

IM3080 Design and Innovation Project (AY20xx/xx Semester x)

Individual Report

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Group No: Group 4

Project Title: BUSMEET

Contributions to the Project (1-2 page)

1. Idea generation and feature research (Week 1-2)

- a. Initially after my team and I have decided on the type of app which we will be working on (transport related), I went ahead to download several similar apps to experience user flows processes and functionalities to better understand what is out there. Below are 2 of the many examples of my takeaway.

SG Buses: A simple and straightforward bus app which is extremely basic with limited features. I did wish they were able to provide additional information on bus timings.

MyTransport.SG: One of the most popular transport applications by LTA. It has numerous features such as Journey Planner, Notification Alerts, Parking availability and Even accident reporting. Many times, I find myself only using 1 or 2 features. UI was chunky, app can be glitchy at times.

I used these apps myself for a few days and wrote down my experiences with them. Furthermore, I consulted my friends of their experience with transport apps and feature they wish would enhance their user experience. Indeed, this process has been important as it has provided me with valuable insights which I would then convey to my team through suggestions of unique features we could work on, as well as things to keep in mind during the initial UI design phase.

2. UI Design, Prototyping, Use Case Diagram, and User flow Map(Week 2-5)

a. Figma

- After planning and deciding on the general idea behind our app, and the screen pages we want to include, I started working on the initial design of the Home Page Screen as well as the Add-Friends page which was our key feature behind our app. With the help of Melville, we were able to achieve the look and feel we wanted our app to have. I took my time to alter and play around with different placement of buttons and displays during the wireframing process. Looking back, it has been a fruitful process because, necessary future tweaks to BusMeet's User Interface were minor, we didn't have to waste extra time revamping and redesigning repeatedly. Additionally, I was also in charge of prototyping the user flow by linking up all the pages on Figma, which was then presented on the first group presentation.

b. Miro

- I was in-charge of doing up the Initial User Flow Diagram of our app for both the Host, and Participant. As users of our app could play multiple roles, it was important for me to conclude the possibilities of their individual flow of use, from numerous permutations of actions. This process helped me identify gaps/clutter points in our app. Additionally, I also did the Final Block Diagram of our completed app with fully functioning features. The block diagram includes key process participants, transition state, decision nodes, and important working relationships.

c. Lucid Charts

- As our app evolves, our features and use cases increased significantly. I took the time to explore and learn how to use lucid charts, which helped me effectively represent the goals of our system-user interactions, by modeling the flow of events

3. Beta testing, Exploring react-native and Javascript

a. VSCode, Git, Github

- After the app was up and running, I tried running and using the app to feedback possible user experience issues or help identify bugs within the software.
- As I had zero experience and understand of react-native and JavaScript, I tried self-learning to possibly help with the implementation of features we are working on.

4. How-to-Guide, User Guide(Summarized Version)

a. Canva

- Finally, i took inspiration from APPLE's website and came up with a How-To-Guide of our application BusMeet. Furthermore, I made use of Canva to design a brochure(User Guide) which serves as a summarized version of the How-To-Guide

5. Miscellaneous

a. PowerPoint Slides

- Helped with doing up the slides used for presentation.

b. Group Report

- Did the final vetting of the entire report, added in content, checked for sentence structure, and grammar.

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:

- (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: Communication

This entire project sincerely reflected to me the importance of communication especially when we are working on a software project in a huge team of 11 members. Firstly, even though we all have a common goal, we came from different backgrounds with varying ability, in both technical and soft skills. The timeline was tight, and we barely had much time to ease into each other. We started off cold and not many of us was putting ourselves out there, myself included which I deeply regret. During the span of this project, many times it was difficult to know what needs help and what has been done. Even though we had weekly meetings and progress checks, it was sufficient in a deeper level. I felt like we made a mistake to not appoint a subgroup leader for teams working on different aspect of the app. This way, there would be multiple points of progress check and provides a closer working environment for all members.

Point 2: Lifelong learnings

I feel grateful to be part of this mod where I get to experience part of a software development process in a practical and hands on way. From planning to analysis, to design, and finally implementation and testing. I have learnt to use many tools along the way. Each stage has different modes of communication and the approach behind the tools required can be quite drastic. Additionally, we should all be continuing to hone and practice our soft skills. To have a proactive and open mindset would help with future teamwork related project.