Table of Contents

1.0 Part 1 – Self Reflection
1.1 Course Impact and Accomplishments

Participating in the Mobile App Development course was a transformative experience that greatly impacted my skills and understanding of the procedure of developing android applications. During the course, I gained valuable insights into project planning, execution and teamwork.

One aspect that I particularly enjoyed was the emphasis on practical application. The hands-on approach of the course allowed me to apply theoretical concepts to real-life projects. This practical approach significantly improved my problem-solving skills and programming knowledge. I have also gained experience after finishing the development of my Assignment 2, as this is my first time developing such complicated applications with numerous features.

However, I encountered a design challenge in the late stages of our group project. We had difficulties implementing some of the feature requirements as stated in the assignment briefing. Due to the fact that we are using fragment navigation instead of load fragment and hence resulting in giving up on the tablet view with dual pane.

Last but not least, as an overall, I have gained a lot of invaluable experience as well as the opportunity to discover android application development and it might unlock my options for final year project as well as helping me in my future career. In short, enrolling in this course and accomplishing its coursework is a precious experience to me as it benefits me in various aspects, including app development, debugging, teamwork and problem solving.

1.2 Successes and Problem-Solving in Design and Implementation

In the area of design and implementation, the Mobile App Development course provided a number of challenges and successes that contributed significantly to my growth as a software developer.

As for the part of successes, one notable success was our team's skilful handling of the design phase. We successfully used various design patterns and principles to create a scalable and maintainable architecture. On top of that architecture, adding more features as assignment required and enhanced the features. As a result, we successfully implemented most of the required features with some extra features that could enhance the user experience and user friendliness. In short, we have successfully developed the ideal application as according to our planning.

Moreover, we also success in the aspect of creating visually appealing user interface of the application. It consists of the cute and warmful welcome screen with interesting animations using property animations. Moreover, the design of the user interface also follows a consistent and aesthetic concept way and hence resulting a visually appealing application. The colour, font style and the themes applied are carefully selected and implemented to ensure the view of user is aesthetically and user-friendly. In essence, we have successfully implemented the user interface of the application as in coherence of our ideal output.

On the other hand, for the part of problem solving, one design challenge we faced is about the error of feature that we did not implement. For example, some of the errors showing that failed

to login to Google, Bluetooth error and other error that we do not have idea on it and there is nothing much match when we search in online. However, we are still able to address it and it appears that is some other minor error that does not relevant to those error messages and we guess it might be prompting wrong error messages. In short, at the end we are still able to resolve the issue by correcting the code.

Additionally, navigation between fragments and pass data between fragments posed an implementation challenge. Rigorous code reviews and pair programming sessions enabled us to identify bottlenecks and implement more efficient algorithms, ultimately enhancing the system's overall performance and resolve the issue faced. In essence, we are still able to address the issue by the end.

2.0 Part 2 – Group Reflection
2.1 Review on Personal Experience of Teamwork

My journey through the Mobile App Development course was marked by an enlightening and rewarding experience with teamwork. From the initial stages of project conceptualization to the final implementation, the collaborative nature of the course not only enhanced my technical skills but also provided valuable insights into effective teamwork dynamics.

As similar to most of the teams, after discussion, we decided to delegate the task as one person will mostly focusing on the implementation of codes, as it will ensure the code integrity, consistency, efficiency of developing the application. The other two person will mainly focus the task other than coding, for example report writing, program structure designing and more. My groupmate Sin Yee and Yi Wen are responsible for implementing the initialize code with structure and report writing, and I am the one who will be coding under the structure and implementing features as well as enhancing the overall application.

One of the most impactful aspects of the teamwork experience was the exposure to diverse perspectives and skill sets within the team. My groupmates were really active in engaging the discussion, sharing opinions and helping each other on respective tasks. Whenever I faced problems and speak it out in the group chat, I always receiving the responds really quickly, and we discuss together and ended up solving the problem together in the end. My groupmates were really helpful in accomplishing this group project, and hence overall I have a positive experience on the teamwork during the time working on this project.

Moreover, as the project progressed, I found myself assuming various roles within the team, from facilitating communication to coordinating efforts. Regular team meetings became a platform for open discussions, where challenges were addressed collectively, and ideas were welcomed from all team members. This shared leadership approach empowered each team member to contribute to decision-making processes, creating a sense of ownership and commitment.

The rewarding aspect of this teamwork experience was witnessing the positive impact of effective collaboration on the project's outcomes. It became evident that the combined efforts of the team led to a more robust and refined software solution. The diverse skills within the team were harnessed to tackle challenges creatively, resulting in innovative problem-solving and a high-quality final product.

In conclusion, the Mobile App Development course provided a profound personal experience with teamwork. The collaborative environment, rich with diverse perspectives and

shared leadership, not only facilitated technical growth but also contributed to a sense of accomplishment and camaraderie among team members. This experience has undoubtedly shaped my understanding of effective teamwork in a professional setting which prepared up me for the future when joining a corporation.

2.2 Review on Group Dynamics

The group dynamics within our team were characterized by mutual respect and effective communication. Each team member brought a unique skill set to the project, and a culture of openness encouraged the sharing of knowledge. This diversity not only enriched our discussions but also significantly contributed to the creativity and innovation evident in our final product. We respect each other's opinions, and we are open to opposing arguments. As this bonding is the most important for developing a user-friendly application which is agreed by most of the people.

During challenging phases, such as unexpected changes in project requirements, the group demonstrated adaptability. Instead of resisting change, the team embraced it as an opportunity for improvement. This adaptability, coupled with a collective commitment to excellence, played a key role in overcoming obstacles and ensuring the project's success.

Last but not least, the group dynamics overall can be described by the word cheerful. Even though there are problems faced or difficulties encountered, we did not put our head down, instead we always looked at the positive side and actively looked for the solution. This proactive mindset is vital in every aspect of life, no matter related to academic stuff bottlenecks, or hardships that encountered in life, this positiveness will always ensure us to find out the way went through it in the end and never felt defeated or having the thoughts of giving up. In short, the atmosphere of our group is pretty good and heart-warming, which can make the day filled with joyful.

2.3 Assessment on Self and Group Members Contribution
2.3.1 Contribution of Planning of the Work

In terms of planning, I took an active role in the initial brainstorming sessions. I contributed by proposing the way of delegating the task, selecting the right people for the right task as well as brainstorming the design of our application. Moreover, I also contributed to planning the due date for each sub-task to ensure that there is progress every week in order to implement all the features as decided during the planning session.

Sin Yee, as one of my group members, has contributed to the planning of the work in terms of the report elements, as the structures of our report on what should include and what should not by listing down the heading and subheading.

Yi Wen, as another group member, has contributed through actively discussing with me about the task delegation to ensure that there is no overload on any of our group members as the workload could be handle by the person and complete on time.

2.3.2 Contribution of Leadership and Management of the Work

As the project progressed, I took on a leadership role, coordinating team meetings and making sure everyone was working towards our common goals. I have actively tracked the progress of each member on their respective tasks and handed over help when they needed. I constantly discuss with the members in order to ensure they are capable of their respective

responsibilities. Furthermore, I am also responsible for checking the quality of the work in order to ensure a well completed project. However, I recognized the importance of shared leadership, and we fostered an environment where the contributions of all team members were valued. This inclusive approach improved our decision-making process and mitigated conflict.

Yi Wen and Sin Yee did not reflect on the leadership role, but instead, have acted really good as the role of henchman in following the instructions and completing the task allocated on time. They too have taken care on the quality of product before submitting their part to me in the aspect of managing the work welly.

2.3.3 Contribution of Final Products

I have contributed to delivering the program code and design of the user interface as well as recording the demonstration video while helping with the documentation after finishing my task. Sin Yee and Yi Wen have contributed to the final products in terms of constructing the skeleton of the coding and mainly contributed to the assignment report. All of us have contributed to the final products by discussing and helping each other when one faced problem with their allocated task. Each of us has contributed according to our strengths and help each other with their weaknesses.

In summary, each team member brought unique skills to the table, contributing to the success of the final product. Clear communication and regular feedback sessions facilitated the integration of the different ideas into a unified solution. The final product was a testament to the collaborative effort in which each team member's contributions played a crucial role.

3.0 Conclusion

To summarise, the Mobile App Development course was a fulfilling journey that provided me with practical skills and a deeper understanding of effective teamwork in software development. The challenges I encountered were overcome through collaborative problem solving and the positive group dynamics greatly enhanced the learning experience.