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

**Individual Report**

Name: Lee Si Ning

Group No: 5

Project Title: myHealth

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

**Ideation**

* Planned the flow, layout and user experience of the E-consultation Q&A section alongside Nikki
* Assisted with the formulation of the E-Consultation feature flow of the application
* Contributed in some discussions and decision-making of the application during group meetings
* Brainstormed and developed the new Diet Tracking feature of the application from its initial stage till the start of coding it before the decision to focus on the development of the E-Consultation feature

**Function and front-end development of application**

* Coded the E-Consultation Q&A section of 8 pages and linked the questions with the other sections of the feature alongside Nikki
* Assisted with the coding of the Games section for the Waiting Room, including researching and utilising online resources
* Debugged some errors which surfaced throughout the development of the application such as errors in checkbox and radio button implementation

**Resources (Group report, presentations, etc.)**

* Planned out the detailed content on what to include in the Design and Implementation section of the group report
* Wrote the Design and Implementation section of the group report
* Vetted the group report and made edits where necessary to improve the report and ensure coherence throughout
* Edited the slides for group presentation on various weeks
* Scripted and presented for three of the group presentations mainly on application development and demo
* Designed, wrote and edited the content of the final poster with Nabilah and Nikki

**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: Individual and Team Work**

While this is not my first time working alone or in a team, it is definitely one which is more significant and impressionable. Due to the large group size which I have never experienced, the individual and team work experienced in this project journey is something new to me. With more manpower, it may seem that things could be done faster and with higher efficiency. However, it is not as ideal as it seems. The group was formed based upon randomization and thus most of us have never talked to, let alone worked with one another before. Since we only have a few months to work on this project, to enjoy the benefit of having higher efficiency, we have to familiarize with each other quickly, understand and respect the working style of each individual and set our goals for the project from the start. Without good communication, leadership and coordination, having more people might hinder the progress of the project even more than having a lack of manpower.

Through this experience of working in a large team, I learnt that good and appropriate delegation of workload (according to each individual’s strengths and weaknesses) is effective in facilitating the progress of the project. Regardless of my skill level, taking the initiative to help with various parts of the project and whenever my teammates require assistance is also beneficial. This helps set the tone and atmosphere for the team, which is crucial in creating a comfortable environment for members to discuss and contribute to the project, minimizing conflicts and increasing the passion and efficiency of each individual for the project.

Apart from working in a large team, collaborating online and remotely due to the COVID-19 situation is something fresh as well. Due to the nature of the project, online meetings and collaboration saved time and boosted efficiency. More time can be delegated to working on the project itself rather than travelling for the meeting, making the time working together for the project more productive.

Therefore, to benefit from the manpower in large teams, good team work is optimized with amicable and effective communication and coordination among the team.

In terms of individual work, while some may feel that their contributions are insignificant in a large group, I realized that it is in fact even more important to do your very best and be accountable for the work you contributed. Every avoidable mistake would hinder the progress of the project and waste the time of every other team member. Especially for the programming aspect, since we have a large number of people with different levels of programming skills and styles of coding, it is difficult to trace back and debug for each error. Hence, to minimize any inconvenience brought to other members, it is important to complete our individual tasks responsibly. Individual work in a team is not just about ourselves, it will actually affect the team we are working in. Hence, we have to constantly consider others when working on our individual tasks.

**Point 2: Design/development of Solutions**

This is my first time working on designing and developing solutions in a group project in which we are required to develop a relatively more functional and complete mobile application. As such, we started off rather clueless on how to proceed with the project. This is an experience which required us to navigate through the project rather independently which I believe would be a common situation we will encounter when we enter the society. This project allowed me to have an idea of how technological solutions are developed from its initial stages of brainstorming, researching and planning to its final outcome.

Due to our limited expertise and time, online researching is one method which greatly assisted us in validating our ideas and developing our application. Therefore, I learnt that researching is essential in the design and development of solutions. Especially when we are still inexperienced in certain areas, researching and learning from past successful solutions will benefit us in generating better solutions.

After finalizing on the general direction and goal of our project would we be able to proceed with the development of our solutions. Since our project is on mobile application development, Application Programming Interfaces (APIs), open-source codes and online resources are available to assist us in the development of our solutions. No matter through online research or asking of team members, seeking help when required is part of the process in development of solutions. I learnt that we should not be embarrassed to seek help as the progress and quality of solutions will be compromised.

Testing of our solution during and after its development phase is also essential. Ultimately, the purpose of designing and developing solutions is to resolve a certain problem faced by our target group. As such we must ensure that our solutions are indeed tackling the problems faced by our target audience in their perspective.

Throughout designing and developing the solution, obstacles, challenges and failures are inevitable. Adjustment of plans according to our situation were common throughout the execution of the project. Through this journey, I understood the importance of flexibility and adaptability. Not everything would progress in our favour and only by having a flexible and creative mindset would we derive a satisfactory final solution eventually.