# IM3080 Design and Innovation Project (AY2022/23 Semester 1) Individual Report

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Group No: 6

Project Title: Personality Test Mobile App Project (SOMA)

## **Contributions to the Project** (1 page)

This project has been fruitful, and I was able to learn a lot from my friends who are proficient in their respective roles. My role in this project is to be the front-end developer of the app together with Chong Wei.

For the first couple of weeks, we are not able to do much of the front-end development tasks as the design team is still designing the layout of the app while the back-end team is creating the API functions. So, we, Chong Wei and I, did the research on the questions of the quizzes we wanted to do and came up with the questions and answers that are related to a specific personality and load it into the database. I also came up with the respective trait names that correspond to a personality type for the Personality Quiz.

After the design team was almost done with their layout and the back-end team was done with their functions, we finally started implementing the API functions to the app via Android Studio. For the app, I mainly did the retrieval of data for all pages while Chong Wei did the manipulation of data for the quizzes itself. I specifically worked on the connect section of the app - where the user can connect with other people with similar traits. The user can then select another person recommended in their connect section and see their results on the 3 different quizzes.

Lastly, for the final presentation, I was one of the "actors" in the promotional video which I think was out of my comfort zone. As our leader could not make it for the presentation due to other school commitments, I took up the role to lead the final presentation making sure we present important features of the app while keeping it short and simple.

### **Reflection on Learning Outcome Attainment**

Reflect on your experience during your project and the achievements you have relating to <u>at least</u> two of the points below:

- (a) Engineering knowledge
- (b) Problem Analysis
- (c) Investigation
- (d) Design/development of Solutions
- (e) Modern Tool Usage
- (f) The Engineer and Society
- (g) Environment and Sustainability
- (h) Ethics
- (i) Individual and Team Work
- (i) Communication
- (k) Project Management and Finance
- (I) Lifelong Learning

#### Point 1: Engineering Knowledge & Design/Development of Solutions (and Lifelong Learning)

Initially, I wanted to be part of the design team as I wanted to improve my level of creativity and also because I am not that proficient in programming. Despite that, I took the opportunity to improve on the frontend portion of software development. Having prior experience in IDP, I feel like I was able to greatly improve on my skills. I was able to do more data manipulation and subsequently, more work done overall. For example, manipulating ArrayLists and the passing of data between activities/fragments. However, I still have a lot of things to work on for example, I was inept in doing the calculation for the quiz as it required to use HashMaps to make it work effectively, which I was not familiar with. This project has also motivated me to learn React, SQL database programs like Heroku and MongoDB.

#### Point 2: Communication & Individual and Teamwork

This project has challenged our teamwork and communication skills. I have never worked with a team of 9 members before. At first, I found it hard to start working as there were too many people trying to do the same thing. As time went on, we managed to divide the work evenly. For example, Chong Wei and I decided to split our work - I will do the retrieval of data from the database and manipulate it to the type of format he needs for his calculations/complex logic. With this, we had a clear structure and was able to work efficiently. In the context of the whole group, everyone understood their roles and responsibilities. Of course there are still miscommunications especially with the layout of the app. However, we are able to solve these problems quickly due to the group having an open communication.