about Mockito as well as CI/CD, although I am still not verify confident with my skills in either of those.