# A. Thorough Description of Project Requirements

## Functional Requirements

1. Welcome Page function: The welcome page will appear only once when the new user downloads this application.
2. Login & Registration function: The registration function allows the user to create their account. The login function will check the stored information from the database system to permit the login requirement.
3. Group creation and control function: user can establish multiple groups for many different purposes. It allows the user to add group members.
4. Create bill and post bill function: The user can store and monitor the bill amount to ensure the multiple bills.
5. Transaction function: Enable all the users to make transactions and payments.
6. Debt record function: To automatically calculate the efficient way for debts and offer different user options.
7. History record function: Automatically records all the transactions and bills for each group. To record all the transactions and payments history.
8. Debt display function: To display all the unsolved debts for different users and groups.
9. Settings function: To allow the users to make modifications and changes based on their preferences.
10. Help function: To allow the users to find the topics and answers related to their questions.

## Non-functional Requirements

1. Debt visualization function: The user can view the group balance and debit when selecting the different group members.
2. GPS location function: Users can set up the billing purposes to remind themselves and group members about the billing details.
3. Receipt function: once the user makes the payment for their bill, the system can automatically generate the related receipt to the user.
4. Email or SMS notification function: This function allow the user to send the notification about payment and bill to the group members based on email and SMS.
5. Tutorial function: This allows the user to watch and check the basic functionalities of this application. To understand how to use this application.

# C. Class Diagram

