IM3080 Design and Innovation Project (AY2023/24 Semester 1) Individual Report

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Group No: 7

Project Title: Duelingo (Multiplayer Language Learning App)

Contributions to the Project (1 page)

- Research
 - o Researched on topic and previous idea.
- Flowchart
 - Created a flowchart to showcase user flow.
- Ideation of project
 - Suggestion of current project.
- Figma design on application
 - Splash Screen created on Figma.
- Multiplayer Realtime Database implementation
 - o Create Lobby for multiplayer to occur and start game.
 - Used firebase Realtime Database.
 - Main feature of the app.
 - o Ensure smooth gameplay and no hiccups.
- Frontend
 - Profile page created with avatar.
 - o Update Splash Screen picture
- Testing Debugging
 - o Check for bugs.
 - After finding bugs, report, and fix bugs.
- Poster mockup
 - Created a poster draft for the presentation.
- Final report
 - Assisted in writing and ensuring report is relevant and proper.

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
- (j) Communication
- (k) Project Management and Finance
- (I) Lifelong Learning

Point 1: Collaborating with a large group of 10.

This is the first time that I have collaborated with a large group of 10 people to do a project. At first, I was unsure and nervous as I personally knew that I was on the weaker side of coding as it is not my forte. However, I came in with an open mind and tried my best to learn as much and help as much as I can whenever possible. It was the first time that I have used GitHub to work together in the team and because I worked on the multiplayer aspect of the project initially, I worked with 2 other teammates and tried my best to learn as much to implement the multiplayer function. I now know that it is not as simple as I thought when working together in a group as communication is very important, but I did my best to communicate as effectively as I could. I am thankful that my group is patient enough to help me and learn with me along the way. Communication is an essential skill for all to have to ensure smooth work flow and to deter hiccups along the way in the work we do.

Point 2: Modern Tool Usage

I came into this project with very little experience in coding and using software online. Particularly Figma and google firebase firestore. Therefore, when I first start out on using this software, I struggled a lot as I was very lost. However, I did not let that stop me and made sure to ask my groupmates for help whenever I encounter a problem that I could not solve. After going through with this mod, I have learnt the basics of these software and am able to utilize these to my advantage in the future. I have also learnt that it does not matter if I am not as strong as the others in terms of technical skills as long as I try my best to keep learning, I will improve and be better.