IM3080 Design and Innovation Project (AY2021/22 Semester 2)
Individual Report

Name: <u>Goh Jessie</u>

Group No: 1

Project Title: <u>Focus – A One Stage Time Management Application</u>

Contributions to the Project (1 page)

Ideation and Project Planning
1. Brainstorm reference ideas and contributed to final decision of project topic
2. Resolved kinks in initial group formation such as group leader nomination and weekly group meeting coordination.
3. Identify crucial and early-stage project needs and establish early project direction by guiding towards developing a hi-fidelity prototype and using relevant interface design tools like Figma.
4. Breakdown product prototype into three broad areas, which led to the initial delegation of workload by: product palette and font design, individual pages design, product structure and use cases flow.

Prototype
1. Designed Add Pages modals on Figma, including page layout and icons.
2. Assisted with the development of the interactive Figma prototype.

Product Development
1. In charge of all the add-pages (AddComponent.js, AddCategory.js, AddEvent.js, AddTask.js and AddDeadline.js pages): creation of pages, navigation
2. Combine Category and Reminder modal components into AddEvent, AddTask and AddDeadline pages.
3. Worked together with groupmate to debug resulting errors in modal and add-pages combination, such as IOS to Android errors.
4. Connect all add-pages and category modals to respective database tables in Firebase, both input to database and display of data from database.
5. Assisted other groupmates to debug errors and clean up user interface in other parts of the project
6. Clean up user interface for timetable screen: coded random colour generator and linked the event colours to its respective category colours.
7. Connect completed task count to database for productivity chart display in the profile page (MeScreen).
8. Designed one of the avatars and corresponding animation for game component.

Group Report
1. Background and Motivations
2. Aim and Objectives
3. Design and Implementation
4. Final Design and User Guide
5. Edited formatting of diagrams for readability, source for references and input screenshots

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: <u>Communication</u>

It is my first time working in a big group on a software development project and with limited time on our hands which has taught the importance of communication, more so than any of my leadership experiences in NTU. Despite the work delegation of coding tasks between members, there were still many parts that overlapped with one another: incorporating modal components, incorporating another stack to the app, linking database to the app and debugging the resulting errors. Thus, it is important to make sure productivity is maximised through ensuring efforts do not overlap. Even with the help of project communication tools like github, notion, group and private messaging, there were still many times I found myself working on the same portion as a groupmate, but only realised when the code has already been pushed to github and vice versa. This has taught me that effective and efficient communication does not only come with updating the group on your progress, but also with clarifying the specifics of tasks with the subgroup, being proactive in thinking how you can further support the group while working on individual tasks and thus, being proactive in reaching out to others. One simply cannot just focus on their own individual task. Overlaps stopped towards the later part of the semester, as our communication with one another improved – we were clarifying with each other more, actively offering support, and explicitly specifying needs when requesting for help. As I was initially not too familiar with github, moving forward, I could perhaps explore github's issue tracker feature, which seems to be a useful tool to enhance teamwork and communication.

Point 2: <u>Design/Development of Solutions</u>

This project has taught me that the development of solutions is never always a smooth sailing one. Especially with coming up with a product like a mobile application, it is important to first identify the specific areas that need to be improved, closely followed by brainstorming then consolidating solutions that can tackle these problems. In the case of user interface and experience, I believe we have done well in suggesting, consolidating then visualizing our solutions in the prototype, which has proved to be extremely useful in guiding us back to our original objectives when we started to work on the codes, which can be messy at times. That said, as our coding skills are not proficient enough

to support our UI ideas, there were many times we had to give up achieving UI accuracy of some components with our Figma prototype and use the time for other core functions. These scenarios are inevitable especially when time is a constraint, which makes such decision making more important. In order to make the best decision in this case, it is important to continuously brainstorm different application flows, look back to compare with our original objectives and target audiences, what seems to be technically manageable for us at the given moment, and adjust accordingly. For example, our todo list was initially really aesthetic, but considering the tight situation we were in, we made the decision to give up achieving the aesthetics of the todo list, for more essential functions such as task completion, display and organisation of events in the timetable screen. In other words, adaptability and critical thinking are crucial skills needed in designing solutions not only at the planning stage but also the coding stages. Moving forward, I will be keeping this in mind for future projects, and will find any opportunity to enhance these skills.