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

Name: Luo Chongwei

Group No: 6

Project Title: Personality App

Contributions to the Project (1 page)

- Research & Presentation ○ Coming up with questions for different quiz categories ○ Preparation of presentation slides & script

- Mobile Application (Android Studio) ○ Setting up of collaborative environment on GitHub including 'how to set up' and 'install' with corresponding dependencies and libraries.
    - Testing of HTTP connection between Android & API which uses Volley library together with Async-task for server-side communication
    - Installation of libraries & Dependencies on Android Environment ○ Coded Login page functionality
    - Coded Home page with corresponding pop ups and dialogs ○ Coded Bitmap, Base64 encoding & decoding function to display image or storing in database.
    - Connecting assets/views to respective Activities ○ Passing Data between Activities
    - Coded the main logic for quiz page and calculation to result screen before uploading to database
    - Coded Profile & Connect Friends Page dynamically, retrieving friends of similar traits and display corresponding User's image, name, etc. ○ Navigation between applications
    - Added proper error response and loading bar in respective activities ○ Debugging of overall application

- App Demo (After Effect & Media Encoder) ○ Composing of scene & flow ○ Creating Project Assets ○ Creating Lights, Effects & Filters ○ Creating Scene captions and texts ○ Creating transition animation and dynamic objects ○ Creating phone animation and interactable ○ Putting video together
    - Compiling/Rendering final demo video

Reflection on Learning Outcome Attainment

Reflect on your experience during your project and the achievements you have relating to <u>at least two</u> 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
    (j) Communication
    (k) Project Management and Finance
    (l) Lifelong Learning

Point 1: Design/development of Solutions
I was allocated to be part of front-end development team; hence I was quite involved with the design side as I needed to know how the navigation and functionalities of the final application works. And from this I realized that besides just doing and knowing your own part, the entire team needs to have a clear understanding of the entire project development and flow. This is crucial when working on big projects that is much more complex as it will reduce unnecessary troubleshooting and complications. Besides this I have also learnt that research is important before going into development stage such as choosing a better solution or environment to build our application on. This would ultimately make our whole development flow easier and deliver better visuals in our application. In the future, I would explore more development alternatives that would better suit the use cases that I am tasked, ensuring final product is of best quality.

Point 2: Individual and Teamwork
Being just a member of the team, I relied mostly upon the group leader to communicate or pass messages around. We wasted time because this only happened when we met weekly to talk about the project; instead, things would have moved along more quickly had I just spoken directly to everyone. Besides this, we also found that it is necessary for all team members to give their comments on different stages of the project to ensure a mutual team agreement. I also came to the realization that everyone on the team needs to provide regular updates on their progress so that everyone is aware of how the project is coming along. In conclusion, Teamwork is everything in the modern workplace, the success of a team effort depends on clear roles, responsibilities, effective communication, and mutual trust that each person will do their part. The ability of a team to accomplish its goals depends heavily on how well its members communicate their objectives.