## MOBILE APPLICATION FOR MEET UP HOSTING AND GATHERING

BY

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#### **ABSTRACT**

This project is a mobile application development project that facilitate users in meeting up with stranger. Some of the problems with traditional dating application can be resolved by this proposed project, where user could find it easy to use the application and meet up with others in real person easily. There will be some features assisting user in scheduling and initiating a meet up such as host, join or accept application of a meet up. This will change the way of people engage with each other differently, unlike any other traditional dating applications. Business owner can now take a part in it for their business promotion with booking and profiling function. This project is developed with Extreme Programming methodology which will be easier for an individual or small team. The technology for backend will be using Android studio in Java language, while Firebase will be the main cloud database for any data of users in the application. This project is initialized in Jan 2021 for the first part and it is proceeded in Jan 2022 for the second part.

## TABLE OF CONTENTS

TITLE	PAGE		i
REPOR	T STAT	TUS DECLARATION FORM	ii
FYP TH	ESIS S	UBMISSION FORM	iii
DECLA	RATIO	N OF ORIGINALITY	iv
ACKNO	WLED	GEMENTS	v
ABSTR	ACT		vi
<b>TABLE</b>	OF CO	NTENTS	vii
LIST O	F FIGU	RES	ix
LIST O	F TABL	ES	xii
LIST O	F ABBR	EVIATIONS	xiv
CHAPT	ER 1 IN	NTRODUCTION	1
1.1	Proble	em Statement and Motivation	2
1.2	Objec	tives	3
1.3	_	et Scope and Direction	4
1.4	Contr	ibutions	4
1.5	Repor	rt Organization	5
СНАРТ	ER 2 L	ITERATURE REVIEW	7
2.1	Existi	ng Applications Review	7
	2.1.1	Tinder	7
	2.1.2	Bumble	8
	2.1.3	Tantan	9
2.2	Metho	odologies Review	10
	2.1.1	Rapid Application Development (RAD)	10
	2.1.2	Agile Methodology – Extreme Programming (XP)	11
	2.1.3	Spiral Methodology	12
СНАРТ	ER 3 SY	YSTEM METHODOLOGY/APPROACH	14
3.1	Syste	m Design Diagram/Equation	14
	3.1.1	Use Case Diagram	14
	3.1.2	Activity Diagram	30
			vii

Bachelor of Information Systems (Honours) Information Systems Engineering Faculty of Information and Communication Technology (Kampar Campus), UTAR

	3.1.3 User Interface (UI) Design	36
СНАРТЕ	ER 4 SYSTEM DESIGN	43
4.1	System Block Diagram	43
4.2	System Components Specifications	44
4.3	Components Design	53
4.4	System Components Interaction Operations	55
СНАРТЕ	ER 5 SYSTEM IMPLEMENTATION	66
5.1	Hardware Setup	66
5.2	Software Setup	66
5.3	Setting and Configuration	67
5.4	System Operation	67
5.5	Concluding Remark	72
СНАРТЕ	ER 6 SYSTEM EVALUATION AND DISCUSSION	73
6.1	System Testing and Performance Metrics	73
6.2	Testing Setup and Result	73
6.3	Implementation Issues and Challenges	78
6.4	Objectives Evaluation	78
6.5	Concluding Remark	79
СНАРТЕ	ER 7 CONCLUSION AND RECOMMENDATION	80
7.1	Conclusion	80
7.2	Recommendation	80
REFERE	ENCES	82
WEEKL	Y LOG	85
POSTER		96
PLAGIA	RISM CHECK RESULT	97
FYP2 CH	IECKLIST	100

## LIST OF FIGURES

Figure Number	Title	Page
Figure 2.1	Swipe left or right feature of Tinder	7
Figure 2.2	Woman on Bumble has to initiate conversation first	8
Figure 2.3	Swipe left or right feature on Tantan	9
Figure 3.1	Normal User Use Case Diagram	14
Figure 3.2	Business User Use Case Diagram	23
Figure 3.3	Log in	30
Figure 3.4	Sign Up	30
Figure 3.5	Log out	30
Figure 3.6	Host Meet up	30
Figure 3.7	Join Meet up	30
Figure 3.8	View User	31
Figure 3.9	View Business	31
Figure 3.10	Write Review	31
Figure 3.11	Give Rating	31
Figure 3.12	View Profile	31
Figure 3.13	Edit Profile	31
Figure 3.14	View Review	32
Figure 3.15	View Meet up	32
Figure 3.16	Check Booking	32
Figure 3.17	Check Apply	32
Figure 3.18	Accept Application	32
Figure 3.19	Reject Application	32
Figure 3.20	Close Registration	33
Figure 3.21	Send Booking	33
Figure 3.22	View Chat	33
Figure 3.23	Send Chat	33
Figure 3.24	Open Chat Room	33
Figure 3.25	Add Friend	33
Figure 3.26	Respond Friend Request	34
Figure 3.27	View Notification	34

Figure 3.28	View Business Profile	34
Figure 3.29	Edit Business Profile	34
Figure 3.30	View Approved Booking	34
Figure 3.31	View Pending Booking	34
Figure 3.32	Accept Booking	35
Figure 3.33	Reject Booking	35
Figure 3.34	View Business Review	35
Figure 3.35	View Business Notification	35
Figure 3.36	View Business Chat	35
Figure 3.37	Send Business Chat	35
Figure 3.38	Open Business Chat Room	36
Figure 3.39	View Normal User Profile	36
Figure 3.40	Turn On Booking	36
Figure 3.41	Turn Off Booking	36
Figure 3.42	Sign Up and Login	36
Figure 3.43	Sign up options for different account	36
Figure 3.44	Sign up for normal user	37
Figure 3.45	Sign up for business user	37
Figure 3.46	Home page for normal user	37
Figure 3.47	Notification Page of normal user	38
Figure 3.48	Chat page for normal user	38
Figure 3.49	Host meet up	38
Figure 3.50	Profile Page of normal user (user's own profile)	38
Figure 3.51	Review Page of normal user (user's own review)	39
Figure 3.52	Review page of business user	39
Figure 3.53	Meet up Page of normal user (user's own meet up)	39
Figure 3.54	Booking detail	39
Figure 3.55	Meet up requested	39
Figure 3.56	Meet up approved or ended	40
Figure 3.57	Profile Page of normal user (other users' profile)	40
Figure 3.58	Review Page of normal user (other users' review)	41
Figure 3.59	Meet up Page of normal user (other users' meet up)	41
Figure 3.60	Business profile in normal user's view	41

Figure 3.61	Home page of business user	41
Figure 3.62	Booking detail page of business user	41
Figure 3.63	Notification page of business user	41
Figure 3.64	Chat page of business user	42
Figure 3.65	Profile page of business user	42
Figure 4.1	System Block Diagram	43
Figure 4.2	Firebase Cloud Storage Structure	51
Figure 4.3	The usage of different layouts	52
Figure 4.4	BottomNavigationView in home screen	52
Figure 4.5	ToolBar on top of screen	53
Figure 4.6	Normal User Flow Chart Diagram	53
Figure 4.7	<b>Business User Flow Chart Diagram</b>	54
Figure 4.8	Navigation Graph	55
Figure 5.1	Setting and Configuration	67
Figure 5.2	User Manual: Home page	67
Figure 5.3	User Manual: Host meet up	68
Figure 5.4	User Manual: Host meet up	68
Figure 5.5	User Manual: Host meet up	69
Figure 5.6	User Manual: Host meet up	69
Figure 5.7	User Manual: Edit profile	70
Figure 5.8	User Manual: Join meet up	70
Figure 5.9	User Manual: Respond friend request	71
Figure 5.10	User Manual: Business home page	71
Figure 5.11	User Manual: Booking details	72

## LIST OF TABLES

Table Number	Title	
Table 2.1	Summary of application review	10
Table 3.1	Host meet up	14
Table 3.2	Join meet up	15
Table 3.3	View user	15
Table 3.4	View business	16
Table 3.5	Give rating	16
Table 3.6	Write review	17
Table 3.7	View profile	17
Table 3.8	Edit profile	17
Table 3.9	View review	18
Table 3.10	Check booking	18
Table 3.11	Check apply	19
Table 3.12	Send booking	19
Table 3.13	Accept application	20
Table 3.14	Reject application	20
Table 3.15	Close registration	20
Table 3.16	View chat	21
Table 3.17	Send chat	21
Table 3.18	Open chat room	21
Table 3.19	Add friend	22
Table 3.20	Respond friend request	22
Table 3.21	View notification	23
Table 3.22	View business profile	24
Table 3.23	Edit business profile	24
Table 3.24	View history booking	24
Table 3.25	View pending booking	25
Table 3.26	Accept booking	25
Table 3.27	Reject booking	25
Table 3.28	View business review	26
Table 3.29	View business notification	26

Table 3.30	View business chat	26
Table 3.31	Send business chat	27
Table 3.32	Open business chat room	27
Table 3.33	View normal user profile	27
Table 3.34	Turn on booking	28
Table 3.35	Turn off booking	28
Table 3.36	Log in	28
Table 3.37	Log out	29
Table 3.38	Sign up	29
Table 4.1	Log in and sign up	55
Table 4.2	Host a meet up	57
Table 4.3	Join a meet up	58
Table 4.4	Meet up is accepted, ended or closed	58
Table 4.5	Host manages the meet up and visits business profile	58
Table 4.6	User views chat page	59
Table 4.7	User view notification	60
Table 4.8	Normal user view own user profile	61
Table 4.9	Normal user view other user profile	62
Table 4.10	Business user visits home page	63
Table 4.11	Business user visits notification page	63
Table 4.12	Business user visits chat page	63
Table 4.13	Business user visits own user profile	63
Table 4.14	Business user visits normal user profile	64
Table 4.15	Log out	65
Table 5.1	Requirements for user's device	66
Table 5.2	Requirements for developer's device	66
Table 6.1	Functional testing	66
Table 6.2	Objectives Evaluation	73

## LIST OF ABBREVIATIONS

RAD Rapid Application Development

JAD Joint Application Development

CASE Computer-Aided Software Engineering

XP Extreme Programming

#### **CHAPTER 1 INTRODUCTION**

Online dating is gradually becoming common and consists of nearly 980,000 users in 2020 including pay and non-pay users in every range of age, especially the group of 18 to 34 years old [1]. There are various dating applications in the market such as Tinder and Tantan which providing a platform for users to have casual communication through texting, video or photo sharing with a stranger met online. It is widely used; however, people tend to dislike using it. Based on the statistics, around 59% of women and 55% of men have negative opinions towards the online dating services because of the risk of engaging strangers online and worried of leaking personal information [2]. It is normal to have this worried as we cannot judge one through an online communication since people can easily construct their personal information and personal qualities as we cannot observe them, unless meeting up in real person. However, there are other more critical problems such as these dating applications are having a consistent, old and traditional concept where user can only swipe left to pass and right to like on someone's pictures. In order to be matched, they have to wait for the other user to swipe right on them too. Furthermore, most of the users are only communicate with strangers on the application, but not many of them successfully meet each other in-person due to few reasons. For example, the users will hesitate to meet up even though they have been communicating through texting for a long period as they do not wish to ruin the texting chemistry [3].

Hence, this project is to develop a mobile application that connecting strangers through face-to-face communication. When user first time get on the application, there will be a list of meet up created by other users that allows user to join. Then, if they are accepted, they will be meeting each other in a particular venue. It gives conveniency for users to schedule a meet up with others. They can meet up with multiple person that sharing similar interest at the same time. They can also review other users' rating and feedback to avoid meeting up some users with inappropriate behaviour. Not only normal user, but business users can also promote their businesses on the application to attract more people to schedule an event at their business location.

#### 1.1 Problem Statements and Motivations

#### a. Cognitive overload due to swipe left or right feature

In Tinder, Bumble or Tantan, there is millions of profile for users to swipe left or right for the one they dislike or like. However, there is no history record on which profile has the user swiped on before. This means that user is forced to recall on which profiles they have swiped. This could be cumbersome as well since there is a case where user accidentally swipe left on someone. For instance, those profile being swiped left will nearly never show up again as Tinder will deprioritize them, except for some special circumstances such as the user deletes the account and comeback [4]. Besides, user might experience memory load on the user they have swipe right before as it will not instantly shows up after user swiped, unless they are matched. Overall, user might have trouble in recalling what have they done on the application. Since there is a lot of alternatives and options of user on Tinder, users will keep swiping and swiping lots of profile until they cannot even recall and even brain overloading [5]. Hence, this is a motivation to build an application that reduce the cognitive and memory load for a better user experience.

#### b. It is hard to schedule for meet-up due to no supported function built in

As most of the online dating applications are targeting for user to match with the one they like, they are more focusing on building the algorithm for user matching such as Elo Score algorithm for Tinder and Gale-Shapley algorithm for Hinge [5]. Hence, there is no function support the entire process of how users meeting up once they are matched to have further engagement. Whenever users feel the need of meeting up with one and another, they have to arrange the meet up such as location, date, and time themselves which is not easy since one might have different time schedule for their daily lives. In addition, not everyone would like to meet up with you as some of them may not be ready yet or they simply do not want to ruin the texting chemistry [3]. Hence, there is a motivation to create a meet up function that would greatly facilitate the process of meeting up in order to let users have a better experience where they could be efficient and effective through this application.

#### c. Difficult in arranging meet-up for multiple person with shared interest

As mentioned above, there is no meet up function for users to facilitate the entire meeting up process. Especially when user not only wants to meet up one person, but

#### **CHAPTER 1 INTRODUCTION**

multiple person at the same time. Under this circumstance, user has to direct message to each and everyone for meet up invitation. Furthermore, users have to keep swiping in order to find one that match their own interests or hobbies. Even when they did find it, there will be no guarantee that the user would like to go out for a meet up. Hence, it causes a lot of time wasting and mental fatigues as they swipe on it for a long period to find the matched. However, according to Tinder matching algorithm for instances, high frequency in swiping left will ruin the user's Elo score - a score that determine user's potential matches [6]. The higher score means this particular user is more attractive and pickier, so the system will show this profile to another user with even higher Elo Score. Hence, this will cause the user hard to be matched as the other users are picky too [7]. Overall, find one with shared interest is hard and to find a group of people with shared interest is even harder. This happened to be a problem because for those busy schedule working user, it is hard to spare time in meeting up with others one-by-one [8]. If there is a function allows user to gather a group of people with shared interest, they could make their time more valuable. Hence, there is a motivation to build up an application that enable user hosting a meet-up that allows other interested users to join along.

### 1.2 Objectives

# a. To analyse various dating application in the market based on their functions, strengths, and weaknesses in providing dating services.

This project is aimed to find out the shortcoming and the strengths of the various market applications in order to provide a new perspective of view and inspiration that should be accomplished in this project for a better user experience.

## b. To design and develop an application that provides function hosting meet up and gathering to enable user have chances to meet each other in real person.

One of the main objectives in this project is to develop an application that enable user to interact with other users in person through hosting meet up functions and features. These functions are inspired from the analysis and review on various market application.

#### c. To evaluate and test the deliverable of the project in the aspect of functionality

#### **CHAPTER 1 INTRODUCTION**

Another objective is to review and evaluate the end deliverable of this project, which is the mobile application in functionality perspective in order to ensure error free.

#### 1.3 Project Scope

The scope of this project is to develop and deliver a social networking and scheduling application that allows user to host a meet up to meet other users in person. This project will be broken down into two types of users, which are normal user and business user. Both type of user will have different functions to perform.

Normal user is expected to host meet up and gathering. With this function, user can schedule meet up by setting up necessary details such as date, time, number of participants, payment method, description and other personal preferences. Other users can choose to join the meet up, while the host will have the choice of accepting or rejecting application. Users can also edit their profile such as interest, preferences, self-description as references for other users.

User can also give feedback and review other users by rating stars and comments. Each user is expected to have their own rating shown in their profile. In the application, user is expected to have the function of chatting with other users too.

Host needs to close the registration for the meet up in order to create a group chat room with other joined users. Once the meet up registration is closed, user can also make booking if the business location is one of the registered user in our system and it is available for booking. For example, user can book the targeted restaurant or places that allows booking in the application.

Business user will have the function of receiving booking requests, accept or reject them, and promoting their business by enhancing their profile.

#### 1.4 Impact, Significance and Contribution

The impact of this project is changing the way how a social networking application can be and how people can utilize it to expand their network connection, find friends, and life partner through this application. Among most of the popular online dating application, there is more than 25 million users all around the world engaging on the online dating application and this is only in United States area only [9]. This kind of application already be part of their lives and affect them in the way of finding life partners and expanding social network. Hence, the way of a dating application operates

will have huge impact on their users. However, the process of using the dating application is still in the traditional way which is swiping left and right on photos of other users to find matches.

By having this application, users can have a different way to make friends through the main function of this application, which is the meet up or gathering hosting. Whoever is interested in a meet up, they can apply and join it. Hence, no more swiping left and right, waiting the other one to swipe right on you, or keep wasting time to find a better option by swiping addictively. Users that are sharing the same interests can meet each other in an easy way. This could encourage users to engage each other by having face-to-face communication, unlike traditional dating application that most of the users are having texting chemistry only. The rating system in the application can also be one of the selling points of this application as it can be a tool for other users to avoid other users with inappropriate intentions and behaviours.

In addition, not only the users who wish to finding friend and partners, business user can also take part and get benefits from this application. This proposed application could possibly contribute to the local economy as users will have the function to choose a registered business as meet up venue and make booking within the application. Hence, business users can use it to receive booking and also promote their business on this platform.

#### 1.5 Report Organization

This report is organized into 7 Chapters: Chapter 1 Introduction, Chapter 2 Literature Review, Chapter 3 System Methodology, Chapter 4 System Design, Chapter 5 System Implementation, Chapter 6 System Evaluation and Discussion, Chapter 7 Conclusion and Recommendation.

The first chapter covers the introduction of this project including the problem statement, objectives, motivation and contribution, project scopes and report organization. The second chapter covers the literature review which sectioned into two part: the first part is where a few similar applications in market are reviewed based on their strengths, weaknesses and features; the second part is about the methodology reviews based on their strengths and weaknesses. The third chapter covers the system methodology with diagrams such as use case diagram, activity diagram and user interface designs. The fourth chapter is about the system design including the block diagram and system components interaction. The fifth chapter covers the system

#### **CHAPTER 1 INTRODUCTION**

implementation with a proper explanation on system operation and setup. The sixth chapter is about the system evaluation and discussion which included the system testing cases and results, objectives evaluation and project challenges. The seventh chapter covers the conclusion and recommendation for the future enhancement of this project.

This literature review is split into two parts which are application reviews and methodology reviews. Application reviewed are Tinder, Bumble and Tantan. Methodologies reviewed are Rapid Application Development, Agile methodology and Spiral Methodology.

#### 2.1 Existing Applications Review

#### **2.1.1** Tinder

Tinder is a mobile application that enable user to build up social network connection, dating and meeting new people [10]. There are some features supported which are swipe left and right that enable users to match with other interested users that liked them back. It has more features can be unlocked by paying the subscription fees ranging from RM64.90 to RM359.90. Features under subscription such as swipe more a day, unlimited rewinds, see who likes you and etcetera [11],



Figure 2.1 Swipe left or right feature of Tinder

#### Strengths:

Tinder is the world leading and most famous online dating application which recorded a total number of 7.86 million of audience size [9]. This has given an advantage where the user has more chances to be likely match with someone that they really interested due to a large size of users. Besides, its clean and simple user interface design enables user to know clearly on what to click and where it will be navigated to within the application. In addition, although there is subscription packages, user can still chat with the one they matched successfully without paying any cents. Besides, Tinder provides a function of photo verification which will match the user selfies and pose geometries from the photo uploaded in order to verify one is a real user. Tinder

also comes with video calling function which could help user to avoid those fake account.

#### Weaknesses:

User will need to pay for subscription fees in order to unlock certain function and features which it always shows up as an advertisement. This could give a bad user experience since user will always see the advertisement and have to close it. Besides, user is not forced to perform the photo verification function. This might give an opportunity to those that trying to impersonate on the platform. It also will create a loophole for some party to create bots and fake accounts with fake professional photo. The most important feature which is the swipe left and right could also create a problem where user might judge the user based on their profile photos uploaded. This might arise a problem for those who does not upload any attractive photos.

#### **2.1.2 Bumble**

Bumble is the first online dating application that challenge the rules of dating where female user will have to chance to make the first move [12]. The CEO of Bumble stated that it is time to flip the table where women have to wait for a man to date and ask them out. It is the time for women to make their first move in building relationship [13]. Men users cannot directly chat with woman unless the opposite one liked them and initiate a conversation. The match will dispose after 24 hours if the woman user does not initiate any conversation.



Figure 2.2 Woman on Bumble has to initiate conversation first

#### Strengths:

It is a platform that empower the woman in finding their interested one instead of being picked by man user. It has a feature that will automatically blur out the nude image that sent by other users which give a protection to user from harassment. User can decide to see the image or not. Besides, Bumble has a moderator that will check and block the messages or account contains any inappropriate content that meets the criteria as stated in Bumble terms and condition. This could help to prevent users sending inappropriate or harass message on the platform [14]. Bumble also comes with an account verification function that allows user to upload a one-time selfie in order to verify oneself. User can also set up the filter such as education and hobbies to increase the chances of swiping the user with same interest.

#### Weaknesses:

Male user has to wait for female user to initiate the conversation, which the match will automatically dispose after 24 hours in worst case. Besides, users can only see who they liked before by paying subscription fees. In addition, male user without subscribing the package, has to wait for female user initiate conversation and cannot see who they have liked. Only two free advanced filters for user without subscription.

### **2.1.3** Tantan

Tantan is also a location-based dating application that pretty much similar to Tinder, where the only difference is Tantan is a Chinese dating application [15]. Tantan also consist of the swipe left and right feature to let user find their interested one. It has more than 300 million registered user on the application with more than 10 million active users in daily usage [16]. It also comes with subscription package which can unlock features such as swipe more, unlimited likes, rewinds, hide last seen and etcetera.



Figure 2.3 Swipe left or right feature on Tantan

#### Strengths:

Tantan has a feature of blocking the contacts on user phone which can give a private social life to user. Its photo verification allows user to upload selfie for self-verification and they will obtain a badge after verified. This could help another user to identify whether the user they liked is a real person or not.

#### Weaknesses:

Video calling is not supported within the application itself where it could lead to inconvenience for user since they have to video call using other application. It is not forcing user to take the photo verification functions which create a loophole for bots and fake account. Its swipe left and right feature is the only way that user to get connect with others, which is a disadvantage to those does not upload attractive photos.

#### Summary:

	Tinder	Bumble	Tantan
Swipe left or right feature		$\sqrt{}$	
Free chat function		$\sqrt{}$	
Video call supported	$\sqrt{}$	-	-
Subscription fee for advanced	RM36.90	RM84.90	RM35.90
feature per month	KW130.90	KW104.90	KW133.90
Photo verification	$\sqrt{}$	$\sqrt{}$	
Block contact	-	-	
Advanced filter for matching	-	$\sqrt{}$	-

Table 2.1 Summary of application review

#### 2.2 Methodologies Review

#### 2.2.1 Rapid Application Development (RAD)

RAD is a methodology that emphasis more on development rather than planning phase. The project will be broken down into smaller modules which allows a faster development process. It involves several components such as Joint Application Development (JAD) session, timebox, incremental prototyping and Computer-Aided Software Engineering (CASE) tools. The prototyping is the most important component in RAD as it focus on iterative model. The development team will produce prototype and present it to customer for feedback and review. At least three time of repetition for inspection, discussion, and amendment in order to product final model that satisfy all

key stakeholders and client [17]. As stated by Geambasu [18], there are 5 main stages in RAD which are initialization, requirement, design, implementation, and deployment. Each stages will go through several phases and each phases will go through three steps which are preparation, session, and conclusion.

#### Strengths:

It promotes user involvement and participation in any of the development phases. For example, a JAD session is hold for communication between project team, stakeholders and customers. It allows the requirement to be defined more details during each of the iterative session with the help of prototype. Besides, it is suitable for low budget project since the prototype produced is reusable. The whole project development time is also shorter as RAD focus on timebox approach which can deliver the product within the due date. The team would rather cut off some requirement instead of extending the deadline [18].

#### Weaknesses:

Although it promotes high user participation, but the client also required to have experience and knowledge in the field or problem domain. The final product may miss out some significant requirement since the development team is working quickly in each of the iteration to produce the prototype. RAD is not suitable for large and complex system as it allows poor defined of user requirement at the early stage, which is not recommended for complex project [18]. Since the project is broken down into modules and smaller segment, the team has to put more attention in the integration of coding [19].

#### 2.2.2 Agile Methodology – Extreme Programming (XP)

Agile literally means easy and quick moving. Hence, this methodology allows project development process able to adapt to new changes very quickly in order to ensure the cost and customer satisfaction. This could be easily fulfilled in Agile as it is an iterative and incremental model approach. Extreme Programming (XP) is one of the frameworks under Agile. It allows direct communication between clients and extreme programmer team. Extreme Programmers will work together on codes production and keep the system constantly integrating to improve on it as needed after communicating with the clients [20]. There are 5 main stages which are planning, design, coding, testing

and release [21]. Paulk [22] pointed out that this XP cycle is included the four core and basic activities that developer should carry out which is designing, coding, testing, and listening.

#### Strengths:

It allows client with little requirement defined at early stage since it promotes communication and feedback between client and XP team to obtain requirement during development process. Since it allows project team to constantly work with client, it is more flexible to adapt new changes of client requirement into the system at any stages of the life cycle. It is suitable for low budget or small project as the XP team required lesser human resources [18]. Since it is a lighter team, with only few developer, it is easy to perform iteration and testing on the system.

#### Weaknesses:

Difficult to use in large scale project due to insufficient planning and poor upfront documentation as it focus on early result of project model [23]. It is also difficult for development effort estimation of the whole project as not all requirements are defined clearly in early stages of XP.

#### 2.2.3 Spiral Methodology

Spiral development methodology includes both of the characteristic of Agile and Waterfall methodology as it combines top-down and bottom-up approach [24]. It is a risk-driven approach where all the activities are planned to reduce risk. Each iteration of spiral model consists of 4 phases which are planning, risk analysis, development, and evaluation. A model is developed at the end of each iteration and it is being reviewed by the key stakeholders. The model will not be discarded, instead, it will be extended to next iteration to adjust and extend from it until the final model meets the user requirement and satisfaction [19].

#### Strengths:

It does not require fully defined user requirement at the early stage as it is an iterative approach where user requirement can be specifically increasing [25]. Besides, it has a high ability in identifying project risk as risk management is the main focus of this methodology. It also allows stakeholders to obtain functional model to review and

give feedback for a better model in the end of next iteration. In addition, it also provides a better time and cost analysis. Time and cost is required to be analysed in each of the iteration during risk analysis phase as it is one of the important criteria to determine the project risk [26].

#### Weaknesses:

The success of project is highly dependent on the accuracy of risk analysis from experts since it is the main focus of this methodology. Otherwise, a non-expert team will be providing an opposite report from the expert and causing wrong decision for whoever review on that [27]. This also link to the next weakness where it is a costly methodology since it required experienced experts to perform risk analysis. It is also not suitable to low-risk or small project aiming for low budget.

## 3.1 System Design Diagram

### 3.1.1 Use-case Diagram

#### a) Normal User Module

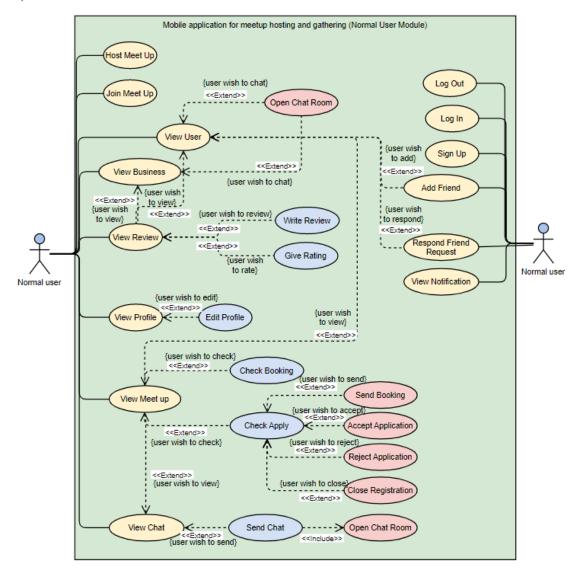


Figure 3.1 Normal User Use Case Diagram

Host meet up	
Description	User wants to host a meet up
Actor	Normal user
Assumption(s)	User wants to host a meet up
Precondition(s)	User is logged into the home page
Postcondition(s)	User hosted a meet up and back to home page
Primary Path	1. User clicks on host meet up button

	2. User keys in necessary input
	3. User clicks publish button
	4. System stores the meet up information
	5. User is returned to the home page
Alternate Path(s)	2. User customized location from the maps. Use case
	resumes at 3.
Exception Path(s)	User is warned by not filling up all the required input at 2.

Table 3.1 Host meet up

Join meet up	
Description	User wants to join a meet up
Actor	Normal user
Assumption(s)	User saw an interesting meet up
Precondition(s)	User is logged into the home page
Postcondition(s)	User joined a meet up
Primary Path	1. User clicks on any meet up
	2. User clicks on the join button
	3. System stores the data
	4. System shows the cancel button
Alternate Path(s)	4. User clicks cancel button. System stores the data and
	shows join button. Use case resumes at 2.

Table 3.2 Join meet up

View user	
Description	User wants to view another user's profile
Actor	Normal user
Assumption(s)	User wants to view another user's profile
Precondition(s)	User is logged in
Postcondition(s)	User is landed in an user's profile page
Primary Path	User clicks on user's header icon
	2. System gets the data
	3. User is landed in the user's profile page
Alternate Path(s)	3. User clicks review tab. Use case proceeds with View
	review case.

User clicks meet up tab. Use case proceeds with View
meet up case.
User clicks add friend button. Use case proceeds with
Add friend case.
User clicks message button. Use case proceeds with
Open chat room case.
User clicks respond button. Use case proceeds with
Respond friend request case.

Table 3.3 View user

View business	
Description	User wants to view a business user's profile
Actor	Normal user
Assumption(s)	User wants to view a business user's profile
Precondition(s)	User is logged in
Postcondition(s)	User is landed in a business user's profile page
Primary Path	User clicks on business user's header
	2. System gets the data
	3. User is landed in the business user's profile page
Alternate Path(s)	1. User clicks the meet up location in the meet up page.
	Use case resumes at 2.
	3. User clicks review tab. Use case proceeds with View
	review case.
	3. User clicks message button. Use case proceeds with
	Open chat room case.

Table 3.4 View business

Give rating	
Description	User wants to rate a business or user
Actor	Normal user
Assumption(s)	User wants to rate a business or user
Precondition(s)	User is logged in
Postcondition(s)	User rated a business or user
Primary Path	1. User input the number of stars
	2. User clicks send button

	3. System stores the data
Exception Path(s)	User is warned if they click send button without giving stars

Table 3.5 Give rating

Write review	
Description	User wants to write a review for business or user
Actor	Normal user
Assumption(s)	User wants to write a review for business or user
Precondition(s)	User is logged in
Postcondition(s)	User gave a review for business or user
Primary Path	1. User input reviews
	2. User clicks send button
	3. System stores the data
Exception Path(s)	User is warned if they click send button without input review

Table 3.6 Write review

View profile	
Description	User wants to view own profile
Actor	Normal user
Assumption(s)	User wants to view own profile
Precondition(s)	User is logged in
Postcondition(s)	User is landed in their own profile
Primary Path	User clicks on profile icon in bottom navigation bar
	2. System gets the data
	3. User is landed in own profile page
Alternate Path(s)	3. User clicks edit button. Use case proceeds at Edit
	profile case.

Table 3.7 View profile

Edit profile	
Description	User wants to edit profile
Actor	Normal user
Assumption(s)	User wants to edit profile
Precondition(s)	User is logged in and landed in their own profile page
Postcondition(s)	User edited their information
Primary Path	1. User clicks on edit button

	2. System gets the data
	3. User edits the information
	4. User clicks done
	5. System stores the data
	6. User is returned to profile page
Exception Path(s)	User is warned by submitting empty information for required
	fields.

Table 3.8 Edit profile

View review	
Description	User wants to view review of own, other users or business user
Actor	Normal user
Assumption(s)	User wants to view review of own, other users or business user
Precondition(s)	User is logged in and landed in profile page
Postcondition(s)	User is landed in review page
Primary Path	User clicks review tab
	2. System gets the data
	3. System displays the data in review page
Alternate Path(s)	3. User wants to rate. Use case proceeds with Give rating
	case.
	3. User wants to write review. Use case proceeds with
	Write review case.

Table 3.9 View review

Check booking	
Description	User wants to check booking detail
Actor	Normal user
Assumption(s)	User has sent booking before
Precondition(s)	User is in the meet up application page
Postcondition(s)	User is landed in booking detail page
Primary Path	User clicks check booking button
	2. System gets the data
	3. User is landed in booking detail page
Alternate Path(s)	1. User clicks from the booking notification. Use case
	resumes at 2.

Table 3.10 Check booking

Check apply	
Description	User wants to check application list of meet up
Actor	Normal user
Assumption(s)	User has received application from other users
Precondition(s)	User is logged in and in the meet up page
Postcondition(s)	User is landed in application page
Primary Path	User clicks check button in meet up page
	2. System gets the data
	3. User is landed in application page
Alternate Path(s)	3. User clicks send booking. Use case proceeds at Send
	booking case.
	3. User clicks close registration. Use case proceeds at
	Close registration case.
	3. User clicks accept or reject. Use case proceeds at
	Accept or Reject application case.

Table 3.11 Check apply

Send booking	
Description	User wants to send a booking request for the meet up location
Actor	Normal user
Assumption(s)	User selected a registered business user as location
Precondition(s)	User is logged in and in the application page.
	The location selected is a registered business user and allow
	for booking.
	User has closed registration.
Postcondition(s)	User has sent booking request
Primary Path	User click send booking button
	2. User keys in information
	3. User clicks send button
	4. System stores the data
	5. User is returned to application page
Alternate Path(s)	2. User edits some preloaded information. Use case
	resumes at 3.

Exception Path(s)	User is warned by sending empty information.
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Table 3.12 Send booking

Accept application	
Description	User wants to accept application of other users.
Actor	Normal user
Assumption(s)	User has received application from other users.
Precondition(s)	User is logged in and in the meet up page
Postcondition(s)	User has accepted application(s)
Primary Path	User clicks accept button
	2. System stores the data
Exception Path(s)	User is warned if the amount of guest accepted is exceeded.

Table 3.13 Accept application

Reject application	
Description	User wants to reject application of other users.
Actor	Normal user
Assumption(s)	User has received application from other users.
Precondition(s)	User is logged in and in the meet up page
Postcondition(s)	User has rejected application(s)
Primary Path	User clicks reject button
	2. System stores the data

Table 3.14 Reject application

Close registration	
Description	User wants to close registration
Actor	Normal user
Assumption(s)	User is satisfied with the number of guest accepted
Precondition(s)	User is logged in and in the application page.
	There is at least one application accepted.
Postcondition(s)	User has closed registration and a group chat is created
Primary Path	1. User clicks close button
	2. System stores the data
	3. System generated a group chat
	4. System checks if the meet up venue is allowed for
	booking

	5. System displays send booking button
Alternate Path(s)	4. The venue is not available for booking. Use case stops
	at 4
Exception Path(s)	User is warned if there is no accepted guest at step 1

Table 3.15 Close registration

View chat	
Description	User wants to view the chat records
Actor	Normal user
Assumption(s)	User wants to view the chat records
Precondition(s)	User is logged in
Postcondition(s)	User is landed in chat page
Primary Path	User clicks the chat icon in bottom navigation bar
	2. System gets the data
	3. User is landed in chat page
Alternative Path(s)	3. User clicks any chat item. System gets the data and
	land user in chat room.

Table 3.156 View chat

Send chat	
Description	User wants to send a message to the other users.
Actor	Normal user
Assumption(s)	User wants to send a message
Precondition(s)	User is logged in and in the chat room
Postcondition(s)	User sent message
Primary Path	1. User input messages
	2. User click send
	3. System stores the data
Alternative Path(s)	3. User wants to send again. Use case resumes at 1.

Table 3.17 Send chat

Open chat room	
Description	User wants to chat with the other users
Actor	Normal user
Assumption(s)	User wants to view the message records and chat with users
Precondition(s)	User is logged in

Postcondition(s)	User is landed in chat room
Primary Path	1. User clicks any chat in chat page
	2. System gets the data
	3. User is landed in the chat room
Alternate Path(s)	1. User clicks on other users' icon. Use case resumes at 2.
	1. User clicks on message button. Use case resumes at 2.
	2. System did not find related data. System creates a new
	chat room. Use case resumes at 3.

Table 3.18 Open chat room

Add friend	
Description	User wants to add the other users as friend
Actor	Normal user
Assumption(s)	User wants to be friend with other users
Precondition(s)	User is logged in and in the other users' profile page
Postcondition(s)	User has sent friend request
Primary Path	User clicks add friend button
	2. System stores the data
	3. System displays cancel button

Table 3.19 Add friend

Respond friend request	
Description	User wants to accept or reject friend request
Actor	Normal user
Assumption(s)	User has received friend request
Precondition(s)	User is logged in and in the profile page of requested user
Postcondition(s)	User responded the friend request
Primary Path	User clicks respond button
	2. System shows a bottom sheet with accept or reject
	button
	3. User clicks accept button
	4. System stores the data
	5. System displays message button
Alternate Path(s)	3. User clicks reject button. Use case resumes at 4 and
	ended.

Table 3.20 Respond friend request

View notification	
Description	User wants to view the notification records
Actor	Normal user
Assumption(s)	User wants to view the notification records
Precondition(s)	User is logged in
Postcondition(s)	User is able to see notification records
Primary Path	User clicks notification icon at bottom navigation bar
	2. System gets the data
	3. User is landed in notification page
	4. User clicks any of the notification item
	5. System gets the data
	6. User is landed in relevant pages
Alternate Path(s)	4. User did not click any item. Use case stops at 3.

Table 3.21 View notification

### b) Business User Module

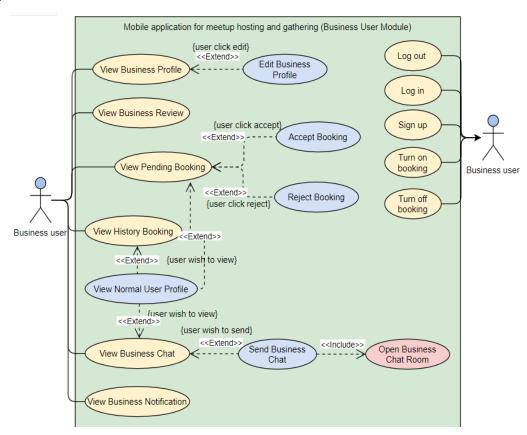


Figure 3.2 Business User Use Case Diagram

View business profile	
Description	User wants view business profile information
Actor	Business user
Assumption(s)	User wants to view business information
Precondition(s)	User is logged in
Postcondition(s)	User is landed in profile page
Primary Path	User clicks profile icon in bottom navigation bar
	2. System gets the data
	3. User is landed in profile page
Alternate Path(s)	3. User wants to edit information. System gets the data
	and open edit page.

Table 3.22 View business profile

Edit business profile	
Description	User wants to edit business information
Actor	Business user
Assumption(s)	User wants to edit business information
Precondition(s)	User is logged in and in the profile page
Postcondition(s)	User edited the business information
Primary Path	1. User clicks edit button
	2. System gets the data
	3. User edits information
	4. User clicks done
	5. System stores the data
Exception Path(s)	User is warned by not filling up all the required input at 4.

Table 3.23 Edit business profile

View history booking	
Description	User wants to view history booking request
Actor	Business user
Assumption(s)	User has responded booking requests before
Precondition(s)	User is logged into the home page
Postcondition(s)	User can see a list of history booking request
Primary Path	User clicks the history tab
	2. System gets the data

	3. System display request details
Alternate Path(s)	3. User clicks the requester's header. System gets the data
	and user is landed in profile page.

Table 3.24 View history booking

View pending booking	
Description	User wants to view pending booking request
Actor	Business user
Assumption(s)	User has received booking applications
Precondition(s)	User is logged into the home page
Postcondition(s)	User can see a list of pending booking request
Primary Path	1. User clicks the pending tab
	2. System gets the data
	3. System display request details
Alternate Path(s)	3. User clicks the requester's header. System gets the data
	and user is landed in profile page.
	3. User clicks the accept or reject button. System stores
	the data.

Table 3.25 View pending booking

Accept booking	
Description	User wants to accept booking request
Actor	Business user
Assumption(s)	User has received booking request
Precondition(s)	User is logged in and in the booking detail page
Postcondition(s)	User has accepted booking request
Primary Path	User clicks accept button
	2. System stores the data

Table 3.26 Accept booking

Reject booking	
Description	User wants to reject booking request
Actor	Business user
Assumption(s)	User has received booking request
Precondition(s)	User is logged in and in the booking detail page
Postcondition(s)	User has rejected booking request

Primary Path	User clicks accept button
	2. System stores the data

Table 3.27 Reject booking

View business review	
Description	User wants to view review of own or other users
Actor	Business user
Assumption(s)	User wants to view review of own or other users
Precondition(s)	User is logged in and landed in profile page
Postcondition(s)	User is landed in review page
Primary Path	User clicks review tab
	2. System gets the data
	3. System displays the data in review page

Table 3.28 View business review

View business notification	
Description	User wants to view the notification records
Actor	Business user
Assumption(s)	User wants to view the notification records
Precondition(s)	User is logged in
Postcondition(s)	User is able to see notification records
Primary Path	User clicks notification icon at bottom navigation bar
	2. System gets the data
	3. User is landed in notification page
	4. User clicks any of the notification item
	5. System gets the data
	6. User is landed in relevant pages
Alternate Path(s)	4. User did not click any item. Use case stops at 3.

Table 3.29 View business notification

View business chat	
Description	User wants to view the chat records
Actor	Business user
Assumption(s)	User wants to view the chat records
Precondition(s)	User is logged in
Postcondition(s)	User is landed in chat page

Primary Path	User clicks the chat icon in bottom navigation bar
	2. System gets the data
	3. User is landed in chat page

Table 3.30 View business chat

Send business chat	
Description	User wants to chat with other users
Actor	Business user
Assumption(s)	User wants to send a message to another user
Precondition(s)	User is logged in and in the chat room
Postcondition(s)	User sent a message
Primary Path	1. User types messages
	2. User clicks send button
	3. System stores the data
Alternate Path(s)	3. User wants to send again. Use case resumes at 1.

Table 3.31 Send business chat

Open business chat room	
Description	User wants to chat with normal user
Actor	Business user
Assumption(s)	User wants to chat with normal user
Precondition(s)	User is logged in
Postcondition(s)	User is landed in the chat room
Primary Path	User clicks on any chat records item
	2. System gets the data
	3. User is landed in chat room
Alternate Path(s)	1. User clicks on message button. Use case resumes at 2.
	2. System did not find related data. System creates a new
	chat room. Use case resumes at 3.

Table 3.32 Open business chat room

View normal user profile	
Description	User wants to view normal user's profile
Actor	Business user
Assumption(s)	User wants to view normal user's profile
Precondition(s)	User is logged in

Postcondition(s)	User is landed in profile page
Primary Path	User clicks any user's header icon
	2. System gets the data
	3. User is landed in normal user profile
Alternate Path(s)	3. User clicks message button. System gets the data. User
	is landed in chat room.

Table 3.33 View normal user profile

Turn on booking	
Description	User wants to turn on booking option
Actor	Business user
Assumption(s)	User wants to turn on booking option
Precondition(s)	User is logged into the home page
Postcondition(s)	User turned on booking option
Primary Path	User turn on the booking switch
	2. System stores the data

Table 3.34 Turn on booking

Turn off booking	
Description	User wants to turn off booking option
Actor	Business user
Assumption(s)	User wants to turn off booking option
Precondition(s)	User is logged into the home page.
	There is no pending booking.
Postcondition(s)	User turned off the booking option
Primary Path	1. User turns off the booking switch
	2. System stores the data
Exception Path(s)	User is warned because there are pending bookings at step 1.

Table 3.35 Turn off booking

### c) Shared use case of normal and business user:

Log in	
Description	User wants to log in to the application
Actor	Normal or business user
Assumption(s)	User has account and wants to log in

Precondition(s)	User has account
Postcondition(s)	User logged into the home page
Primary Path	User input credentials
	2. System logs in the account
	3. User is landed in the home page
Alternative Path(s)	3. Normal user is redirected to normal user dashboard
	3. Business user is redirected to business user dashboard
Exception Path(s)	User is warned because the credentials are wrong at step 1.

Table 3.36 Log in

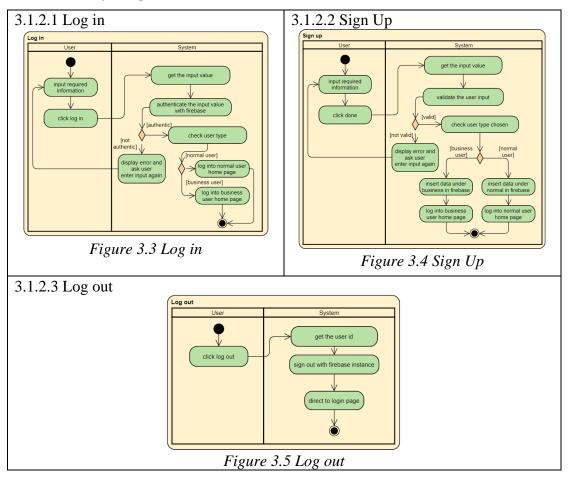
Log out	
Description	User wants to log out of application
Actor	Normal or business user
Assumption(s)	User wants to log out of application
Precondition(s)	User is logged in
Postcondition(s)	User is logged out
Primary Path	1. User clicks log out button
	2. System logs out the account
	3. User is redirected to log in page

# Table 3.37 Log out

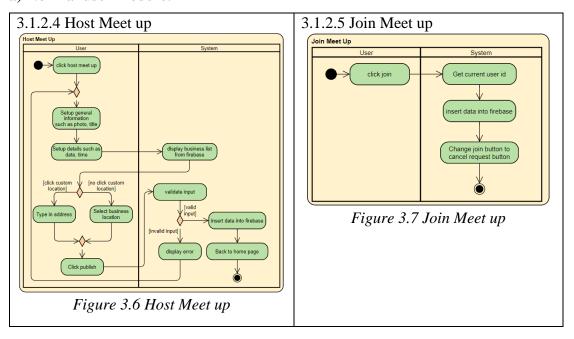
Sign up	
Description	User wants to sign up an account
Actor	Normal or business user
Assumption(s)	User wants to sign up an account
Precondition(s)	
Postcondition(s)	User signed up an account and landed in home page
Primary Path	1. User clicks sign up button
	2. User key in required data
	3. User clicks done
	4. System gets the data and verify
	5. User is redirected to home page
Alternative Path(s)	5. Normal user is redirected to normal user dashboard
	5. Business user is redirected to business user dashboard
Exception Path(s)	User is warned because there are invalid input at step 2.

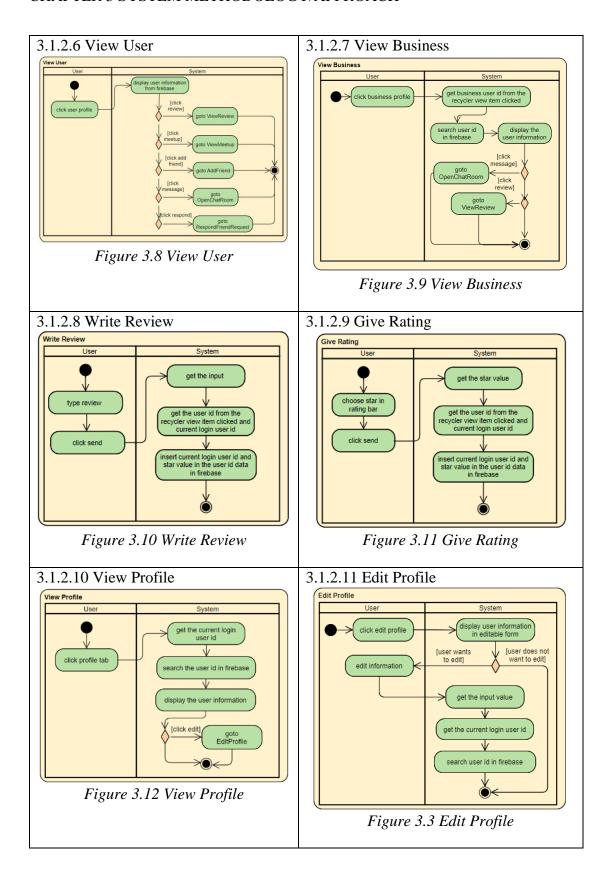
Table 3.38 Sign up

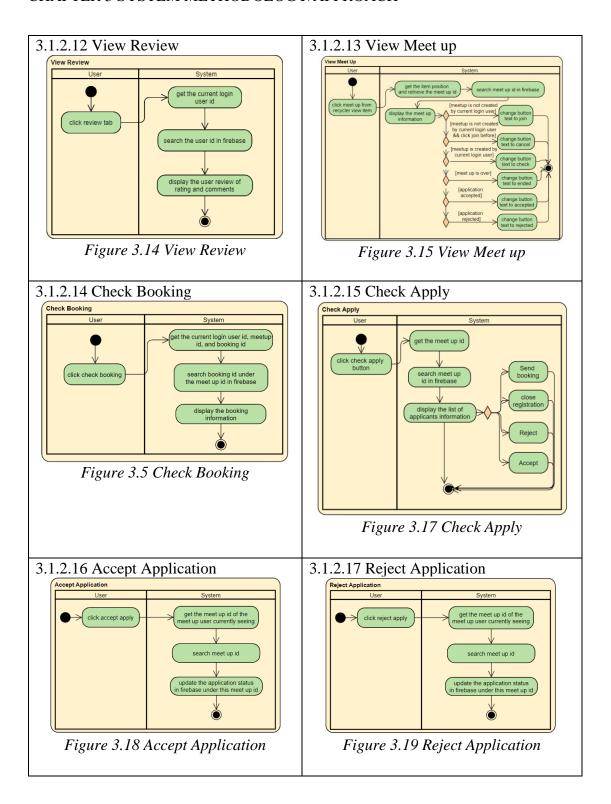
### 3.1.2 Activity Diagram

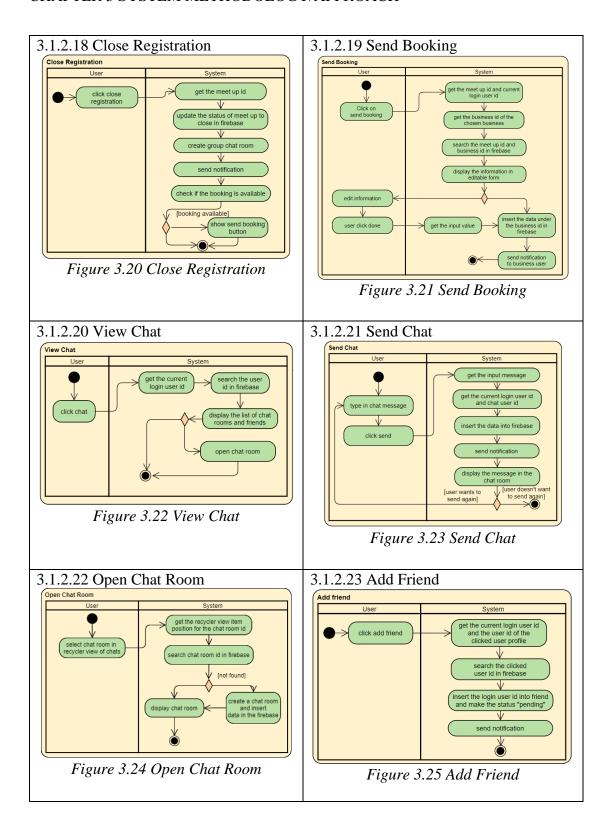


### a) Normal user module:



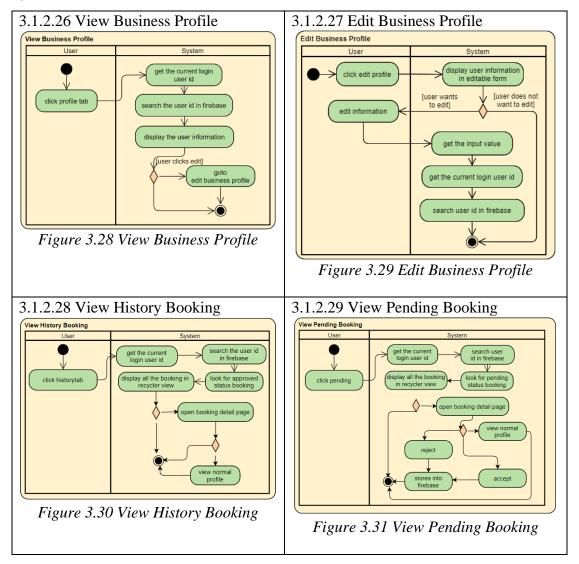


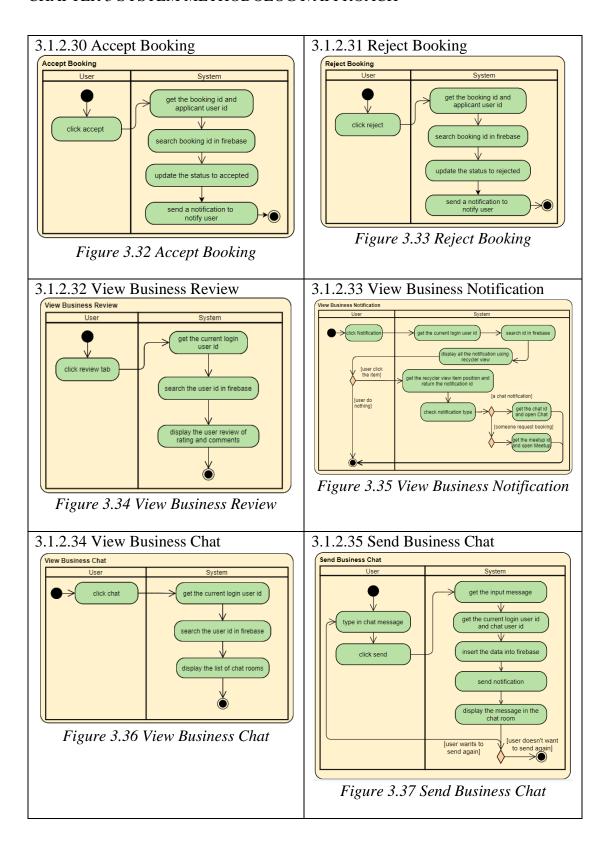




# 3.1.2.24 Respond Friend Request | System | User | Click | System | User | Sys

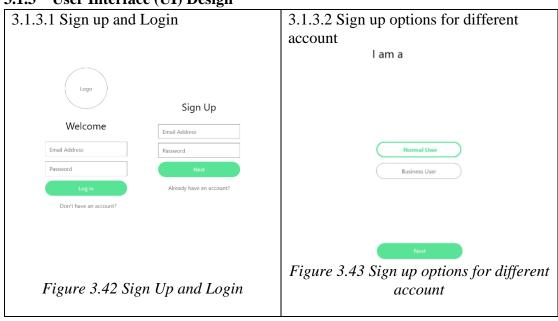
### b) Business user module

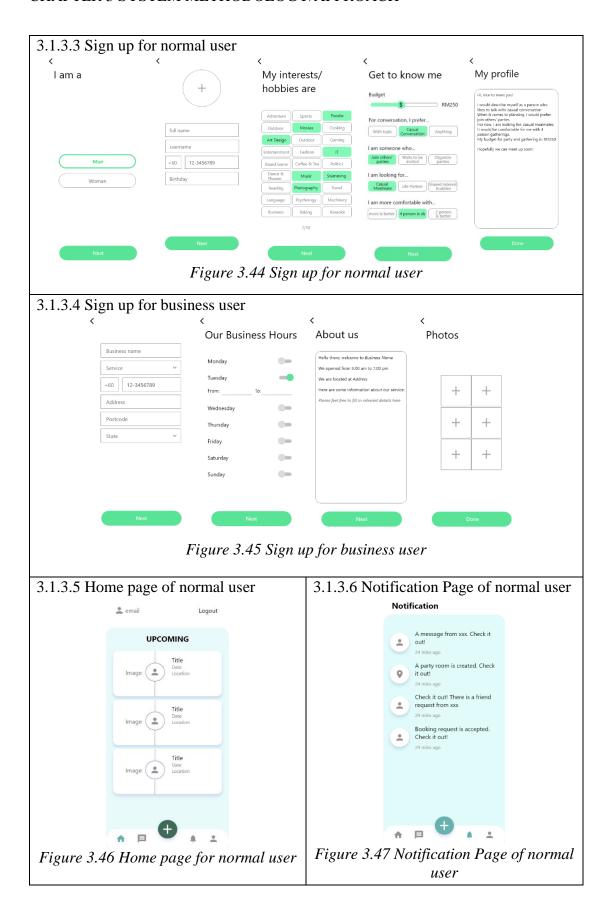


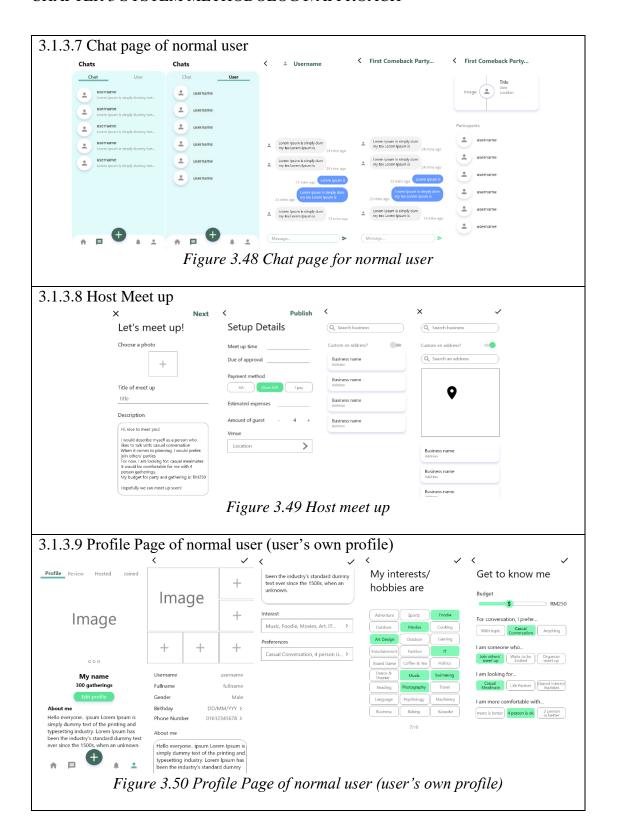


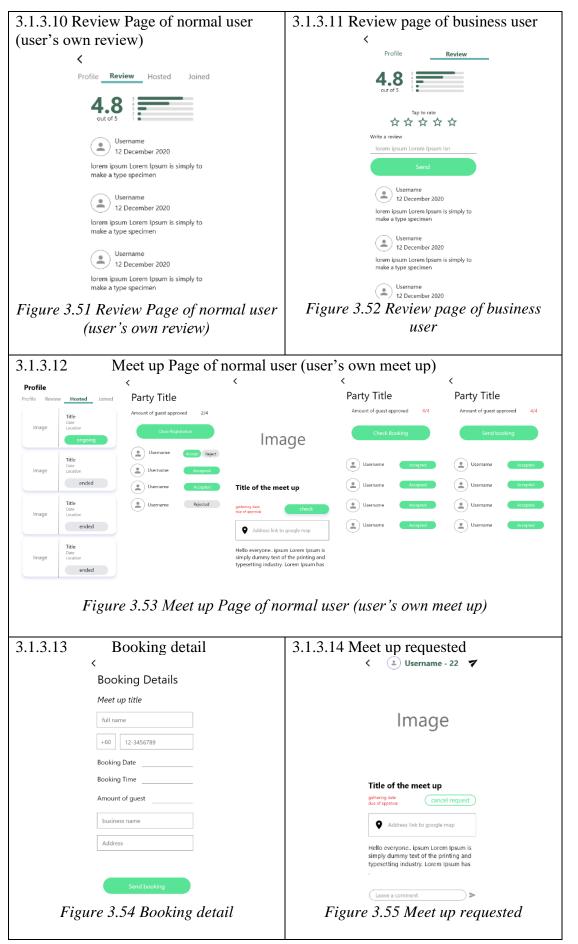
## 3.1.2.40 Open Business Chat Room 3.1.2.41 View Normal User Profile Open Business Chat Room View Normal User Profile get the user id click use header search chat room id in firebase display user profile [not found] create a chat room and insert data in the firebase display chat room Figure 3.38 Open Business Chat Room Figure 3.39 View Normal User Profile 3.1.2.40 Turn On Booking 3.1.2.40 Turn Off Booking Turn On Booking Turn Off Booking get the current login user id turn off booking switch check if there is any pending booking turn on booking switch search user id in firebase update booking flag to true update booking flag to false Figure 3.41 Turn Off Booking Figure 3.40 Turn On Booking

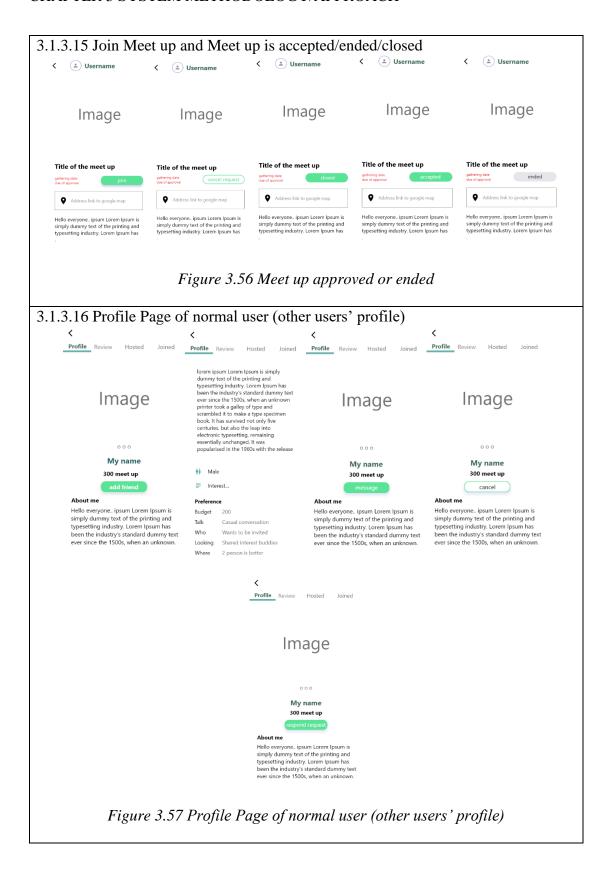
### 3.1.3 User Interface (UI) Design



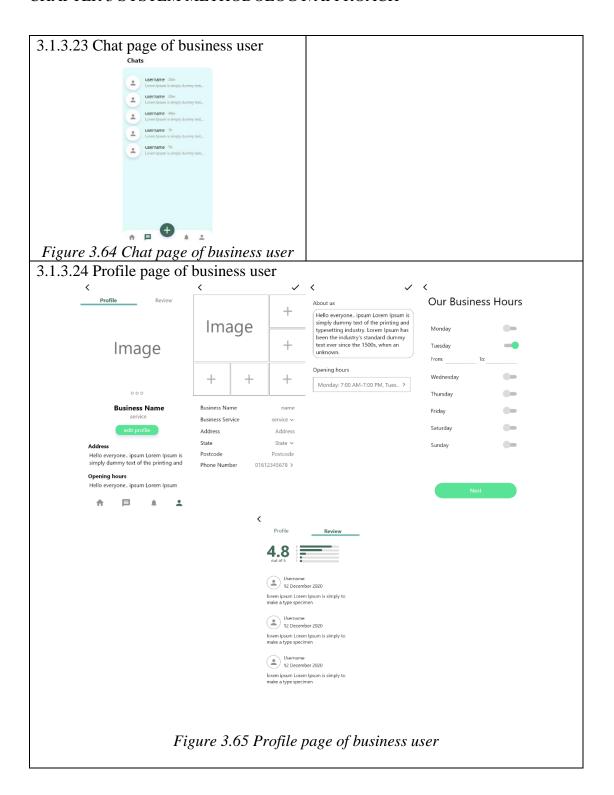








# 3.1.3.17 Review Page of normal user 3.1.3.18 Meet up Page of normal user (other users' review) (other users' meet up) Profile **Review** Hosted Joined Profile Review Hosted Joined lorem ipsum Lorem Ipsum is simply to make a type specimen Username \*\*\*\*\*\*\* 12 December 2020 larem ipsum Lorem Ipsum is simply to make a type specimen Figure 3.58 Review Page of normal user Figure 3.59 Meet up Page of normal (other users' review) user (other users' meet up) 3.1.3.19 Business profile in normal 3.1.3.20 Home page of business user user's view Booking Off On Booking Off On Pending History Pending History 4.8 Image Party title assumed to be ver... Fri. 18/12/2020 7pm Rejected 4 quest Business Name Username 12 December 2020 ryone.. ipsum Lorem Ipsum Party title assumed to be very long Frl. 18/12/2020 7pm Username 12 December 2020 **↑** □ **↓** ± Figure 3.60 Business profile in normal Figure 3.61 Home page of business user user's view 3.1.3.21 Booking detail page of business 3.1.3.22 Notification page of business user user Notification **Booking Details** Meet up title username Full name full name Accept Reject **→** □ **→** . . Figure 3.63 Notification page of Figure 3.62 Booking detail page of business user business user



### 4.1 System Block Diagram

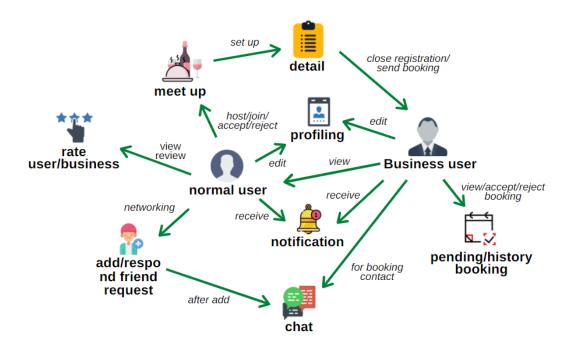


Figure 4.1 System Block Diagram

### Normal user:

For meet up, user can host or join a meet up hosted by other normal users. There are some information needed to be setup such as photo, description, gathering date and time, approval date and time to accept or reject the application and meet up location. For meet up location, the users can either choose the business locations which are registered business user in the system, or they can custom a location by searching the address in the map. When all the information is setup, they can publish it and other users can start applying to join the meet up.

When the host checks the application of the meet up, they can close the registration whenever there is at least one accepted guest. If the location chosen is one of the registered business user in the system and booking is available, the host can send a booking request.

For networking, users can send friend request to each other and respond them by accepting or rejecting. After added as friend, they can chat via the chat room. They can also review and give rating to each other. They can also contact with business user for booking enquiry.

Users can edit their own profile such as adding photos and modifying their personal information.

For notification, it will only happen in the following scenarios: chat message is received, booking is accepted, meet up registration is closed and a group chat room is created, friend request is received and friend request is responded.

### **Business Users:**

For booking, they can view the history or pending approval booking in home page. Inside the booking detail page, they can either accept or reject the booking. They can also click on the host's header to view user profile. They can also chat with the host to communicate on the booking request.

They can also edit their business profile such as adding photos and modifying business information to enhance their business page.

For notification, it will only happen in the following scenarios: booking request is received and chat message is received.

### 4.2 System Components Specification

### **Classes and Objects Specification:**

In this system, multiple java libraries and classes are utilized to build up the functionality of the application. For the most basic classes that required are Activity and Fragment. The lifecycle of the Activity and Fragment will control the pages and content switching of the application. For example, there are a couple of callback supported to monitor the state changes such as onCreate() – the system is creating, onStart() – the system is starting, onDestroy() – the system process is destroyed.

For fragment, there are some different extensions of the class such as BottomSheetDialogFragment. It is a fragment that provides a modal bottom sheet view on the application. For example, it is used in the function of responding friend request in this application where there will be a rectangular modal pop up at the bottom of the screen with some button options. Another kind of fragment will be AppCompatDialogFragment which is a class that support pop up dialog on the screen. It is useful in allowing user to edit their phone number on the pop-up screen without directing them to another page. Another class that is related to fragment is PagerAdapter, which is a class that keep the fragments persistently as a set of tabs. For example, it is useful in allowing users to swipe right to view more profile photos.

Besides, another common class being used in this application is the RecyclerView. It mainly helps in generating a dynamic list of output after retrieving

the data from database. It is a view supporting scrolling function where users can scroll up and down to discover contents. RecyclerView works with ViewHolder – create a view for each item of data, and Adapter – binding the data to the view. These three classes work together to provide the functionality of viewing contents in a scrollable screen.

Another common class in this application is ViewModel. It is a class that is dedicated to hold and store the data controlling by a lifecycle. For example, data that hold by ViewModel will not be loss once users rotated the screen. Another example will be the data will not be lost when users trying to go back and forth of a series of process. This is particularly useful in the application's signing up process, where users might be going back to the previous page to amend the sign-up information, then move forward again without loss of data.

### **Database, Cloud Storage, and Messaging Specification:**

The database used across the application is Firebase Realtime Database. It stores the users' data in JSON format and provide real-time data retrieving services. The structure of the database is as shown below:

```
"Tokens": {
 "userID": {
  "token": "value"
 }
},
"booking" : {
 "bookingID": {
  "booking datetime": "value",
  "booking_id": "value",
  "business_id": "value",
  "customer_contact": "value",
  "customer_id": "value",
  "customer_name": "value",
  "guest_amount": "value",
  "party_id": "value",
  "status": "value"
```

```
}
},
"chatMessage" : {
 "rooomID": {
  "chatMessageID": {
   "message": "value",
   "messageDateTime": "value",
   "messageID": "value",
   "senderID": "value"
  }
 }
},
"friends": {
 "userID": {
  "friendID": {
   "status": "value",
   "user_id" : "value"
 }
},
"notification": {
 "userID": {
  "notificationID": {
   "data" : {
    "body": "value",
    "icon": "value",
    "sent": "value",
    "title": "value",
    "type": "value",
    "user": "value",
    "misc": "value"
    },
   "datetime": "value",
   "key": "value"
```

```
}
 }
},
"party" : {
 "partyID": {
  "party_approvalDate": "value",
  "party_description": "value",
  "party_expenses": "value",
  "party_gatheringDate": "value",
  "party_hostUser": "value",
  "party_id": "value",
  "party_image": "value",
  "party_joinedUser": {
   "partyJoinedUserID": {
    "status": "value",
    "user id": "value"
   }
  },
  "party_location": "value",
  "party_numGuest": "value",
  "party_paymentMethod": "value",
  "party_title": "value"
 }
},
"party_location" : {
 "partyLocationID": {
  "businessID": "value",
  "partyID": "value",
  "partyLocationID": "value"
 }
},
"reviews" : {
 "userID": {
  "reviewID": {
```

```
"message": "value",
   "rating": "value",
   "reviewDateTime": "value",
   "reviewID": "value",
   "userID": "value"
  }
 }
},
"userChat": {
 "userID": {
  "roomID": {
   "member" : {
    "userID": "value",
    "userID": "value"
    },
   "message": "value",
   "roomid": "value"
  },
  "roomID": {
   "member" : {
    "userID": "value",
    "userID": "value"
    },
   "message": "value",
   "partyid": "value",
   "roomid": "value"
  }
      }
},
"users" : {
 "business" : {
  "userID" : {
   "bu_address": "value",
   "bu_booking": "value",
```

```
"bu_businessName": "value",
  "bu_description": "value",
  "bu_email": "value",
  "bu_hour": {
   "value": "value",
   "value": "value",
   "value": "value",
   "value": "value",
   "value": "value"
  },
  "bu_imgUri": {
   "imageID": {
    "imgUri": "value",
    "key": "value"
   }
  },
  "bu_password": "value",
  "bu_phoneNum": "value",
  "bu_postcode": "value",
  "bu_service": "value",
  "bu_state": "value",
  "bu_userid": "value"
 }
},
"normal": {
 "userID": {
  "nu_birth": "value",
  "nu_budget": "value",
  "nu_description": "value",
  "nu_email": "value",
  "nu_fullname": "value",
  "nu_gender": "value",
  "nu_imgUri": {
   "imageID": {
```

```
"imgUri": "value",
       "key": "value"
      }
     },
    "nu_interest" : [ "value", "value", "value", "value" ],
     "nu_partyCreated" : {
     "partyCreatedID": {
       "party_id": "value"
      }
     },
     "nu_partyJoined" : {
      "partyJoinedID": {
       "party_id": "value",
       "status": "value"
      }
     },
    "nu_password": "value",
    "nu_phoneNum": "value",
    "nu_preference" : [ "value", "value", "value", "value" ],
    "nu_userid": "value",
    "nu_username" : "value"
   }
  }
 }
}
```

For cloud storage, Firebase Clous Storage is used as it supports user to upload and download file from a cloud-based storage which supported together with the real-time database services. The cloud storage structure is as shown below where the images uploaded by the business user will be stored to BusinessImages/, normal user will be stored to Images/ and meet up images will be stored to PartyImages/.



Figure 4.2 Firebase Cloud Storage Structure

For the messaging service that enable users to send and receive notification, Firebase Cloud Messaging is used in this application. There are few classes needed to build up the entire service. An instance class that extends FirebaseMessagingService class is needed with the override methods such as onNewToken() - create a token to grant the service and onMessageReceived() controls the behaviour when the message is received. Another self-defined method could be sendNotification() – to send out the message. Other classes such as Client – contains getClient() method for the messaging service to get the current client, DataMessage class – a model for the message, FCMToken class that contains getToken() - to get the token for service granted, Response class - indicating the success or fail of the service, Sender class – to create an instance of the message sender. There is an interface needed APIServiceFCM - contains a header and HTTP POST method to send notification over the internet.

### **User Interface Specification:**

The types of layout that are commonly used across the application are LinearLayout, ConstraintLayout, and RelativeLayout. These three layouts provide different flexibility to arrange different View class in the application. For LinearLayout, it is mostly used to arrange and group the relevant views in horizontal or vertical layout. ConstraintLayout is also frequently used as the base layout of the screen as it allows to position the children view in flexible way by setting the constraint weight. While RelativeLayout is used when there is a need to display the children view in a relative way such as overlapping views. All these layouts are often used together. For example, in sign up page, there is a base layout using ConstraintLayout, then the children view using LinearLayout to organize multiple views in vertical orientation to ask for user's information. An example for RelativeLayout will be displaying the user image by overlapping it with another image view.

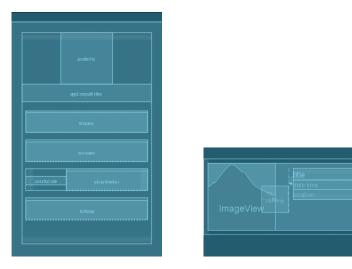


Figure 4.3 The usage of different layouts

For the design of bottom navigation, a view called BottomNavigationView is used to populate the menu items for users to switch to different tab of pages. For example, there are 4 pages – Home, Chat, Notification and Profile that can be switched by users at the bottom of the screen, which is hold by this BottomNavigationView. The options of items are populated by a menu – a XML file that specify all the menu items.



Figure 4.4 BottomNavigationView in home screen

There is a header used across the application mainly for back-pressed function and displaying the title of the pages. It is a customized ToolBar view that contains all the necessary view that shows the title of the pages. Whenever users land in a particular page, the ToolBar will handle which title view to show on the top of the page. Sometimes it is also useful for displaying a back-pressed button at the left of the ToolBar to let user navigates to previous page.



Figure 4.5 ToolBar on top of screen

# 4.3 Components Design

# **System Flow Chart Diagram:**

# a) Normal User Module

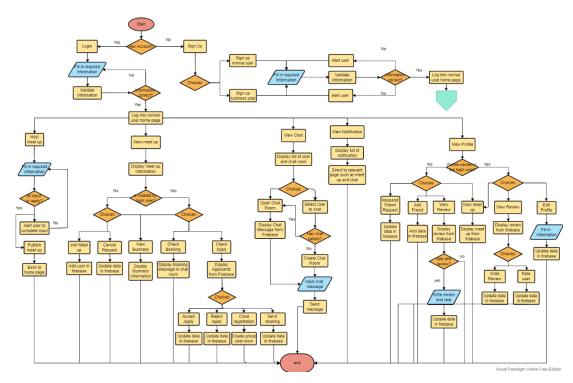


Figure 4.6 Normal User Flow Chart Diagram

# b) Business user module

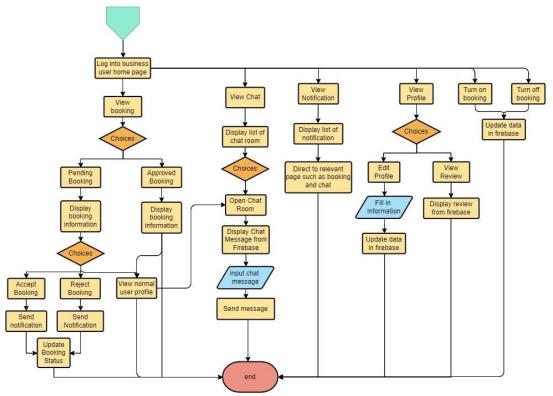


Figure 4.7 Business User Flow Chart Diagram

### **User Interface Navigation Design:**

There is an important component that is designed to control the flow of multiple related fragments. It is a Navigation components supported by Android that allows user to navigate across different fragments in the application. For example, since the sign-up process is split into multiple pages, these pages can be group together with the help of Navigation Graph that helps navigating one to another. A Navigation Graph is an XML file that contains relevant fragments that has a navigating destination. As shown in below picture, this is a Navigation Graph for sign up process, where a fragment can be navigated to another fragment as destination and going back or forth.

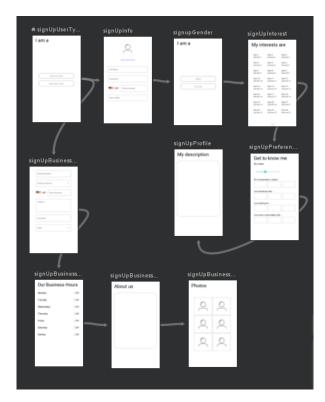
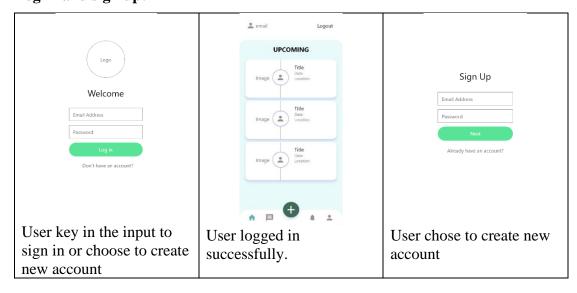
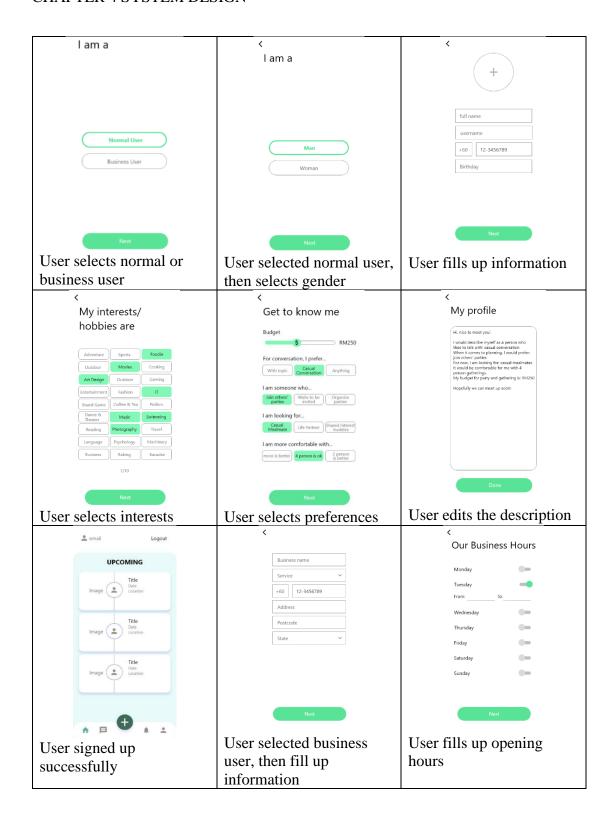


Figure 4.8 Navigation Graph

# 4.4 System Components Interaction Operation

### Log in and sign up:





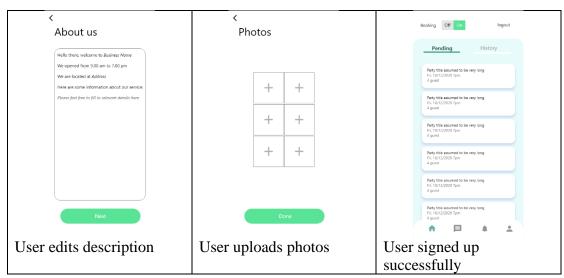


Table 4.1 Log in and sign up

### Host meet up:

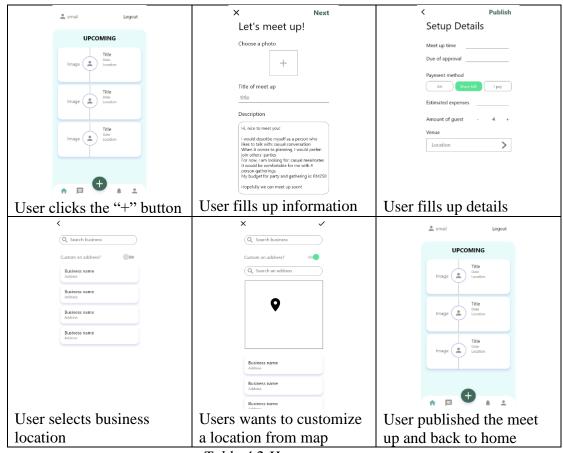


Table 4.2 Host a meet up

### Join a meet up:

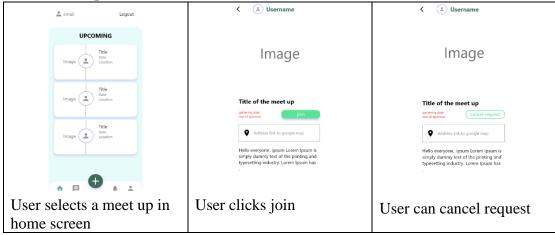


Table 4.3 Join a meet up

### Meet up is accepted, ended or closed

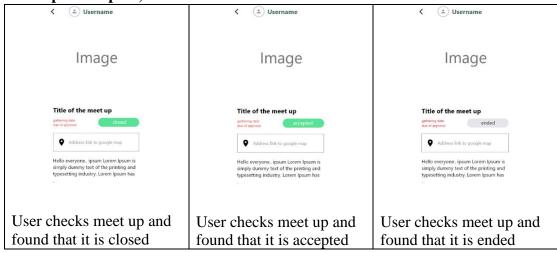
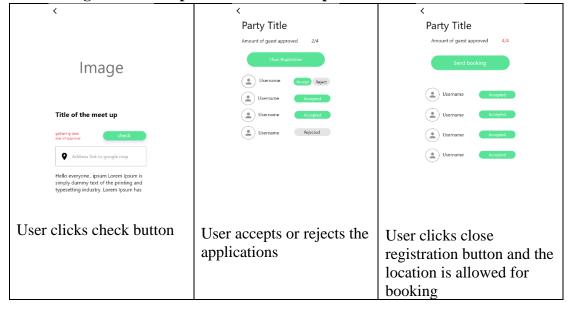


Table 4.4 Meet up is accepted, ended or closed

### Host manages the meet up and visits business profile



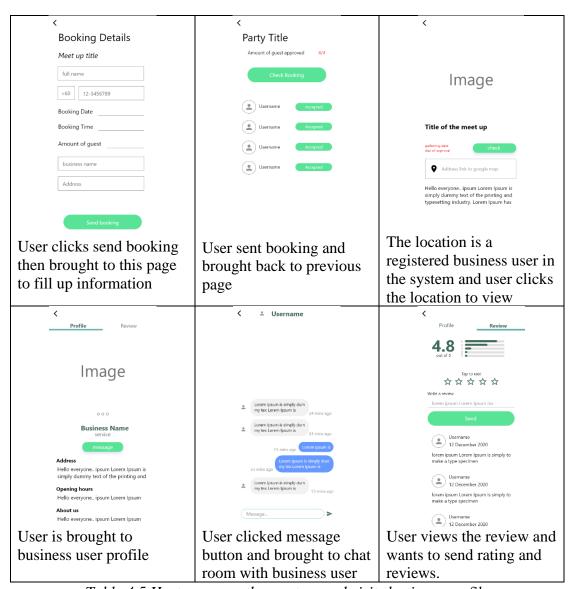
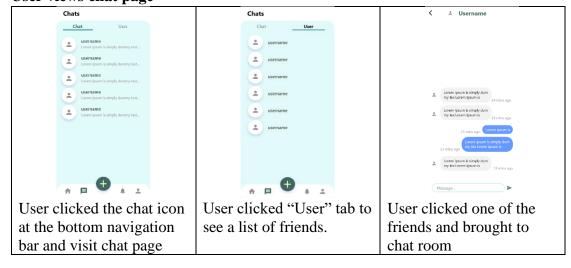


Table 4.5 Host manages the meet up and visits business profile

#### User views chat page



#### **CHAPTER 4 SYSTEM DESIGN**

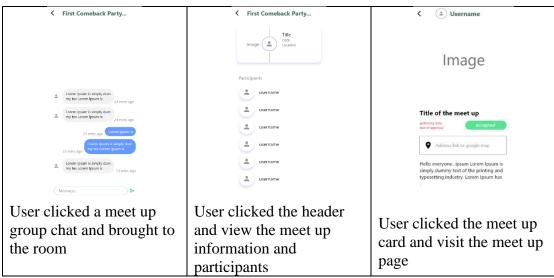
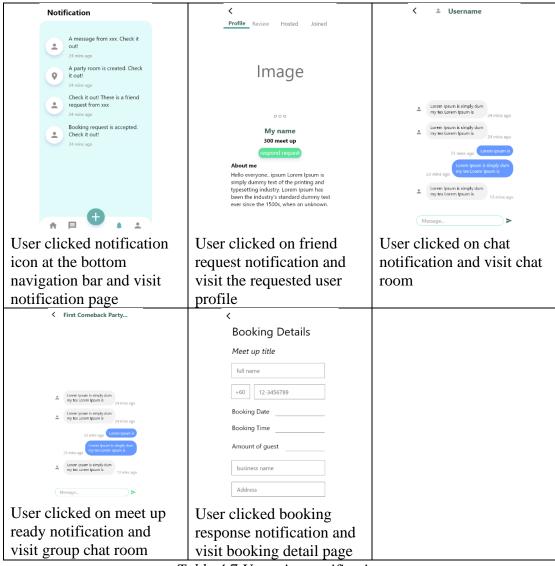


Table 4.6 User views chat page

#### User view notification



*Table 4.7 User view notification* 

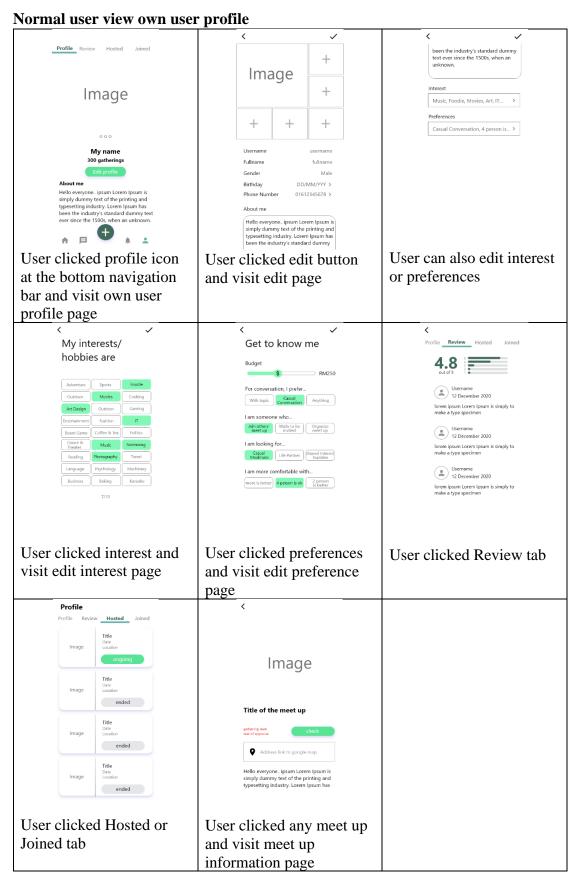


Table 4.8 Normal user view own user profile

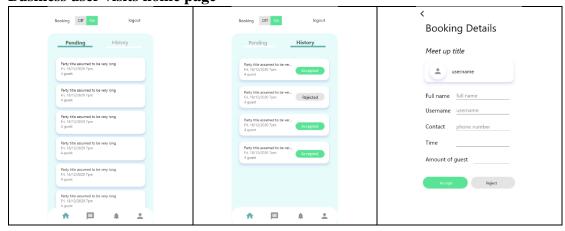
Normal user view other user profile: Profile Review Hosted Joined Profile Review Hosted Joined Profile Review Hosted Joined **Image Image Image** 000 000 My name My name My name 300 meet up 300 meet up 300 meet up cancel About me Hello everyone.. ipsum Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown. Hello everyone.. ipsum Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown. Hello everyone. ipsum Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown. User visits other user User visits other user User visits other user profile and is a friend profile and is not a friend profile and friend request is pending yet Profile **Review** Hosted Joined Profile Review Hosted Joined Review Hosted Joined Image \* \* \* \* \* 000 My name Username

##### 12 December 2020 lorem ipsum Lorem Ipsum is simply to make a type specimen About me Hello everyone.. ipsum Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown. Username 

\$\phi \phi \phi \phi \phi \phi 12 December 2020 lorem ipsum Lorem Ipsum is simply to make a type specimen User visits other user User clicked Review tab User clicked Hosted or profile and not yet and view reviews, user Joined tab, user cannot respond request can give rating and review view the meet up detail

Table 4.9 Normal user view other user profile

# **Business user visits home page**



User can switch on or off	User clicked History tab	User clicked any of the
for "booking". User needs		booking in home page and
to accept or reject all the		visit booking detail page
pending booking before		
switching off		

Table 4.10 Business user visits home page

Business user visits notification page

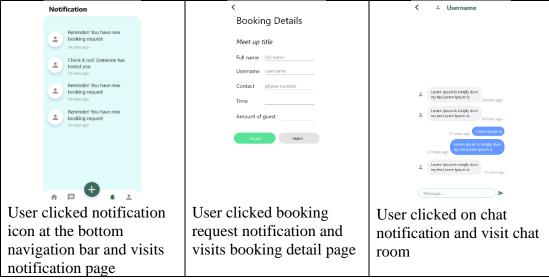


Table 4.11 Business user visits notification page

Business user visits chat page

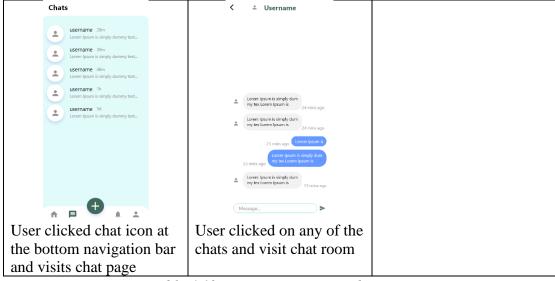


Table 4.12 Business user visits chat page

Profile About us + Hello everyone... ipsum Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown. Image +**Image** +Monday: 7:00 AM-7:00 PM, Tues.. > **Business Name** Business Name Business Service service v Address Address State State v Hello everyone.. ipsum Lorem Ipsum is simply dummy text of the printing and Postcode Postcode Phone Number 01612345678 > **Opening hours** Hello everyone.. ipsum Lorem Ipsum **□** . . User clicked edit button User can edit User clicked profile icon at the bottom navigation business hours and visit edit page bar and visit own user profile page **Our Business Hours** Review 4.8 Tuesday Username 12 December 2020 lorem ipsum Lorem Ipsum is simply to make a type specimen Thursday Username 12 December 2020 lorem ipsum Lorem Ipsum is simply to make a type specimen Saturday Username 12 December 2020 lorem ipsum Lorem Ipsum is simply to User clicked business User clicked Review tab hours and visit edit hours

Business user visits own user profile

Table 4.13 Business user visits own user profile

Business user visits normal user profile ≜ Username Profile Review Hosted Joined **Booking Details** Meet up title username **Image** Full name full name Contact phone number My name Time Amount of guest \_\_\_\_ About me Hello everyone.. ipsum Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown. Accept Reject Lorem Ipsum is simply dum my tex Lorem Ipsum is

page

#### **CHAPTER 4 SYSTEM DESIGN**

User clicked any booking	User clicked user header	User clicked
and visit booking detail	and visit profile page	message button and
page		visit chat room

Table 4.14 Business user visits normal user profile

# Log out

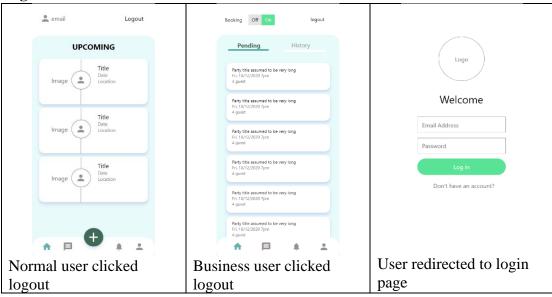


Table 4.15 Log out

#### 5.1 Hardware Setup

#### Requirements for user's device

Aspect	Description
Operating system (OS)	Android Kitkat 4.4 or above
Random Access Memory (RAM)	2GB or above
Internal Storage	1GB or above
Internet Connection	Required for cloud database access

Table 5.1 Requirements for user's device

#### Requirements for developer's device

Aspect	Description				
Operating System (OS)	Window 7 or above, Window 10 is				
	recommended				
Processor	Intel core i3 8 <sup>th</sup> Gen or above				
Random Access Memory (RAM)	4GB or above, 8GB is recommended				
Disk Space	2GB or above, 4GB is recommended				
Disk Drive	SSD is recommended				
Screen Resolution	1280 x 800 or above				

Table 5.2 Requirements for developer's device

## 5.2 Software Setup

There is a file with extension ".apk" which indicating that it is an Android Package File which created for Android operating system.

For using it in a physical smartphone operated by Android, download the APK file and open it in file manager, then wait for the download and installation process to be completed.

For using it in Android Studio software, follow the instruction and download the software at the following website: <a href="https://developer.android.com/studio?gclid">https://developer.android.com/studio?gclid</a> =Cj0KCQiAybaRBhDtARIsAIEG3km5x88Sjx577c\_7fvg8NODcxQy2bCDu1YFNH <a href="https://developer.android.com/studio/run/emulator">ddHVCPTTw3TlcETFmIaApjzEALw\_wcB&gclsrc=aw.ds</a>. After that, follow the instruction to set up the emulator at the following website: <a href="https://developer.android.com/studio/run/emulator">https://developer.android.com/studio/run/emulator</a>. After the emulator is set up, drag

the APK file to the emulator and wait for the download and installation process to be completed.

### 5.3 Setting and Configuration

There is only a simple setting which is to turn either the Wi-Fi or mobile data on since it required user to be online in using this application.

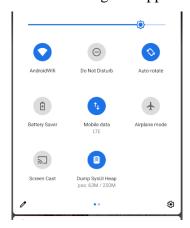


Figure 5.1 Setting and Configuration

#### 5.4 System Operation

#### Normal user:

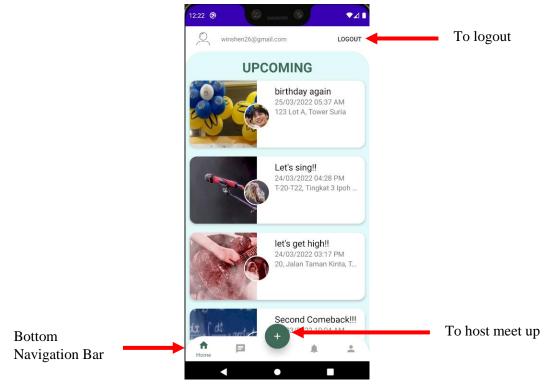


Figure 5.2 User Manual: Home page

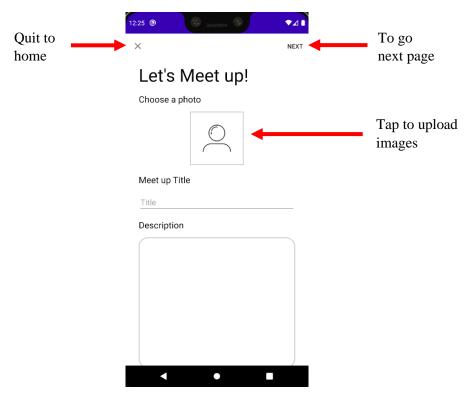


Figure 5.3 User Manual: Host meet up

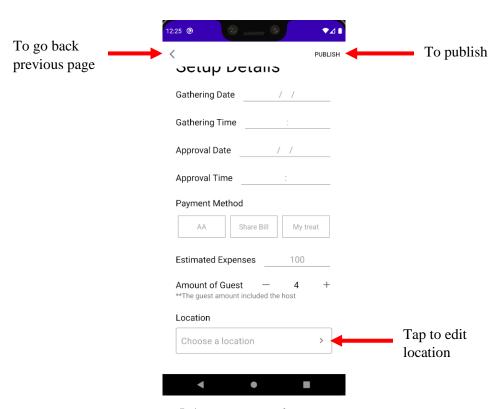


Figure 5.4 User Manual: Host meet up

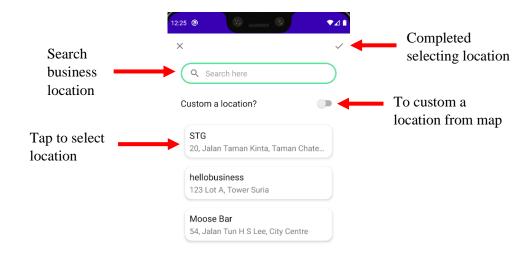




Figure 5.5 User Manual: Host meet up

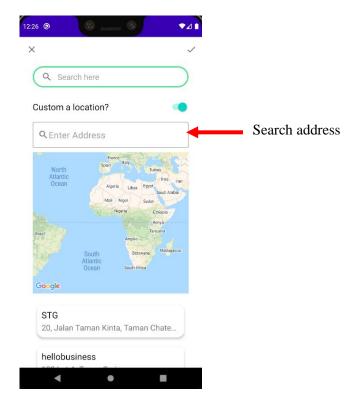


Figure 5.6 User Manual: Host meet up

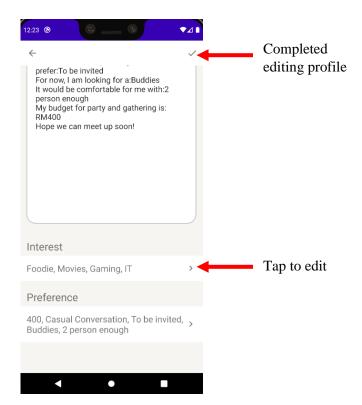


Figure 5.7 User Manual: Edit profile

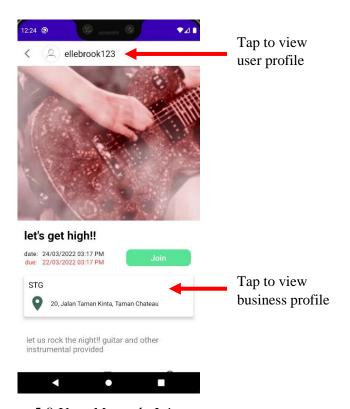


Figure 5.8 User Manual: Join meet up

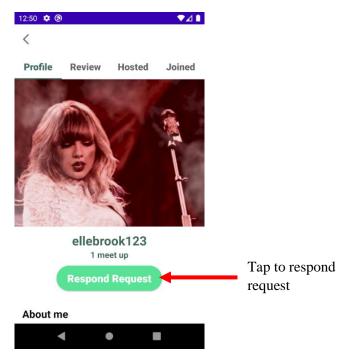


Figure 5.9 User Manual: Respond friend request

#### **Business user:**

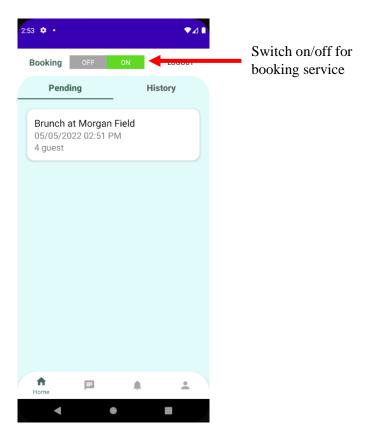


Figure 5.10 User Manual: Business home page

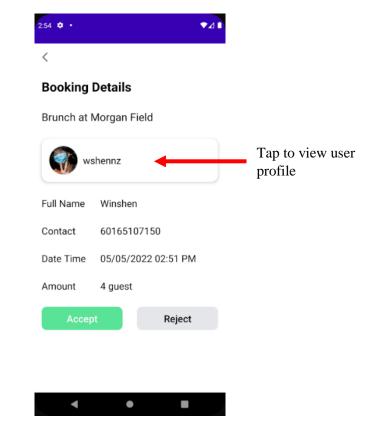


Figure 5.11 User Manual: Booking details

#### 5.5 Concluding Remarks

This section covers the setup, device's requirements as well as a simple user manual to guide the interested user in using the application. User's device required to be operating on system Android Kitkat 4.4 or above. However, if the user wishes to use this application in Android Studio, there is a built-in emulator provided by Android Studio and the user can drag the application file into the emulator. A brief user manual is provided in this section to guide the user in using the main function of the application.

#### **6.1** System Testing and Performance Metrics

System testing is used to verify the developed application meets and satisfy all the expected requirement. There will be several testing to be performed for verification which are functional testing and user interface testing.

Functional testing is to test the functions or project scopes are delivered as expected and with correct output. All the units are integrated together become a function as expected. Usually, this testing involved black box testing without the concern of the codes. For example, when user clicks host meet up, the whole process from setting up details, publish the meet up and to update the database record should be operated without error and wrong output. The key metric in this testing is to verify whether all the functions are working properly (actual outcome meets the expected outcome).

#### 6.2 Testing Setup and Result

#### **Functional Testing:**

Test case	Description	Step	Expected Outcome	Actual Outcome	Result		
Normal User	Normal User						
Login as normal user	User can login as normal user	1. Input credentials	Login successfully into normal user dashboard	Login successfully	Pass		
Sign up as normal user	User can sign up as normal user	1. Input credentials 2. Select account type 3. Input information 4. Select gender 5. Select interests 6. Select preferences 7. Edit description	Sign up successfully and login into normal user dashboard	Sign up and login successfully	Pass		
Host meet up	User can host a meet up	1. Input information	User published meet up and	Meet up is successfully	Pass		
чр	a meet up	2. Input meet	return the	hosted and user			
		up details	home page successfully	is returned to home page			

		3. Select location			
Join meet up	User can join the interested meet up	1. Select meet up 2. Click join	User sent out application successfully and can cancel request before host accepted	User joined successfully and has the option to cancel joining	Pass
View user	User can view another user's profile	1. Click user's icon or header	User can view other user's profile details	User can view other user's profile successfully	Pass
View review	User can view another user's review	1. Click user's icon or header	User can view other user's review	User can view other user's review successfully	Pass
Give rating	User can rate another user	1. Tap on the star rating 2. Click send	User gave rating successfully	User can rate the other user successfully	Pass
Write review	User can write review for another user	1. Input review 2. Click send	User sent review successfully	User can review the other user successfully	Pass
View business	User can view business profile	1. Click business user header or location card	User can view business profile details successfully	User can view the business profile details successfully	Pass
View profile	User can view own user profile	1. Tap profile icon at bottom navigation bar	User can view own user profile detail successfully	User can view own user profile detail successfully	Pass
Edit profile	User can edit own user profile details	1. Click edit button 2. Edit the information	User can edit the information successfully	User can edit the information successfully	Pass
View meet up	User can view meet up either through profile page or home page	1. Click a meet up	User can view the meet up details successfully	User can view the meet up details successfully	Pass
Check apply	Host can check meet up application	1. Click a hosted meet up 2. Click check apply button	User can see a list of applications	User can see a list of applications successfully	Pass

Accept application	Host can accept application	1. Click check apply button 2. Click	User accepted the application successfully	User accepted the application successfully	Pass
Reject application	Host can reject application	1. Click check apply button 2. Click reject button	User rejected the application successfully	User rejected the application successfully	Pass
Close registration	Host can close registration if there is at least one accepted application	1. Click check apply button 2. Click close registration button	User closed registration successfully	User closed registration successfully	Pass
Send Booking	Host can send booking if the selected location is a registered business user and allow booking	1. Click send booking button 2. Input information 3. Click send button	User can send a booking successfully	User can send a booking successfully	Pass
Check booking	Host can check booking details	1. Click check apply button 2. Click check booking button	User can check the booking details	User can check the booking details successfully	Pass
View chat	User can view chat page	1. Tap chat icon at bottom navigation bar 2. Click any chat record	User can view a list of chat and the chat room message	User can view a list of chat and the chat room message successfully	Pass
Send chat	User can send chat to another user	1. Click any chat record or send message button 2. Input message 3. Click send icon	User sent out a message successfully	User sent out a message successfully	Pass
Add friend	User can add another user as friend	1. Click user's header or icon	User sent out friend request	User sent out friend request successfully	Pass

Respond	User can	2. Click add friend button 1. Click	and can cancel request User accepted	User accepted	Pass
friend request	respond the friend request	user's header or icon 2. Click respond request button	or rejected friend request successfully	or rejected friend request successfully	T uss
View notification	User can view notification	1. Tap notification icon at bottom navigation bar 2. Click any notification record	User can view notification at relevant pages successfully	User can view notification at relevant pages successfully	Pass
<b>Business Use</b>	er				
Login as business user	User can login as business user	1. Input credentials	Login successfully into business user dashboard	Login successfully	Pass
Sign up as business user	User can sign up as business user	1. Input credentials 2. Select account type 3. Input information 4. Setup business hour 5. Edit description 6. Upload photos	Sign up successfully and login into business user dashboard	Sign up and login successfully	Pass
View business profile	User can view own user profile	1. Tap profile icon at bottom navigation bar	User can view own user profile detail successfully	User can view own user profile detail successfully	Pass
Edit business profile	User can edit own user profile details	1. Click edit button 2. Edit the information	User can edit the information successfully	User can edit the information successfully	Pass
View business review	User can view own review	1. Tap Review tab	User can view own review	User can view own review	Pass
View pending booking	User can view pending	1. Tap Pending tab	User can view the list of pending	User can view the list of pending	Pass

	booking in home page	2. Click any of the pending booking	booking and the details	booking and the details	
Accept booking	User can accept booking	1. Click any pending booking 2. Click accept button	User accepted the booking request successfully	User accepted the booking request successfully	Pass
Reject booking	User can reject booking	1. Click any pending booking 2. Click reject button	User rejected the booking request successfully	User rejected the booking request successfully	Pass
View history booking	User can view history booking	1. Tap History tab 2. Click any history booking	User can view the list of history booking and the details	User can view the list of history booking and the details	Pass
View normal user profile	User can view normal user profile	1. Click user's header or icon	User can view normal user profile details	User can view normal user profile details	Pass
View business chat	User can view chat records	1. Tap chat icon at bottom navigation bar 2. Click any chat record	User can view the list of chat and chat records	User can view the list of chat and chat records	Pass
Send business chat	User can send message	1. Click any chat record or send message button 2. Input message 3. Click send icon	User sent chat message successfully	User sent chat message successfully	Pass
View business notification	User can view notification records	1. Tap notification icon at the bottom navigation bar 2. Click any notification record	User can view notification at relevant pages successfully	User can view notification at relevant pages successfully	Pass
Turn on booking	User can turn on booking availability	1. Click the on button at the top of home page	User turned on booking successfully	User turned on booking successfully	Pass

Turn off	User can turn	1. Click the	User turned off	User turned off	Pass
booking	off booking	off button at	booking	booking	
	availability if	the top of	successfully	successfully	
	there is no	home page			
	pending				
	booking				

Table 6.1 Functional testing

#### 6.3 Implementation Issues and Challenges:

One of the challenges is that the Firebase Realtime Database structure has to be well planned and structured. As suggested by Google, it is better not to nest the data under each nodes (Structure Your Database, 2021). In another words, it is better to not create many levels of data for each nodes. This is because when the system wants to read and access a particular nodes, all the child of that nodes will be granted access. Hence, to have a better readability and security, it is always recommended to flatten out the data structures. Flatten is also known as denormalization where data are separated into different paths so that they can be called in separate called. However, this is not easy to fully achieve as a beginner to the firebase service. Hence, there will be some flaws and issues whenever structuring the database.

Another challenge is to create a seamless and smooth screen navigation across the application. It is needed to ensure user can access the certain screen and return back to the previous screen seamlessly and smoothly. A lot of configuration needed to be done whenever user is landing on a certain page from another certain page. Especially for the notification, when user clicks on it, the system needs to navigate the user to the relevant page. Hence, this condition is needed to be controlled and configured in the system.

#### 6.4 Objectives Evaluation

Objectives	Evaluation	Achievement
To analyse various dating	This objective is met as the Chapter 2	Achieved
application in the market	Literature Review has covered the	
based on their functions,	detail analysis of various similar	
strengths, and weaknesses	application in the market based on their	
in providing dating	functions, strengths, and weakness.	
services.		

To design and develop an	This objective is met as the user can	Achieved
application that provides	host a meet up in the application by	
function hosting party and	setting up relevant information such as	
gathering to enable user	title, description, gathering date and	
have chances to meet each	time, guest amount and also location.	
other in real person.		
To evaluate and test the	This objective is met as the Chapter 6	Achieved
deliverable of the project	has covered the system testing and	
in the aspect of	results by carried out functional testing.	
functionality		

Table 6.2 Objectives Evaluation

#### 6.5 Concluding Remark

This section covers the system testing plan, testing cases, testing results, challenges as well as the objectives' evaluation. The testing results show that the functions are working properly and met the expected outcomes. It is carried out by black box testing which focus on the input and output of the test cases. In order to pass the test, the actual outcome should meet the expected outcome. The last part of this section covers the evaluation of objectives which reflect the success or failure of this project.

#### CHAPTER 7 CONCLUSION AND RECOMMENDATION

#### 7.1 Conclusion

This project is dedicated to bring users meet up in real life in an easier and efficient way by utilizing the in-application function. Unlike other dating applications that focus on matching then texting, this project is mainly encouraging the real connection and in-person feeling with one and another. Not only meeting one, but meeting in a group of people brings different experience and chemistry among each other through this propose application. On the other hand, It also dedicated to resolve one of the problem in most of the swipe-to-match dating application, which is the cognitive or memory overloading of user's brain while swiping away the other users in the application. This project is carried out successfully where all of the objectives are achieved by using Agile methodology – Extreme Programming (XP). Two types of users – Normal and Business user can interact with each other under the same roof. A detail system methodology, design and diagram are provided in the Chapter 3 and 4. This project was initialized in Jan 2021 for part one and proceeded in May 2022 for part two.

An overview for this application, user can now host meet up and join any meet up hosted by other users. They can also use it as social application to add friend and chat with them. Editing their profile to enhance their online personal presence is also doable in this application. Business user can enhance their profile presence in this application and facilitate their operation through the booking function. It solves the cognitive load problem since there is no swiping feature and users can always look back their joined and hosted meet up history.

#### 7.2 Recommendation

Since this project is carried out by Agile methodology, there is always improvement and enhancement can be done in the next incremental. There are some recommendations for the next increment version. For example, the user cannot delete any record now in the application, this can be improved by adding a delete function for meet up history, chat record, and notification record. Another recommendation is to add a comment section under the meet up page where users interact with each other to decide whether joining the meet up or not. From technical viewpoint, it is suggested to implement alternative authentication methods such as Google and Facebook

#### CHAPTER 7 CONCLUSION AND RECOMMENDATION

authentication. In the future version, it is suggested that only those users who have attended a meet up together will have the privilege to rate and review each other. It is suggested to provide safety guidelines to the host and joiners for the meet up.

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(Project II)

Trimester, Year: Y3S3
Study week no.: 1
Student Name & ID: Choong Win Shen, 18ACB01717
Supervisor: Ms. Yap Seok Gee
Project Title: MOBILE APPLICATION FOR MEET UP HOSTING AND GATHERING

#### 1. WORK DONE

[Please write the details of the work done in the last fortnight.]

Developing navigation from chat room to user profile Developing review and rating function

#### 2. WORK TO BE DONE

Enhance notification

Develop navigation from notification to specific page

#### 3. PROBLEMS ENCOUNTERED

Need to host a user fragment in activity for easy navigation

Need to check if the guest amount included the host

#### 4. SELF EVALUATION OF THE PROGRESS

Good in progressing

Supervisor's signature

(Project II)

Trimester, Year: Y3S3 Study week no.: 2
Student Name & ID: Choong Win Shen, 18ACB01717
Supervisor: Ms. Yap Seok Gee
Project Title: MOBILE APPLICATION FOR MEET UP HOSTING AND GATHERING

#### 1. WORK DONE

[Please write the details of the work done in the last fortnight.]

Enhancing notification

Developing navigation from notification to specific page

#### 2. WORK TO BE DONE

Develop sign in and sign up for business user

Develop function to choose business user as meet up location

#### 3. PROBLEMS ENCOUNTERED

None

#### 4. SELF EVALUATION OF THE PROGRESS

Good in progressing

Supervisor's signature

(Project II)

Trimester, Year: Y3S3
Study week no.: 3
Student Name & ID: Choong Win Shen, 18ACB01717
Supervisor: Ms. Yap Seok Gee
Project Title: MOBILE APPLICATION FOR MEET UP HOSTING AND GATHERING

#### 1. WORK DONE

[Please write the details of the work done in the last fortnight.]

Developing sign in and sign up for business user

Developing function to choose business user as meet up location

#### 2. WORK TO BE DONE

Develop function to view booking information Develop business profile page

#### 3. PROBLEMS ENCOUNTERED

None

#### 4. SELF EVALUATION OF THE PROGRESS

Good in progressing

Supervisor's signature

(Project II)

Trimester, Year: Y3S3	Study week no.: 4
Student Name & ID: Choong Win Shen, 18ACB01717	
Supervisor: Ms. Yap Seok Gee	
Project Title: MOBILE APPLICATION FOR MEET UP HOSTING AND	
GATHERING	

#### 1. WORK DONE

[Please write the details of the work done in the last fortnight.]

Developing function to view booking information Developing business profile page

#### 2. WORK TO BE DONE

Develop chat function to chat with normal user Enhance notification

#### 3. PROBLEMS ENCOUNTERED

None

# 4. SELF EVALUATION OF THE PROGRESS

Good in progressing

Supervisor's signature

(Project II)

Trimester, Year: Y3S3	Study week no.: 5
Student Name & ID: Choong Win Shen, 18ACB01717	
Supervisor: Ms. Yap Seok Gee	
Project Title: MOBILE APPLICATION FOR MEET UP HOSTING AND	
GATHERING	

#### 1. WORK DONE

[Please write the details of the work done in the last fortnight.]

Developing chat function to chat with normal user Enhancing notification

#### 2. WORK TO BE DONE

Develop function to respond booking request Develop navigation from business user to normal user

#### 3. PROBLEMS ENCOUNTERED

None

# 4. SELF EVALUATION OF THE PROGRESS

Good in progressing

Supervisor's signature

(Project II)

Trimester, Year: Y3S3	Study week no.: 6
Student Name & ID: Choong Win Shen, 18ACB01717	
Supervisor: Ms. Yap Seok Gee	
Project Title: MOBILE APPLICATION FOR MEET UP HOSTING AND	
GATHERING	

#### 1. WORK DONE

[Please write the details of the work done in the last fortnight.]

Developing function to respond booking request

Developing navigation from business user to normal user

#### 2. WORK TO BE DONE

Enhance meet up page

Develop booking and close registration function

Write report for chapter 1 and 2

#### 3. PROBLEMS ENCOUNTERED

None

#### 4. SELF EVALUATION OF THE PROGRESS

Good in progressing

Supervisor s signature

(Project II)

Trimester, Year: Y3S3
Study week no.: 7
Student Name & ID: Choong Win Shen, 18ACB01717
Supervisor: Ms. Yap Seok Gee
Project Title: MOBILE APPLICATION FOR MEET UP HOSTING AND GATHERING

#### 1. WORK DONE

[Please write the details of the work done in the last fortnight.]

Enhancing meet up page

Developing booking and close registration function

Writing report for chapter 1 and 2

#### 2. WORK TO BE DONE

Enhance review page

Enhance meet up record page

Test and fix bugs

Write report for chapter 3 and 4

#### 3. PROBLEMS ENCOUNTERED

None

#### 4. SELF EVALUATION OF THE PROGRESS

Good in progressing

Supervisor's signature

(Project II)

Trimester, Year: Y3S3
Study week no.: 8
Student Name & ID: Choong Win Shen, 18ACB01717
Supervisor: Ms. Yap Seok Gee
Project Title: MOBILE APPLICATION FOR MEET UP HOSTING AND GATHERING

#### 1. WORK DONE

[Please write the details of the work done in the last fortnight.]

Enhancing review page

Enhancing meet up record page

Testing and fixing bugs

Writing report for chapter 3 and 4

#### 2. WORK TO BE DONE

Enhance chat room

Enhance navigation across application

Test and fix bugs

Write report for chapter 5 and 6

#### 3. PROBLEMS ENCOUNTERED

None

#### 4. SELF EVALUATION OF THE PROGRESS

Good in progressing

Supervisor's signature

(Project II)

Trimester, Year: Y3S3 Study week no.: 9
Student Name & ID: Choong Win Shen, 18ACB01717
Supervisor: Ms. Yap Seok Gee
Project Title: MOBILE APPLICATION FOR MEET UP HOSTING AND GATHERING

#### 1. WORK DONE

[Please write the details of the work done in the last fortnight.]

Enhancing review page

Enhancing meet up record page

Testing and fixing bugs

Writing report for chapter 5 and 6

#### 2. WORK TO BE DONE

Enhance chat room

Enhance navigation across application

Test and fix bugs

Write report for chapter 7

#### 3. PROBLEMS ENCOUNTERED

None

#### 4. SELF EVALUATION OF THE PROGRESS

Good in progressing

Supervisor's signature

(Project II)

Trimester, Year: Y3S3	Study week no.: 10
Student Name & ID: Choong Win Shen, 18ACB01717	
Supervisor: Ms. Yap Seok Gee	
Project Title: MOBILE APPLICATION	N FOR MEET UP HOSTING AND
GATHERING	
1. WORK DONE	
[Please write the details of the work done in the las	st fortnight.]
Enhancing chat room	
Enhancing navigation across application	
Testing and fixing bugs	
Writing report for chapter 7	
2. WORK TO BE DONE	
Test and fix bugs	
3. PROBLEMS ENCOUNTERED	
None	
4. SELF EVALUATION OF THE PRO	GRESS

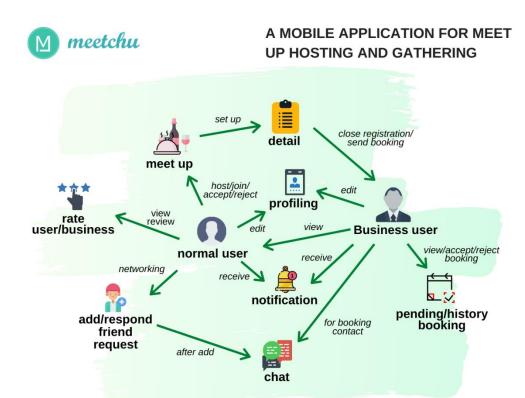
Supervisor's signature

Good in progressing

(Project II)

Trimester, Year: Y3S3	Study week no.: 11
Student Name & ID: Choong Win She	n, 18ACB01717
Supervisor: Ms. Yap Seok Gee	
<b>Project Title: MOBILE APPLICATIO</b>	ON FOR MEET UP HOSTING AND
GATHERING	
1. WORK DONE	
[Please write the details of the work done in the l	ast fortnight.]
Testing and fining house	
Testing and fixing bugs	
2. WORK TO BE DONE	
Test and fix bugs	
_	
3. PROBLEMS ENCOUNTERED	
None	
4. SELF EVALUATION OF THE PRO	OGRESS
Good in progressing	
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Supervisor's signature	Student's signature
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#### **POSTER**



# LET'S MEET UP AND TALK

Ever wonder why is it so hard to meet users on other dating applications? Not only looking for a dating partner but a group of friends or networking? Host a meet-up using this application to meet strangers with shared interests in real life easily and efficiently. Business is given chances to attract more customers through our booking and profiling function.







A bridge or tool to let you meet strangers in real life easier and efficient for friends, partner and networking.

**Developed By: Choong Win Shen** 

Supervised By: Ms. Yap Seok Gee

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# FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY

Full Name(s) of Candidate(s)	CHOONG WIN SHEN
ID Number(s)	18ACB01717
Programme / Course	BACHELOR OF INFORMATION SYSTEMS (HONOURS) INFORMATION SYSTEMS ENGINEERING
Title of Final Year Project	MOBILE APPLICATION FOR MEET UP HOSTING AND GATHERING

Similarity	Supervisor's Comments (Compulsory if parameters of originality exceeds the limits approved by UTAR)
Overall similarity index:3 %	
Similarity by source Internet Sources: 1 % Publications: 0 % Student Papers: 2 %	
Number of individual sources listed of more than 3% similarity: 0	

Parameters of originality required and limits approved by UTAR are as Follows:

- (i) Overall similarity index is 20% and below, and
- (ii) Matching of individual sources listed must be less than 3% each, and
- (iii) Matching texts in continuous block must not exceed 8 words

Note: Parameters (i) – (ii) shall exclude quotes, bibliography and text matches which are less than 8 words.

<u>Note</u> Supervisor/Candidate(s) is/are required to provide softcopy of full set of the originality report to Faculty/Institute

Based on the above results, I hereby declare that I am satisfied with the originality of the Final Year Project Report submitted by my student(s) as named above.

Gee	
Signature of Supervisor	Signature of Co-Supervisor
Name: Ms. Yap Seok Gee	Name:
Date: <u>17/4/2022</u>	Date:



#### UNIVERSITI TUNKU ABDUL RAHMAN

# FACULTY OF INFORMATION & COMMUNICATION TECHNOLOGY (KAMPAR CAMPUS)

#### **CHECKLIST FOR FYP2 THESIS SUBMISSION**

Student Id	18ACB01717
Student Name	Choong Win Shen
Supervisor Name	Yap Seok Gee

TICK ( $$ )	DOCUMENT ITEMS
	Your report must include all the items below. Put a tick on the left column
	after you have checked your report with respect to the corresponding item.
	Front Plastic Cover (for hardcopy)
$\sqrt{}$	Title Page
$\sqrt{}$	Signed Report Status Declaration Form
	Signed FYP Thesis Submission Form
	Signed form of the Declaration of Originality
	Acknowledgement
	Abstract
	Table of Contents
$\sqrt{}$	List of Figures (if applicable)
	List of Tables (if applicable)
	List of Symbols (if applicable)
	List of Abbreviations (if applicable)
	Chapters / Content
$\sqrt{}$	Bibliography (or References)
$\sqrt{}$	All references in bibliography are cited in the thesis, especially in the
	chapter of literature review
	Appendices (if applicable)
$\sqrt{}$	Weekly Log
	Poster
	Signed Turnitin Report (Plagiarism Check Result - Form Number: FM-
	IAD-005)
	I agree 5 marks will be deducted due to incorrect format, declare wrongly
	the ticked of these items, and/or any dispute happening for these items in
	this report.

\*Include this form (checklist) in the thesis (Bind together as the last page)

I, the author, have checked and confirmed all the items listed in the table are included in my report.

(Signature of Student)

Date: 17/4/2022