## Appendix D

## Tunku Abdul Rahman University of Management and Technology BAIT2073 Mobile Application Development

## **Task Description**

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Programme: RSD2S3 Group: G5

Instruction: Answer **ALL** the questions. You may insert extra pages.

1. Please briefly describe the module(s)/function(s) you engaged in the assignment.

I handled the chat module, which facilitates communication among users by enabling them to chat individually or in groups. This module supports real-time one-on-one messaging with features like typing indicators, and message timestamps. For group interactions, it allows users to create group chats, and utilize functionalities such as media sharing. The chat module is designed to enhance user interaction and collaboration, making it a crucial component of the overall system.

- 2. What are the strengths of the modules/functions created by you? The strengths of the chat module I created include enabling real-time communication between users, ensuring messages are delivered instantly. In addition to text messages, users can share images, enhancing the richness and versatility of their conversations. This functionality supports both individual and group chats, providing a seamless and interactive experience for personal and collaborative communication. The module's real-time capabilities and multimedia support make it a powerful tool for effective and engaging user interactions.
- 3. What are the weaknesses of the modules/functions created by you? The weaknesses of the chat module I created include the inability for users to send videos or files to each other, limiting the types of media that can be shared. Additionally, users cannot manage group chats by adding or removing members, which restricts group management capabilities. The module also lacks features such as mentioning other users in group chats and receiving notifications for new messages, which are essential for enhancing user engagement and keeping users informed about ongoing conversations. These limitations reduce the overall functionality and user experience of the chat module.
- 4. What have you learned in doing this assignment? In doing this assignment, I have learned how to use Firebase to manage data effectively, which includes storing and retrieving chat messages in real-time. Additionally, I have gained experience in managing the chat layout, ensuring that it remains consistent across different pages and devices. This involved understanding and implementing responsive design principles to provide a seamless user experience regardless of the device being used. These skills are crucial for developing robust, user-friendly chat applications.
- 5. What are the challenges, if any, faced by you while working on this assignment? In doing this assignment, I have faced challenges in maintaining a consistent layout for the chat module, ensuring that the interface looks uniform across different pages and devices. Additionally, I needed to ensure that recipients reliably receive messages from senders in both individual and group chats, which required handling real-time data synchronization and message delivery. These challenges helped me improve my skills in user interface design and real-time communication management.

## Appendix D

Signature:

Date: 17/05/2024