**IM3080 Design and Innovation Project (AY2021/22 Semester 1)**

**Individual Report**

Name: Mary Aquiline

Group No: 5

Project Title: myHealth

**Contributions to the Project** (1-2 page)

I was part of the design team. The design team and I planned and designed the overall look of the app, using Figma prototypes and other sketches. I was involved with the 1.0 version of the app (which excludes the additional feature of the e-consultations and diet tracking). I designed and implemented some of the 1.0 base app with user-centric design like using breaking down user actions, trimming the interface, and consistent design. These include the following features of the app:

* Appointments
* Payments
* Caregiver
* Health records
* Singpass login page

as well as their subpages. I also designed some of the icons, backgrounds and components used in the app to fit with the new theme of Singapore Identity and to also follow our design principles, one of which was to make it easy and clear for users to find what they wanted. The icons were designed to have a consistent design. I did some of the navigation for the app. At the end of the project, I assisted with the video ideation and editing.

**Reflection on Learning Outcome Attainment**

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

1. Engineering knowledge
2. Problem Analysis
3. Investigation
4. Design/development of Solutions
5. Modern Tool Usage
6. The Engineer and Society
7. Environment and Sustainability
8. Ethics
9. Individual and Team Work
10. Communication
11. Project Management and Finance
12. Lifelong Learning

**Point 1:** (d) Design/development of Solutions & (j) Communication

During the project, I experienced firsthand some possible reasons why only 35% of software projects are successful. One of the key challenges are that projects are ever-changing, and hence require a lot of effective communication for the development of the best solution.

One particularly memorable example to me was when the design team decided to revamp the design of the app. The team had already completed most of the first two out of the four stages of the project life cycle - initiation (conceptualization), planning, execution, and closure (termination). We had confirmed the initial goal and technical specifications of the project and developed the detailed planning and schedules. We had settled on our prototypes on Figma after much discussion, and the execution phase had begun. During this stage however, we realized we were not satisfied with the UI and overall look of the app. Due to our dissatisfaction, we gathered to discuss again how we could improve the look of the app. I appreciated the team’s constructive criticism so that I could improve the pages that I had designed. Changes will certainly occur during the project life cycle, and I think we managed to communicate and work our way through the changes well to ensure the project kept moving.

Although I think we managed to communicate our thoughts and ideas for the betterment of the app, we could have spent more time on the planning stage so that we could have a more cohesive design from the start. More concrete design documentation could have improved our communication effectiveness. The lack of face-to-face interaction could have also led to poorer communication between us. Perhaps next time, the team can follow more of the techniques to improve the creative process so that this situation could have been avoided. Some of the techniques I think we would benefit from using are limiting the group size, defining the problem well, and to limit the brainstorming session to 40 to 60 minutes. Although I believe I did strive for quantity over quality while brainstorming, I think I could personally improve by daring to imagine the unreasonable. This could help us better design solutions for the digital healthcare problems in Singapore and design components that meet the specified needs with appropriate consideration for our target audience.

**Point 2:** (e) Modern Tool Usage and (l) Lifelong Learning

Over the course of the project, I learnt the value of self-directed learning as I picked up some new tools and languages. JavaScript and React Native are both quite new to me. The DIP team was always willing to help with troubleshooting different issues. Without the team’s effort and sharing of resources, my learning pace would have been slower and less productive. Sharing information and collaborative effort is an integral part of learning.

React Native has many libraries. I read documentation to compare different libraries to implement certain functions, for example the navigation. I first implemented a certain library but realized later I could not do some basic screen animation with it, so I switched the library to fit the new needs that arose. Applying the appropriate techniques and tools, while understanding their limitations, is an important part of modern tool usage, and can only be achieved through constant learning and trial and error.

I also learnt how to use MongoDB and connect it to a project. Although we finally decided to switch to SQLite, I learnt a lot about MongoDB and the way it works. I set up some databases using AWS Cloud through MongoDB Atlas. This practical exposure to data storage on the Cloud was useful to me as I had only been exposed to cloud-based storage in theory until this project. I want to continue to develop skills and knowledge to be more equipped to handle technological improvements.

I enjoyed reading more about React Native and healthcare in Singapore. This project gave me the opportunity to learn things that I am not sure I would have sought out on my own before, and I realize that self-learning through my own projects would also be fulfilling and is as important. As technology continues to rapidly evolve, there is a need to structure more learning goals into every day life to keep up.