PLACE HUNT: A MOBILE APPLICATION TO INTRODUCE INTERESTING PLACES IN MALACCA AND EVENTS IN MALAYSIA

NG CHIN SING

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

BORANG PENGESAHAN STATUS TESIS

JUDUL: PLACE HUNT: A MOBILE APPLICATION TO INTRODUCE INTERESTING PLACES IN MALACCA AND EVENTS IN MALAYSIA

SESI PENGAJIAN: 2015/2016

Saya NG CHIN SING

mengaku membenarkan tesis (PSM/Sarjana/Doktor Falsafah) ini disimpan di Perpustakaan Fakulti Teknologi Maklumat dan Komunikasi dengan syarat-syarat kegunaan seperti berikut:

1. Tesis dan projek adalah hakmilik Universiti Teknikal Malaysia Melaka.
2. Perpustakaan Fakulti Teknologi Maklumat dan Komunikasi dibenarkan membuat salinan untuk tujuan pengajian sahaja.
3. Perpustakaan Fakulti Teknologi Maklumat dan Komunikasi dibenarkan membuat salinan tesis ini sebagai bahan pertukaran antara institusi pengajian tinggi.
4. ** Sila tandakan (/)

_____ SULIT (Mengandungi maklumat yang berdarjah keselamatan atau kepentingan Malaysia seperti yang termaktub di dalam AKTARAHSIA RASMI 1972)

_____ TERHAD (Mengandungi maklumat TERHAD yang telah ditentukan oleh organisasi/badan di mana penyelidikan dijalankan)

_____/_____ TIDAK TERHAD

_____ (TANDATANGAN PENULIS)

Alamat tetap: 334 A,
BAGAN SELATAN,
34250 TG PIANDANG,
PERAK.

Tarikh: 24/8/2016

_____ (TANDATANGAN PENYELIA)

Nama Penyelia: EN WAN SAZLI NASARUDDIN BIN SAIFUDIN

Tarikh: 24/8/16

CATATAN: * Tesis dimaksudkan sebagai Laporan Akhir Projek Sarjana Muda (PSM)

** Jika tesis ini SULIT atau TERHAD, sila lampirkan surat daripada pihak berkuasa.

PLACE HUNT: A MOBILE APPLICATION TO INTRODUCE INTERESTING PLACES IN MALACCA AND EVENTS IN MALAYSIA

NG CHIN SING

This report is submitted in partial fulfillment of the requirements for the Bachelor of Computer Science (Interactive Media)

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

2016

DECLARATION

I hereby declare that this project report entitled

PLACE HUNT: A MOBILE APPLICATION TO INTRODUCE INTERESTING PLACE IN MALACCA AND EVENT IN MALAYSIA

is written by me and is my own effort and that no part has been plagiarized without citations.

STUDENT: _____ **Date:** 24/8/2016

(NG CHIN SING)

I hereby declare that I have read this project report and found this project report is sufficient in term of the scope and quality for the award of Bachelor of Computer Science (Interactive Media) With Honours.

SUPERVISOR: _____ **Date:** 24/8/16

(EN WAN SAZLI NASARUDDIN BIN SAIFUDIN)

DEDICATION

This thesis is dedicated to my beloved parents, for their kindness and for endless support when develop this project. They always taught me think positive and solve the problems even faced how big the problems.

ACKNOWLEDGEMENT

First and foremost, I would like to thank my supervisor, En Wan Sazli Nasaruddin bin Saifudin for giving me advice and creative ideas to develop this project successfully. He also help me to solve the problems that I was faced such as solving the coding that I was not familiar. He also give me the idea and example to develop the attractive user interface. Because of that, I would like to express my special thanks of gratitude and appreciation to my supervisor, En Wan Sazli Nasaruddin bin Saifudin helping and guiding me complete this project.

Besides that, I would also like to thank my beloved parents for giving me endless support when develop this project. And also not forgotten to all my fellow friends and classmate, who always lend their hand and give suggestion during developing this project. I would also like to thank others lecturer point out the problems and give solution when I developing this project.

ABSTRACT

Malacca city has been listed as a UNESCO World Heritage Site since 7 July 2008. Due to this reasons, many tourists are came to visit Malacca. Unfortunately, many of the interesting place and events in Malacca was not visited by tourist because they do not know where the place. To overcome this problem, a mobile application is introduce to public user to aid tourism sector in Malacca. This mobile application introduce the interesting places in Malacca and events in Malaysia. With the feature of GPS, it can lead the tourists to the destination with detail direction. The events is updated by users through this mobile application. Tourist also can share their feelings after visited some places or events. Moreover, other tourists also can read the review posted by other users as reference while they cannot decide where to go. So, this mobile application can bring a lot of advantages to the tourist when they are visited to Malacca.

ABSTRAK

Bandar Melaka telah disenaraikan sebagai Tapak Warisan Dunia UNESCO sejak 7 Julai 2008. Oleh sebab ini, ramai pelancong datang untuk berkunjung ke Melaka. Malangnya, ramai tempat yang menarik dan aktiviti di Melaka tidak dapat dikunjungi oleh pelancong kerana mereka tidak tahu di mana tempat itu. Untuk mengatasi masalah ini, aplikasi mudah alih ini memperkenalkan kepada pengguna awam untuk membantu sektor pelancongan di Melaka. Aplikasi mudah alih ini memperkenalkan tempat-tempat menarik di Melaka dan aktiviti di Malaysia. Dengan ciri-ciri GPS, ia boleh membawa pelancong ke destinasi dengan hala tuju. Aktiviti-aktiviti boleh dikemas kini oleh pengguna melalui aplikasi mudah alih ini untuk berkongsi aktiviti itu. Pelancong juga boleh berkongsi perasaan mereka selepas melawat beberapa tempat-tempat atau aktiviti. Selain itu, pelancong lain juga boleh membaca ulasan yang diberikan oleh pengguna lain sebagai rujukan semasa mereka tidak dapat membuat keputusan tempat yang hendak pergi. Jadi, aplikasi mudah alih ini boleh membawa banyak kelebihan kepada pelancong apabila mereka melawat ke Melaka.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

INTRODUCTION

1.1 Introduction

In this project titled “Place Hunt: A Mobile Application to introduce interesting places in Malacca and events in Malaysia”, to recommend a mobile application delivers information about interest places and events in Malacca on a tourists travel route.

Recently, there are a lot of user use their mobile phone as their mobile tourist guides when travel to certain places. Most of the tourists use the mobile tourist guides to search the destination to visit.

In this project, the recommended mobile application will help user to find interesting and famous place in Malacca. It will automatically recommend the most visited place in Malacca. This will help users or tourists save time to plan where to go when they are first time came to Malacca. Furthermore, it also will give user turn-by-turn directions to the destination.

Besides that, this mobile application also can update the current event in Malacca. Users can update their current event through this mobile application to promote their event. Therefore, tourists can participate the event when they use this mobile application.

1.2 Problem Statements

Nowadays, there are a lot of tourists use their mobile phone as their mobile tourist guides when travel to certain places. They use the mobile application to search the interesting places of the certain country. In Malacca, only have few website or mobile aplication to introduce the interesting places in Malacca. Besides that, tourist is hard to know when the local event organizer promote their event through local brochures or billboard beside the road. This will cause many of tourist cannot participate the interesting event in Malacca.

Furthermore, tourist often use printed maps to look for the direction, but without a good knowledge of the many symbols on a map, it is often difficult to find what are looking for in a short space of time. Moreover, printed maps are often out of date, so it will lead the tourist lost or walk in the wrong way. Therefore, a mobile application with the function of digital maps will bring advantages to tourists.

1.3 Objective

1. To investigate how the current event and interesting place will be updated.
2. To design and develop mobile application that promote interesting place and event in Malacca
3. To evaluate the functionality of suggested mobile application.

1.4 Scope

1.4.1 User scope

The target users for this project are local and foreign tourists. The potential users of this mobile application have their own smartphone with the features of GPS and often or want to travel in Malacca.

1.4.2 Application/Function Scope

This mobile application is a travel application which is introduce interesting places in Malacca and events in Malaysia. Users will update the current event through this mobile application. With the digital maps provided in this mobile application, user can reach the destination without lost or walk in wrong way.

1.4.3 Platform scope

The target platform for this mobile game will be iOS.

1.5 Project Significance

This mobile application is suitable for users who are often travel and have their own smartphone and GPS. After user have installed this application, it will help the tourist save the time to plan when they are first time visit the new place. Besides that, the mobile application will let the users know the current event where and when would be held. Furthermore, this mobile application will lead the users to reach the destination.

1.6 Conclusion

Mobile application used as tourist guides have becoming increasingly available in tourism sector for tourists to visiting places. The majority of mobile application can install on mobile device and other tablets. The mobile application also can used through network to access the information about the interesting places in a country.

Therefore, at the end of this project, this recommended mobile application will give benefits to user. This is because when they are visit to a new place, this mobile application will plan a set of most visited place in Malacca. Besides that, user also know the current event where and when would be held through this mobile application. Furthermore, they will know the direction will take to reach to the destination.

CHAPTER II

LITERATURE REVIEW AND PROJECT METHODOLOGY

2.1. Introduction

This chapter will focus on literature review and project methodology that will be used in this project to optimize the development of the application. Literature review is to describe and summarize the study or research of publish materials. Besides that, the purpose of review is to identify the studies, models or case studies that supporting the topic, establish a theoretical framework for the topic and the area of study, classification and compared the journals, case studies, thesis and online resources. However, project methodology describe a set of activities that will be carried out during the development of the application. The approach will be used in the project is Sazli Content Development (SCD) Model that lead to complete the project.

2.2. Domain

The domain for this project is the use of mobile application to aid tourism in Malacca. The interesting places will be suggested for users when they are first time came to Malacca. This mobile tourist guide give users the directions by Global Position System (GPS). The current event will be updated by user to promote their event to public. This mobile tourist guide suitable for those first time visit to Malacca especially local and foreign tourists.

2.2.1 Mobile Application

Mobile application is a type of application software that can install and download on a mobile device, smartphone, tablet or another mobile device that provide users with similar services to those accessed on PCs. Moreover, mobile application is a small unit's software with limited function. Users can visit specific portals such as Apple's App Store to download the mobile applications that corresponding with their mobile's operating system.

Rather than that, to develop a mobile application, the suitable programming languages that developer have chosen is one of the conditions that mobile application will be more advance. There are several programming languages to develop the mobile application such as HTML5, Java, C++, Objective-C, Swift, C# and others. HTML5 is a Web-fronted markup language that allow data type can be simply insert, rationalize input parameters, eliminating and redundant attributes, detailed rules for parsing and offline editing.

On the other hand, mobile application can divide into many categories such as games, weather, maps or navigation, social networking, music, news, travel, dining or restaurant and other entertainment application. From the previous research done by The Nielsen Company, Facebook is the leading social networking application, the Weather Channel is the top weather application, Google Maps dominates Maps or Navigation and Pandora is the most popular Music app.

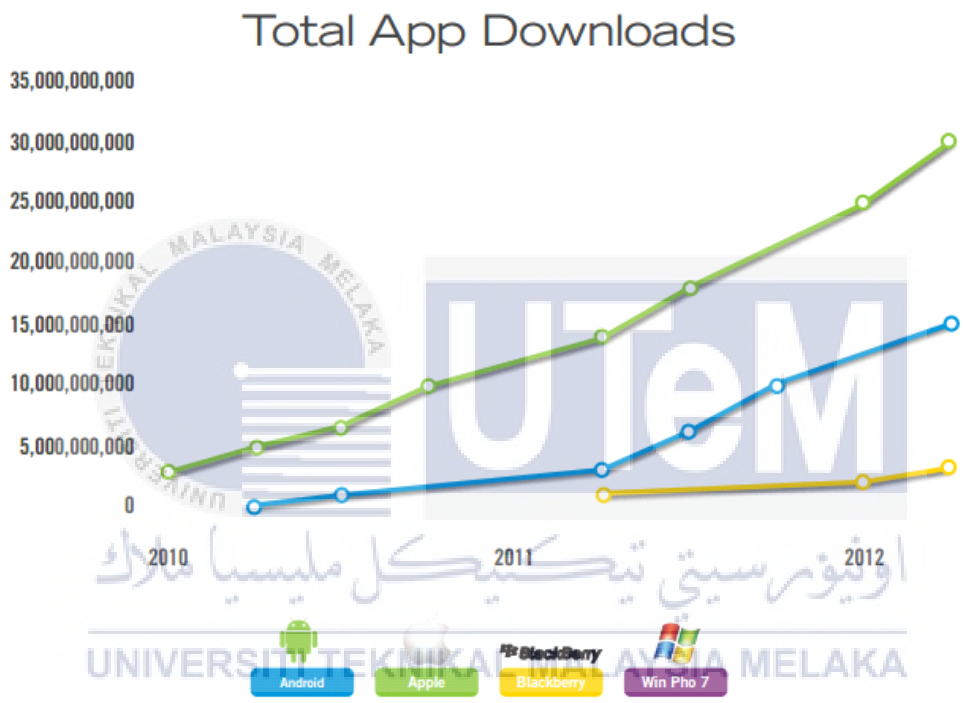

Figure 2: The increase in mobile app downloads

Figure 2.1 The increase in mobile application downloads

Figure 1 show the increase in mobile application downloads from Android, Apple, Blackberry and Windows mobile device. In 2012, total of mobile application downloaded for Apple mobile device was the highest which was 30,000,000,000 compared with other mobile device. Besides that, android mobile was reached 15,000,000,000 while Blackberry and Windows mobile were reached 5,000,000,000 in 2012. From the Figure 2.1 can conclude that the growth of mobile application downloaded is increase tremendously from 2010 to 2012.

2.2.2 Mobile Tourist Guide

Recently, with the advanced and fast developments of Internet and mobile technologies, there are increasing the demands of mobile tourist guide to access the information or services in tourism sector. Mobile tourist guide use to execute various tourist information resource and service processes through constant network connection and use Semantic Web technologies.

As an intelligent mobile tourist guide will provide the information about attraction around the current position for tourists. A mobile tourist guide also can provide recommendation service that based on the data that have been stored in database earlier. Besides that, the tourists also can provide and receive information about the current situation in the current location such as weather, traffic jams and closed attraction.

One of the areas that users can benefit from mobile tourist guide is tourism. As first time travel to other country, many tourists may not enough to visit everywhere in limited time. Because of that, tourists have to select most attractive location in that country through searching web sites, guidebooks, or magazines. Unfortunately, information in guidebooks or magazines is not up-to-date and some interesting places closed due to renovation or unavailable such as museum. Therefore, mobile tourist guide can provide valuable information to guide the tourist in their trip with advantageously.

2.2.3 Interesting places and current event in Malacca

Malacca is the historical state of Malaysia, rich with heritage buildings, ancient landmarks and colonial structures. Malacca has numerous interesting places such as Menara Taming Sari, A'Famosa, Jonker Walk, The Stadthuys, Malacca Butterfly & Reptile Sanctuary, St. Paul's Church, Melaka Sultanate Palace, Baba-Nyonya Heritage Museum, Mini Malaysia & ASEAN Cultural Park, Taman Buaya Melaka, Freeport A'Famosa Outlet, Melaka River Cruise, Cheng Ho Cultural Museum, Al-Khawarizmi Astronomy Complex (Planetarium Melaka), Zoo Melaka and others spot in Malacca that listed out from *Melaka Hari Ini* website.

Unfortunately, the event organizer or organizer of tourism Malacca had faced some problem. They had limitations to promote the interesting places and event in Malacca. They only promote through magazine, newspaper, poster, brochures, flyers or postcard. In addition, tourist form other country come at Malacca need a tourist guide, but with the limits of tourist guides, they only rely on the printed maps.

Nowadays, printed maps are often out of date because it had to be printed and therefore the date of publication is the latest date of accuracy. Furthermore, they also show only a situation that is static and is a reflection of one section in time only. In addition, the information that they contain is often a compromise afforded because of the cost of producing and making certain maps.

Besides that, printed maps use the symbol to classify the different classes of the chosen features for the map. A representative key is usually supplied to interpret most symbols and features. It is difficult to find a location, if tourists without a good knowledge of the many symbols on a map.

Therefore, a mobile application is needed to introduce and promote the interesting place and event in Malacca is very important.

Figure 2.2: Website of Melaka Hari Ini

Figure 2.3: Printed map of Malacca

2.3. Existing System

A. Waze

Waze, usually called "Freemap", is a GPS-based geographical navigation application program for mobile devices and tablets. It provides turn-by-turn direction and route details over mobile networks. Waze supports many platform of mobile device included android, iPhone, BlackBerry 10, Windows Phone 8 and Windows Mobile from version 5.

Compared with other GPS software, “Live” street maps provide routing and real-time traffic updates to users. Users can report road closures or other road changes such as accidents, speed traps and police traps, traffic jams or other roadside hazards. Waze different with other traditional GPS navigation application because it is community

driven, collecting a lot of map data and traffic information from the users. Last but not a least, user also able to post information directly to Twitter or other social media and share real-time photos

Figure 2.4 Interface of WAZE

B. Triposo

Triposo is a social travel application created by ex-google Dutch brothers Richard Osinga and Douwe Osinga with the help of Jon Tirsen. Triposo lists the tops attractions, accommodations, eateries and more of over 45,000 destinations. It comes with detailed maps and city walks, guides to attractions and sights, hotel information, a list of the best bars, clubs, shops and restaurants and smart suggestions to open the doors to hidden gems.

This application support for iOS and Android. It will give the user recommendations location where to go based on weather on that day or nearby location. The travel information combined from Wikipedia, Wikitravel, Wikivoyage and OpenStreetMaps. Triposo also provide information about hotel let user to choose and to make a reservation smoothly. This application also provide search tool let user to search best shops, bars, restaurants and club that suit user's preferences.

Besides that, this application provide offline maps, offline routing and offline city walks lists over 45,000 destinations in almost every country. It will guide users to all location and attractions of that city. If user purchase the in-app purchase, user will get expert advice from Fodor's travel writers.

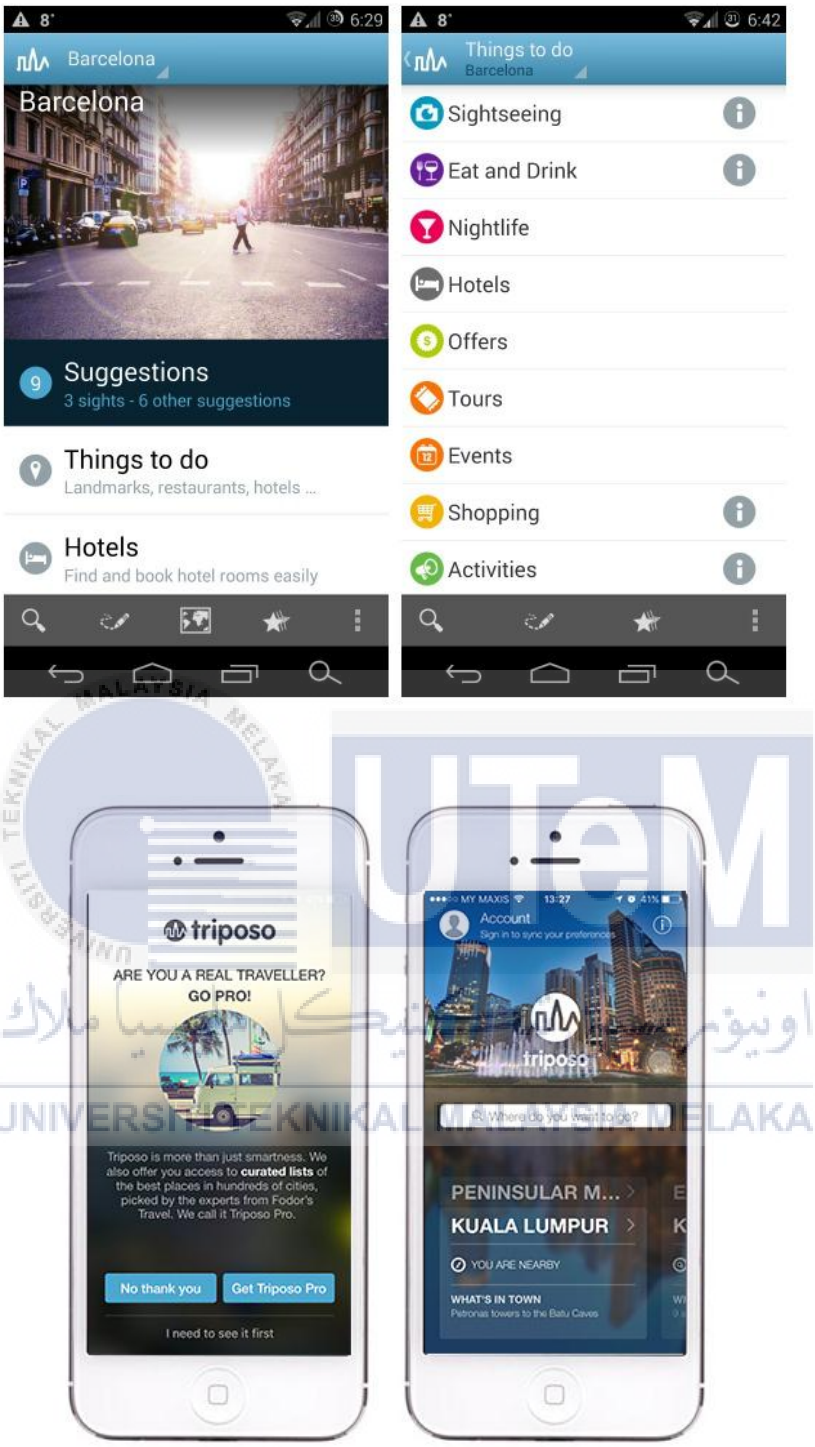

Figure 2.5 Interface of Triposo

C. Maps.me

Maps.me offers maps that can be used offline which different with Google Maps and it save money on roaming charges. It supports for iOS and Android mobile devices.

This application shows maps that allow user explore manually to displays gas stations, restaurants, public transport, public places, and parking zones. The maps can be downloaded and installed separately of mobile application for smaller countries

Besides that, this application also allow user to mark the favorite locations or travel destination at the bookmarks list. It is also provide offline search tool to find location or others like restaurants and gas stations needed by user.

Figure 2.6 Interface of Maps.me

2.3.1. Comparison of Existing System

Table 2.1 Comparison of Existing System

	WAZE	**TRIPOSO**	**MAPS.ME**
Maps	YES	YES	YES
Outdoor positioning	GPS	GPS	GPS
Network infrastructure	WLAN/GPRS/3G/4G	Offline	Offline
Mobile information services	Navigation & Orientation	Accommodation & Gastronomy	Gastronomy
Operating Platform	Android & iOS & Windows Phone	Android & iOS	Android & iOS & BlackBerry
Cost	Free	Free	Free
3D navigation mode	YES	NO	NO
Voice guidance	YES	NO	YES
Suggestion of interesting places	NO	YES	NO
Introduce the up-to-date event	NO	NO	NO

2.4. Project Methodology

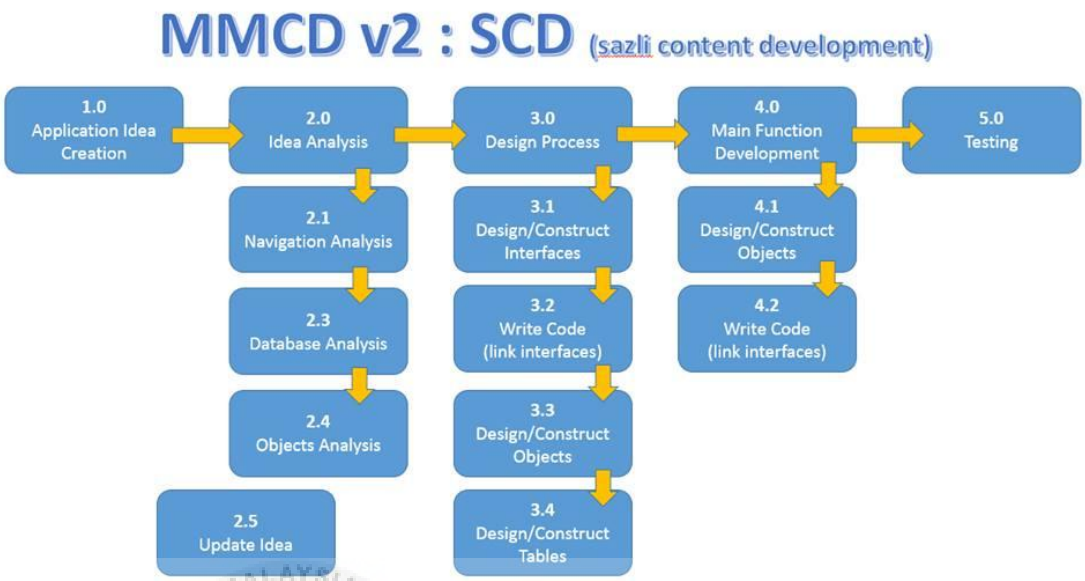

Figure 2.7 Sazli Content Development (SCD)

The methodology that will be used in this project is Sazli Content Development (SCD) as shown as Figure 2.0. This methodology include five phase there are: 1)application idea creation, 2)idea analysis, 3)design process, 4)main function development and 5)testing.

2.4.1 Application Idea Creation

In order to gain information about the project, online searching, background study and analyzing data for the project is carried out. Firstly, investigated the information about which software is suitable to develop through internet and books. Next, background study is made to analyze the existing application.

2.4.2 Idea Analysis

In idea analysis, the purpose of this stage is to analysis the whole structure and framework of this project. In this stage, need to draft the interface of mobile application as well as the navigation of each interface. It will leads the development of the mobile application in smooth way. Besides that, the database analysis is to identify the data and data type need to store in the database.

2.4.3 Design Process

In this design process, every single of multimedia element of mobile application will be implemented. Hence, in this stage also will describe the design of interface and navigation structure. The design of each interface and multimedia element must be simple that will let user to understanding each function of this mobile application.

2.4.4 Main Function Development

For this mobile application, the main functions are the navigation between the menus to interact with the user get information about the interesting places and event. Users also can get the direction from current location to destination. Besides that, users can add an event to promote the event current held at Malacca. Furthermore, users can write the review to give the feedback about the places or event that have been visited.

2.4.5 Testing

This mobile application was tested using Intel XDK and a mobile device. When the mobile application was 100% completed, this mobile application was published a to the website for user testing purpose. The testing in constantly repeated until PSM 2 to improve this project.

2.5. Project Requirements

2.5.1. Software Requirement

The software used to develop this project are listed in table below:

Table 2.2 Explanation of software requirement

Software	Uses
Adobe Photoshop CS6	Design and edit the image
Adobe Illustrator CS6	Design and illustrate the logo
Intel XDK	Design and develop the mobile application
Microsoft Word 2013	Prepare and write documentation
Microsoft Power Point 2013	Prepare presentation slide
Microsoft Visio 2010	illustrate the navigation structure and gantt chart

2.5.2. Hardware Requirement

- iPhone 6s
  - To run and testing the mobile application

2.5.3 Other Requirements

- Laptop
  - Manufacturer: Dell
  - Model: N5110
  - Processor: Intel(R) Core(TM) i7-2630QM CPU @ 2.00GHz 2.00 GHz
  - Installed memory (RAM): 4.00GB
  - System type: 64-bit Operation System
- Mouse: Longitech Wireless Mouse M235

2.6 Gantt Chart / Millstones

Gantt chart and milestone of this project is attach at the Appendix A.

2.7 Conclusion

This chapter describes fact findings that show a lot of aspects that should be taken when developing the mobile application. Based on this fact findings, a project methodology must choose that will lead the project complete efficiency. The milestone or gantt chart will guide the project development proceed smoothly. In the next chapter will discuss about the requirement analysis.

CHAPTER III

ANALYSIS

3.1 Introduction

The objective in this stage is to analysis the process that has been carried out to study the requirement of the prototype. During the analysis phase, it will help to enhance the current process and enable a visibility of current project through the problem statements listed out before. In this stage also include others requirement such as software requirements, hardware requirements and others requirements.

3.2 Current Scenario Analysis

In current scenario analysis, the problem statements that faced by tourism's sector in Malacca are travel guide and the limitation of the printed maps, magazine, posters, newspaper to promote the interesting places and current event. Besides that, tourist faced difficulty to use the printed maps as tourist guide.

3.3 Project Requirement

3.3.1 Function Requirement

a) Map

Map is a graphically representation of an area of land showing the physical features, cities, roads and other entertainment of that area. In this mobile application, map provides the current location for user, the distance from the current location to destination, the time needed to reach the destination, the interesting places and event with a marker.

b) Information of interesting places at Malacca

The information provided is important to tourist because tourist need to decide which places is most interest and they want to visit that places or not.

c) Current event

The current event is updated by organizer or any member through this mobile application. Due to this, tourist can participate the latest and up-to-date event.

d) Review

Tourist or any member can write a review to give the feedback when they have visited some places or events. The feedback of user will helps to improve the up-to-date places or events.

3.3.2 User Requirement

For this mobile application, the target users is foreign tourists and local tourists. This is because this group of user is know less about the information of interesting places in Malacca.

First and foremost, user need to register as member and login to this mobile application. After that, user can find the current location and get the direction to destination they have chosen. Besides that, user also can view the information about the interesting places in Malacca and current events in Malacca. Furthermore, user can write a review after visited the place.

3.3.3. Software Requirement

a) Operating system.

i. Microsoft Windows 7, 64bit, core i7
ii. iOS 9 (iPhone 6s)
ii. Android

b) Intel XDK IoT Edition

- Intel XDK a free software that allows developers to write a single app in HTML5 environment.

c) Adobe Illustrator CS6

- Adobe Illustrator CS6 is used to design and illustrate the logo and icon.

d) Microsoft Word 2013

- Microsoft Word 2013 is used to prepare and write the documentation about the mobile application.

e) Microsoft Power Point 2013

- Microsoft Power Point 2013 is used to prepare the presentation slide.

f) Microsoft Visio 2010

- Microsoft Visio 2010 is used to illustrate the flowchart and navigation structure.

3.3.4. Hardware Requirement

a) Laptop

- Able to support all the software are installed

b) iPhone 6s / Android mobile device

- Mobile device to run the mobile application

c) Keyboard

- Perform as input device

d) Mouse

- Perform as input device

3.4 Conclusion

In conclusion, this chapter elaborates the overall analysis phase that include current scenario analysis of this application, identifying the requirement that should be include in this mobile application. The software requirements and hardware requirements also important to develop a better mobile application. In next chapter will defines the rules of the analysis of the preliminary design and the result of the detailed design.

CHAPTER IV

DESIGN

4.1 Introduction

During the design stage, the visual aspects of the project will determine how it looks and feels. In the same way, the looks and feels will determine the user's feeling is interesting or annoying when interact with the application. In this stage need to create graphics, logo or icons, design the navigation and structure of each interface. Furthermore, this stage will ends in a blueprint of the mobile application for future development.

4.2 Preliminary Design

In the preliminary design, every single of multimedia element of mobile application will be implemented. Hence, in this stage also will describe the design of interface and navigation structure. The design of each interface and multimedia element must be simple that will let user to understanding each function of this mobile application.

4.2.1 Navigation Structure

The mobile application of this project consists of 6 module which is login/register module, main menu module, places module, events module, info module and review module. For login/register module, user need to login to the application or register as a member when first time use the application. In main menu module, user can choose the sub-menu to get more information. Furthermore, in places module will show to the user about the current location, information of places and events, and the direction from current location to destination. Besides that, in event module, user can add an event. In addition, the info module will show the information about interesting places in Malacca. Last but not a least, the review module let the user to write a review.

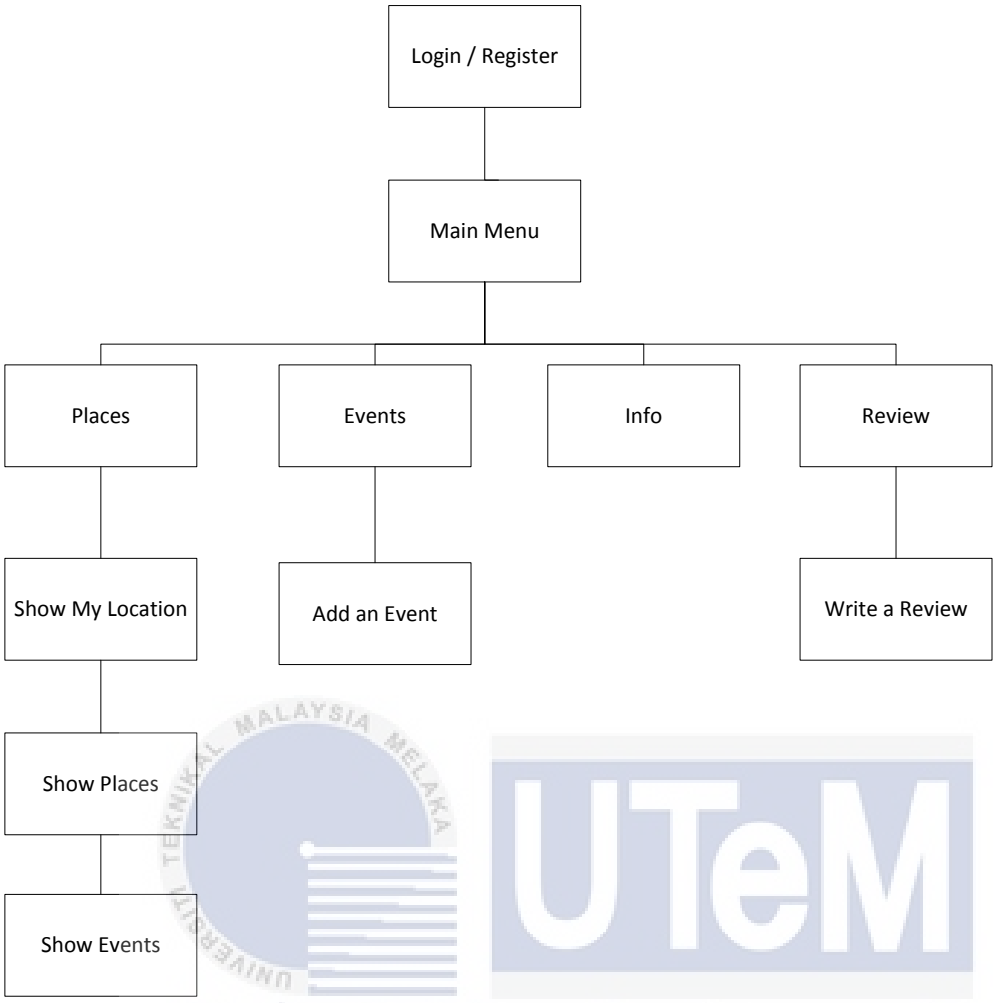

Figure 4.1 Navigation flow of mobile application

4.3 User Interface Design

User interface design focuses on interaction between users and the interface, through the elements that are easy to access, understand, and use to facilitate those actions. When design the interface design need to do consideration about the layout, it must be consistent and predictable. Below are some of the interface design of the mobile application.

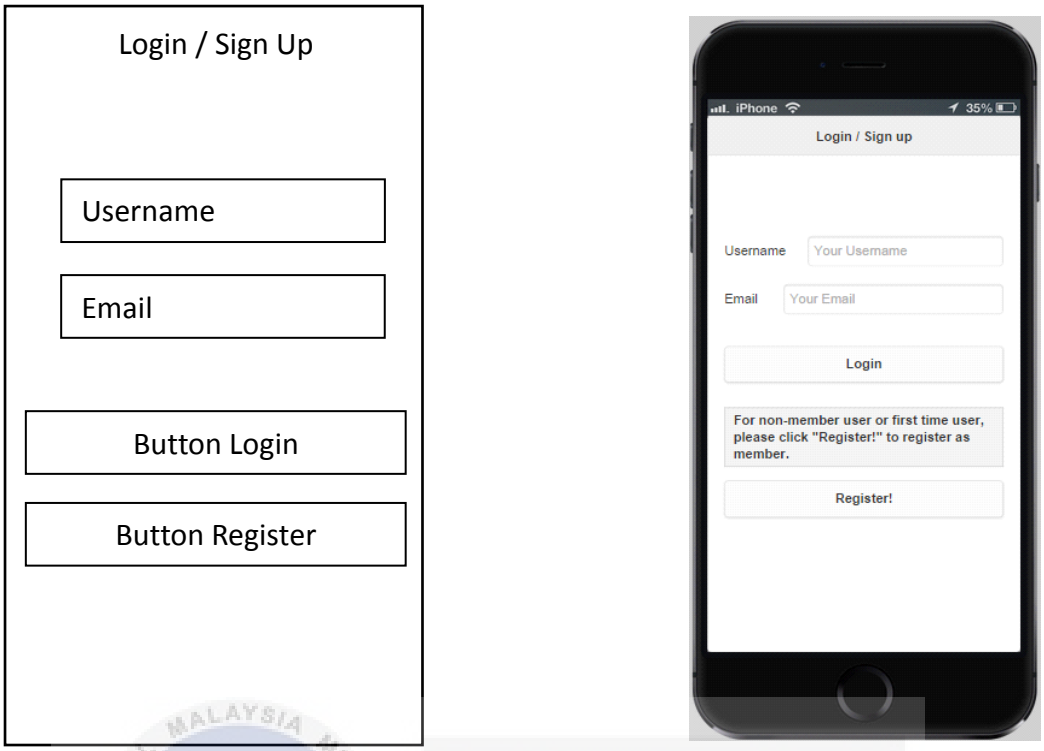

Figure 4.2 Login / Register Page

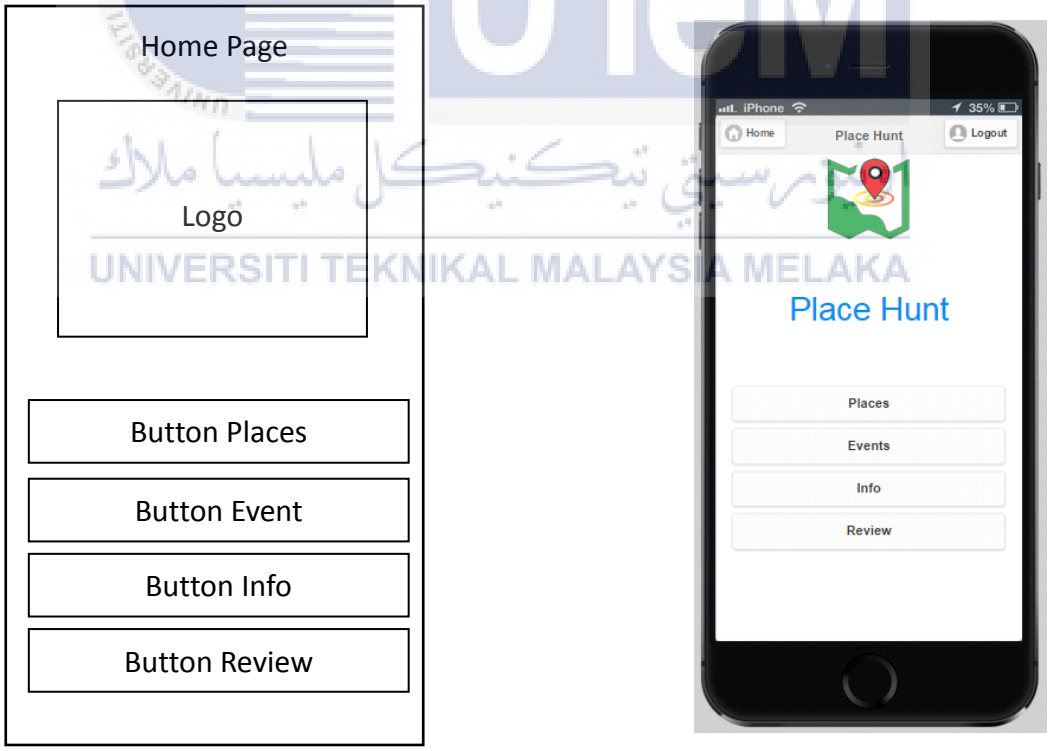

Figure 4.3 Main Menu

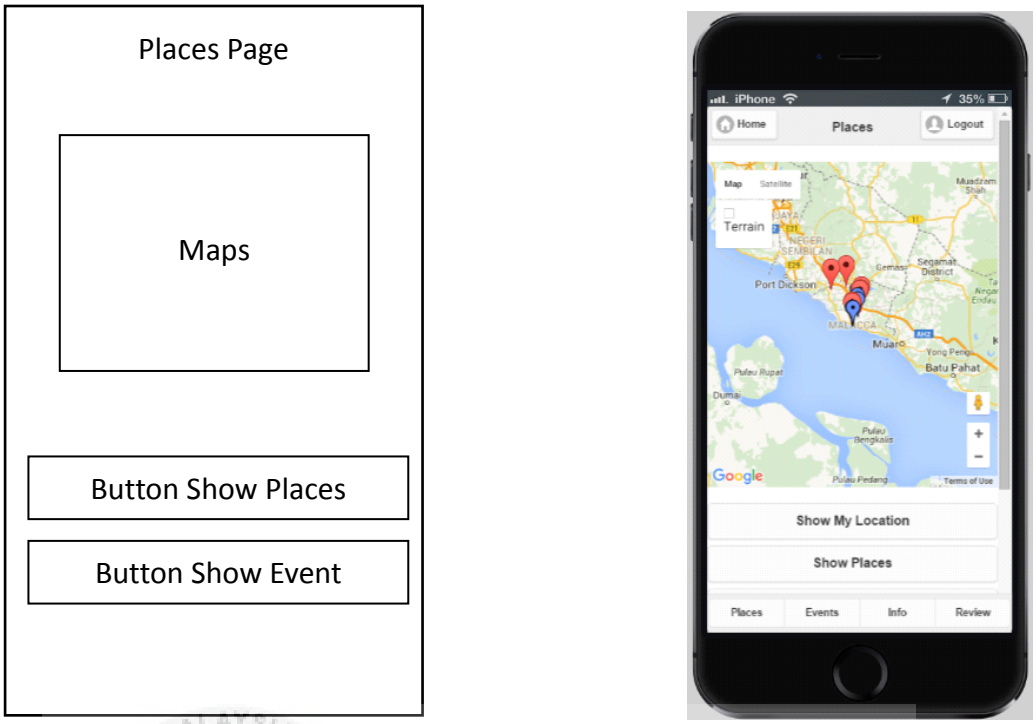

Figure 4.4 Places Page

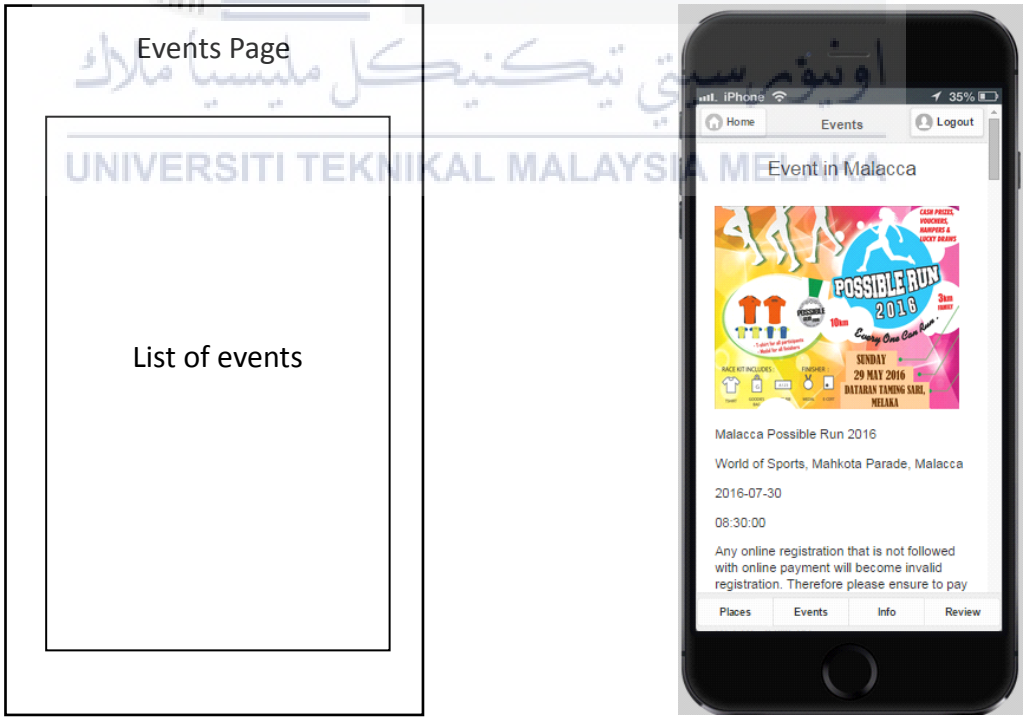

Figure 4.5 Events Page

Figure 4.6 Info Page

Figure 4.7 Review Page

4.4 Database Design

The table below describe the data that will be stored in the database.

Table 4.1 Database design of mobile application

Data	Description
Username	User's name
Email	User's email
EventName	Title of the event
Location	Location of the event
StartDate	Start date of the event
EndDate	End date of the event
StartTime	Start time of the event
EndTime	End time of the event
EventDescription	Description of the event
CompanyName	Name of the organizer
CompanyRegistrationNO	Company's registration number
Review	Review of user after visited that place

4.5 Object Design

The object design of this project is the logo. The design of the logo represent the meaning of map and marker. This logo is place at the main menu.

Figure 4.8 Logo of Place Hunt

4.6 Conclusion

This chapter described the preliminary design, navigation structure, user interface design, database design and object design. In this case, the overall of the structure mobile application and user interface design have been described to lead the developer develop the content, the media element, programming and improve the visual effects of this application. In next chapter will discuss the activity involved in the implementation phase and what is the expected output after complete the implementation phase.

CHAPTER V

IMPLEMENTATION

5.1 Introduction

From the previous chapter had been done, a detailed interface design and navigation structure had been elaborated for the mobile application. In contrast, during the implementation phase, all the implementation of the mobile application is done by Intel XDK. In Intel XDK, the language used to develop the application are HTML5, Javascript, PHP and CSS.

5.2 Intel XDK

The diagram below will describe all the process and implementation in Intel XDK.

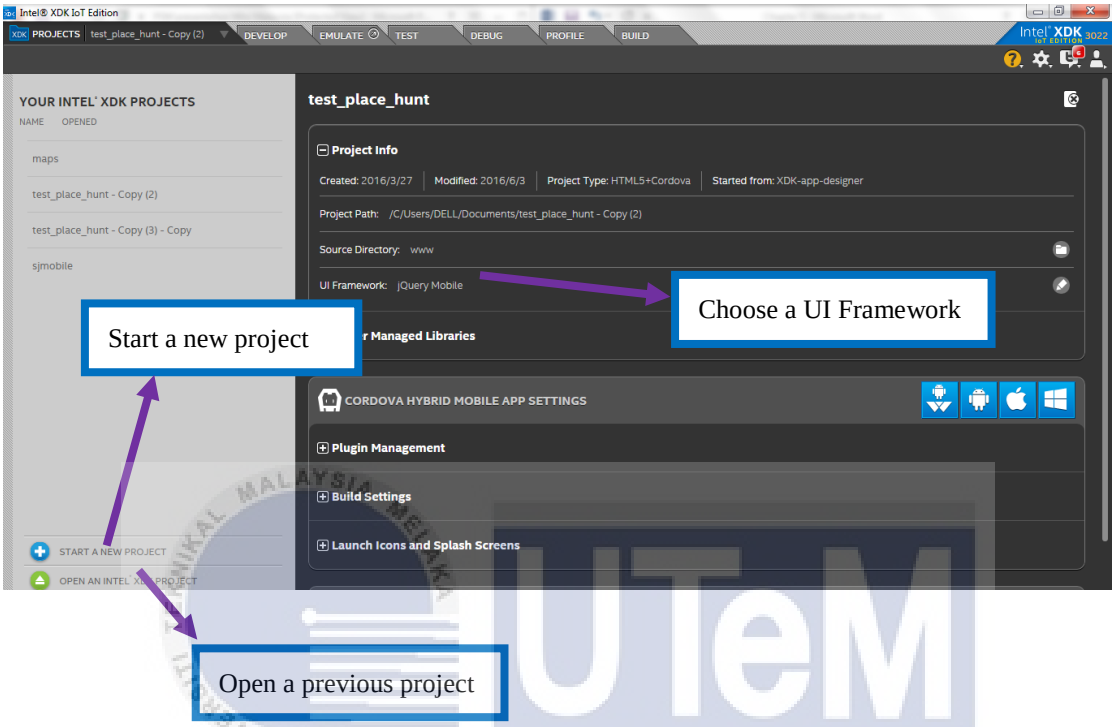

Figure 5.1 Interface of Intel XDK

Figure 5.1 show that the first step need to do to develop a mobile application project. First, click the start a new project button to start a new project or click the open an Intel XDK project button to open a previous project. Next, choose a UI framework to develop and design the user interface.

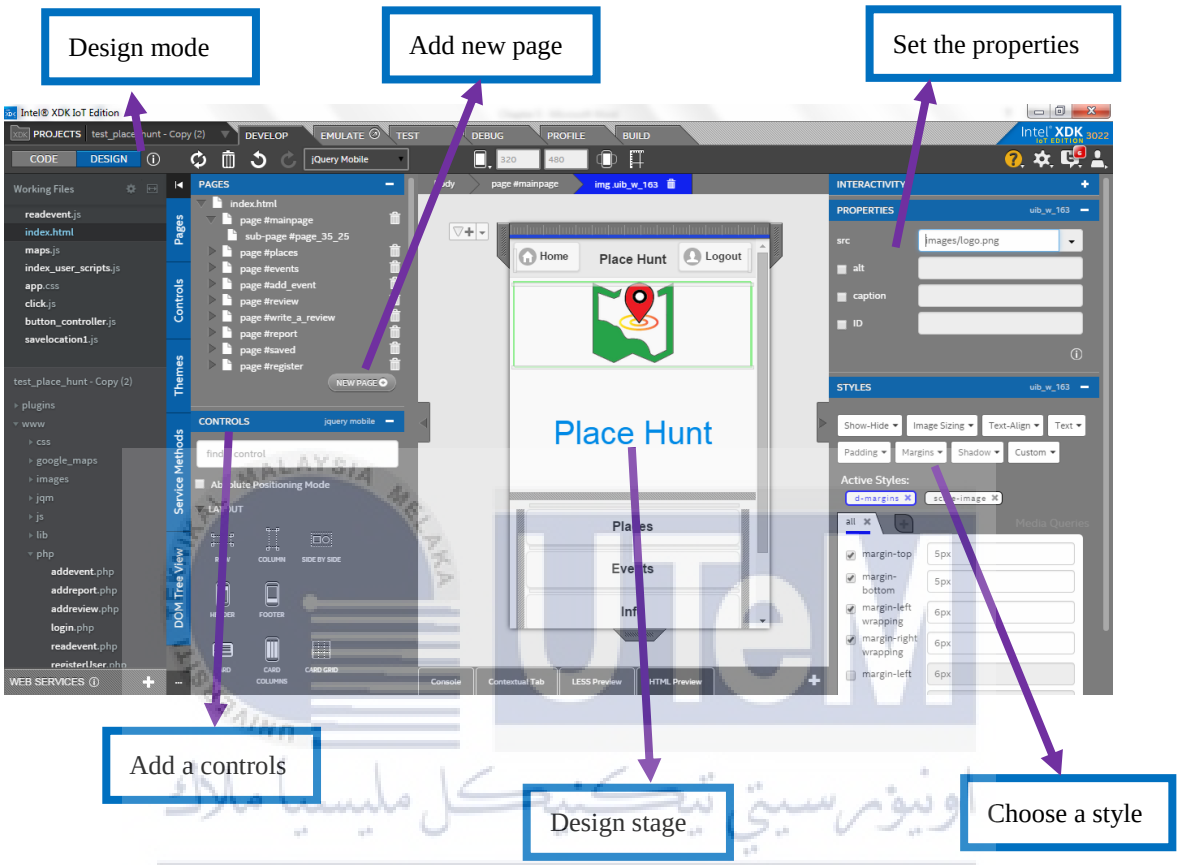

Figure 5.2 Interface of Intel XDK in Design Mode

From the Figure 5.2, choose the design mode to design the interface of mobile application. Next, add a new page to add a controls in design stage. Furthermore, after develop an interface at design stage, can choose a style to improve the visual of the interface. The functionality can set by the properties to add function of each button or image.

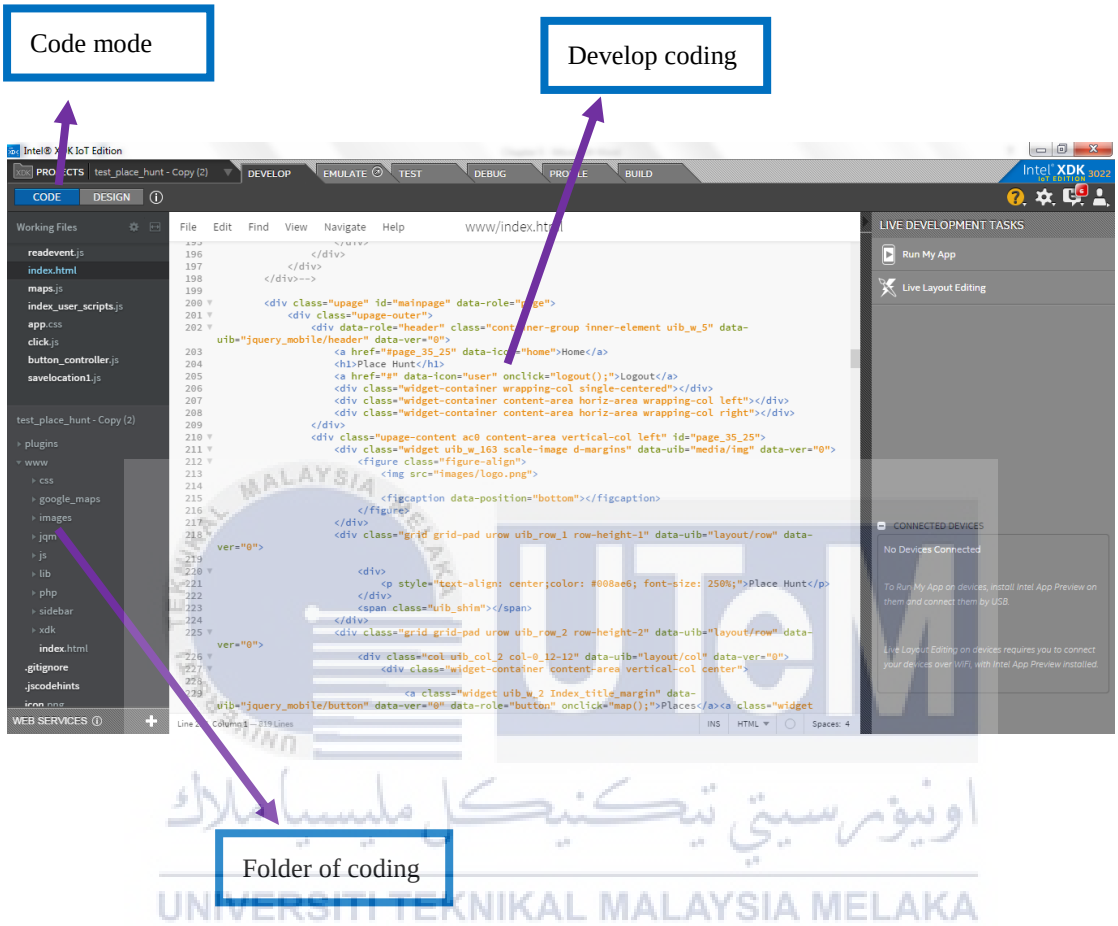

Figure 5.3 Interface of Intel XDK in Code Mode

From Figure 5.4, in code mode, develop a functionality mobile application at this stage. The file can arrange in the folder of coding. There are 4 language to develop the functionality, for example:

HTML5

```
                    <div id="googleMapsOne" style="width:auto;height:400px;margin-top:20px;margin-
bottom:20px;"></div>

                    <input type="button" value="Show My Location" onclick="initialize()" style="margin-
top:20px;">
                    <input type="button" value="Show Places" onclick="initMap();" style="margin-
top:20px;">
                    <input type="button" value="Show Event" onclick="eventLocation();" style="margin-
top:20px;">
```

Figure 5.4 Example of HTML5 Coding

From the Figure 5.4 above, the HTML5 coding is to present a button of Show My Location, Show Places and Show Event in the interface of Places.

CSS

```
body {
    /* margin: 0.5rem ; */
    background: white ;
    color: black ;
}

table img{
    height:250px;
    width: 300px;


}
```


Figure 5.5 Example of CSS Coding

From the Figure 5.5 above, the CSS coding is to describe the presentation of the interface. For example, the table with the content of image is describe with the height is 250px and width is 300px.

Javascript

```
function eventLocation(){
    var totalEvent;

   // window.alert("counting..");


            $.ajax({
                type: "POST",
                url: "http://smartgreen.my/gps/countEvent.php",
                data: "",
                dataType: 'text',
                success: function(result){
                    var mydata= $.parseJSON(result);
                    totalEvent = mydata.key2;
                //window.alert("Successfully Login " + mydata.key2 + "!" + totalEvent);

                    readLocation(totalEvent);
        }

    }).fail(function() {
        window.alert(" Failed");

    });

   // window.alert("meh..");
}
```

Figure 5.6 Example of Javascript Coding

From the Figure 5.6 above, the javascript programming language is the function that to control all the event written by developer. For example, the function eventLocation is used to count how many event is stored at the database.

PHP

```php
<?php
define('SQL_HOST', 'localhost');
define('SQL_USER', 'smarnmy1');
define('SQL_PASS', 'Sma20405');
define('SQL_DB', 'smarnmy1_gps');

$conn = mysql_connect(SQL_HOST, SQL_USER, SQL_PASS) or die('There is a problem with connection to
database.'.mysql_error());

mysql_select_db(SQL_DB, $conn) or die('Could not select database.'.mysql_error());

$ename = $_POST['eventName'];
$elocation = $_POST['location'];
$s_date = $_POST['start_date'];
$e_date = $_POST['end_date'];
$s_time = $_POST['start_time'];
$e_time = $_POST['end_time'];
$e_description = $_POST['event_description'];
$c_name = $_POST['cName'];
$r_no = $_POST['registration_No'];
$s_image = $_POST['smallImage'];


if (empty($ename)||empty($elocation)){
    echo json_encode(array('addevent' => "0"));
} else {

$sql1="INSERT INTO addEvent (ename, location, sdate, edate, stime, etime, eDescription, cname, rNo, image)
VALUES ('$ename', '$elocation','$s_date', '$e_date','$s_time', '$e_time','$e_description', '$c_name',
'$r_no', '$s_image')";
$exec = mysql_query($sql1, $conn) or die(json_encode(array('addevent' => "0")));

echo json_encode(array('addevent' => "1"));
}
mysql_close($conn);
?>
```

Figure 5.7 Example of PHP Coding

From the Figure 5.7 above, the PHP coding is server scripting language, it uses to execute the server side. For example, the Figure 5.7 shows all the input data is store in database using PHP coding.

Figure 5.8 Interface of Intel XDK in Emulate Mode

From figure 5.3, in emulate mode, the actual emulate of mobile application will show to user. User can choose a mobile device that of user want.

Figure 5.9 Interface of Intel XDK in Test Mode

From the figure above, the complete project of this mobile application will push to server in Test Mode. User can preview the apps through actual mobile device.

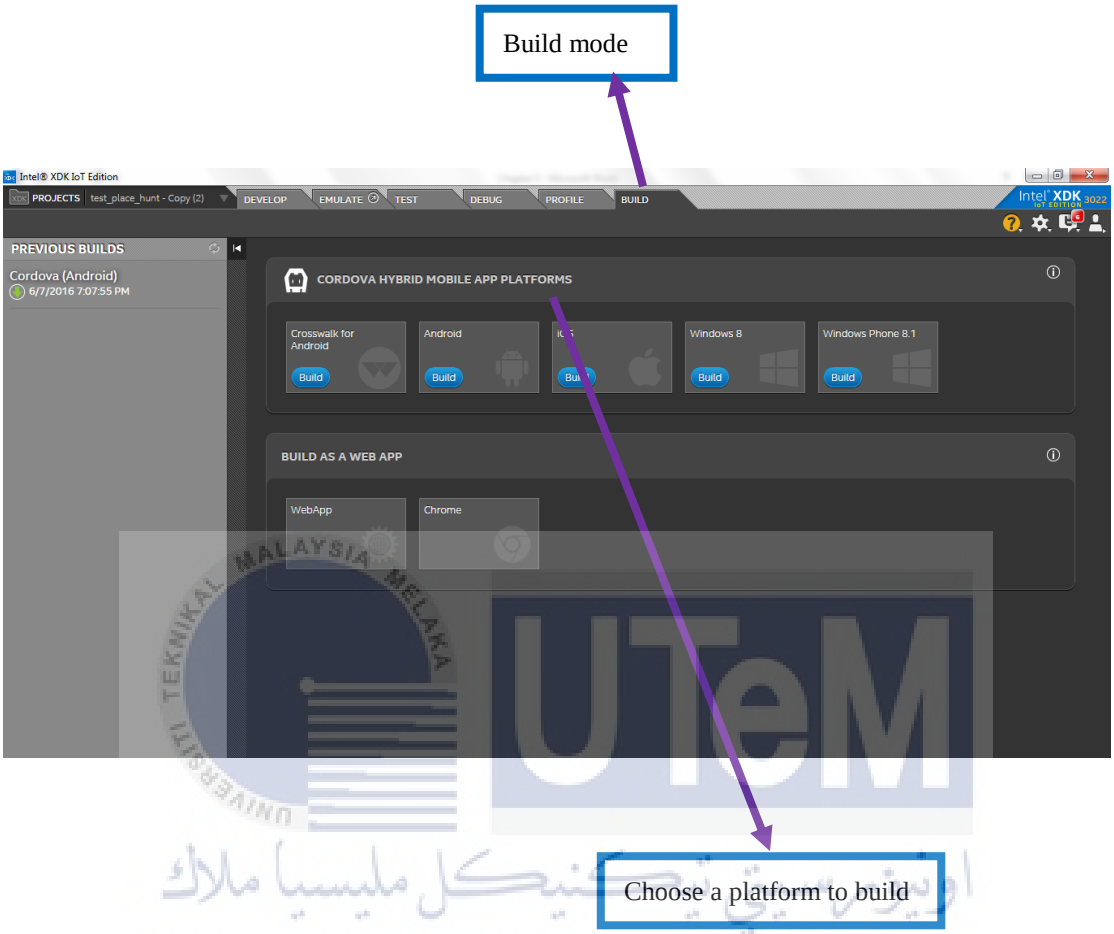

Figure 5.10 Interface of Intel XDK in Build Mode

From figure above, the actual mobile application can build in Build Mode. User can choose a platform to build.

5.3 Conclusion

From this chapter had gone through, the process of the development is clearly described. To design and develop the functionality is very important because the final mobile application will became a good product. Next chapter will describe about testing the mobile application from users.

CHAPTER IV

TESTING AND EVALUATION

6.1 Introduction

In this chapter, a testing and evaluation of the mobile application will be carried out. The activity of the test plan including test user, test environment and test schedule will be involved in testing phase. Besides that, a testing strategy will be adopted and implemented to get the accuracy feedback or result and data to analyze and evaluate the effectiveness of this mobile application. The feedback or result also used to ensure that the objectives of this project are achieved.

6.2 Test Plan

The test plan explain the activity of the test will be carried on while demo the mobile application to target user. An advanced test plan can lead the mobile application more advanced than before testing. This test plan will describe the participants who involved in the testing, when the testing conducted and where the testing conducted later.

6.2.1 Test User

The number of participants involved in this testing is 50 person, including local tourist, foreign tourist, and local people at Malacca. These people are selected randomly at the testing location. These participant's age should range from 13years old to 60 years old. However permission will be asked before the participants do the testing to make sure that the participants do it willing and not forced them to do it.

Table 6.1 Current residence of participants

Residence	**Malaysia (other state)**	**Malaysia (Malacca)**	**Others country**
No. of participants	34	4	12

Figure 6.1 Testing with participants

6.2.2 Test Environment

The testing location had been chose is The Stadthuys or Dutch Square and Jonker Street. This three location had been chose because these places is historical places in the heart of Malacca city. Due to this reason, most of the tourist came here to visit especially at weekend or during public holidays.

Figure 6.2 Test Environment: Jonker Street

Figure 6.3 Test Environment: The Stadthuys or Dutch Square

For this testing, the hardware used to demo and test of the test user is iPhone 6s which is installed with the mobile application “Places Hunt”.

6.2.3 Test Schedule

There have two phase of testing schedule during the testing is carried on. The testing is carried out in same day but different period. Phase one is on 6 August 2016, at 11pm to 1pm. Phase two is on 6 August 2016, at 3pm to 5pm. Each of phase is involved 25 person.

6.3 Test Strategy

Two phase of testing were carried out to test the mobile application. The first testing phase is give a guidance from developer to the participants while test the mobile application. The guidance give on what is the mobile application about and how the mobile application navigate. The second testing phase is let the participants to explore himself or herself. The guidance or explanation will give if the participant ask.

6.4 Test Implementation

In this section, a detailed description of how to test the mobile application will discussed later. Besides that, the questionnaire was gave to participants filled up and then the data was collected for analyze and evaluate whether this mobile application has meet the requirement or not.

6.4.1 Test Description

The objective for testing the mobile application is to replace the printed travel guide in the way of efficiently to promote the interesting place in Malacca and event in Malaysia. Besides that, the objective for testing the mobile application is to test the function of map can efficiently help the tourist find their way in Malaysia. The questionnaire is consists of two part. Part A is about the question of profile of participants and the motivation and destination choice of the participants. Part B is about the question of evaluate the functionality of the mobile application. Furthermore, Part A is conducted before the demo of testing start while Part B is conducted while demo of testing is finished. After that, the answer of the questionnaire are gathered together and analyzed.

6.4.2 Test Data

The questionnaire is consists of two part: Part A is in the form of choose an answer and fill in the blanks when necessary while Part B is in the form of scaling the functionality of the mobile application. The questionnaire of Part A will give to participants before the demo of testing start while Part B will give to participants while demo of testing is finished. Next, all the suggestion and answer will collected and analyzed after. The result of this testing can evaluate the mobile application has meet the objective or not. Below is the list of the questionnaire.

From Part A, question 1, 2, 3 and 4, is ask about the profile information of participants to identify the gender, age, residence, and current position. Question 5, 6 and 7 is ask about the mobile device and the advantages of mobile application while travel. Furthermore, question 8, 9 and 10 is ask about the where the interesting place in

Malacca and event in Malaysia have visited.

From Part B, the overall question is about evaluation the functionality of the mobile application while after use the mobile application. From question 1 and question 2 are to evaluate the mobile application is easy to use and the navigation flow of mobile application is smooth. Besides that, question 3 is evaluate the content and information provide is useful. Furthermore, question 4 is evaluate the interface of the mobile application is nice and attractive. Moreover, question 5 is evaluate the mobile application can replace the printed travel guide or not. Lastly, the participants can give the suggestion or improvement about this mobile application.

6.5 Test Results and Analysis

In this section, all the feedbacks and results according to the questionnaire is collected and analyzed to evaluate the mobile application is accepted by public and meet the requirements of public. Below is the feedbacks and results according to the questionnaire from participants.

Part A: Question about the profile of participants and the motivation and destination choice of participants.

Q1. Please indicate your gender.

A. Male

B. Female

Table 6.2 Result of Part A Question 1

Answer	**Male**	**Female**
No. of participants	17	33

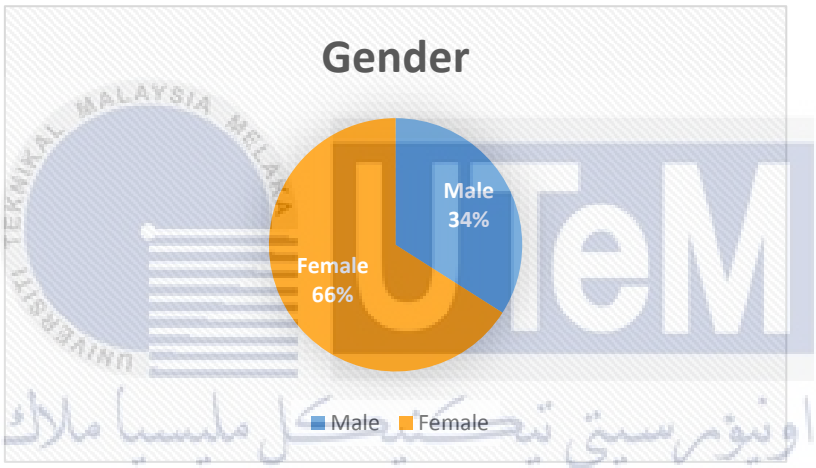

Figure 6.4 Result of Part A Question 1

From the Figure 6.4 above, participants consists of 34% (17 person) of male and 66% (33 person) of female.

Q2. Please indicate your age group.

A. 19 or below
B. 20-29
C. 30-39
D. 40-49
E. 50-59
F. 60 or above

Table 6.3 Result of Part A Question 2

Answer	**19 or below**	**20-29**	**30-39**	**40-49**	**50-59**	**60 or above**
No. of participants	3	34	8	4	1	0

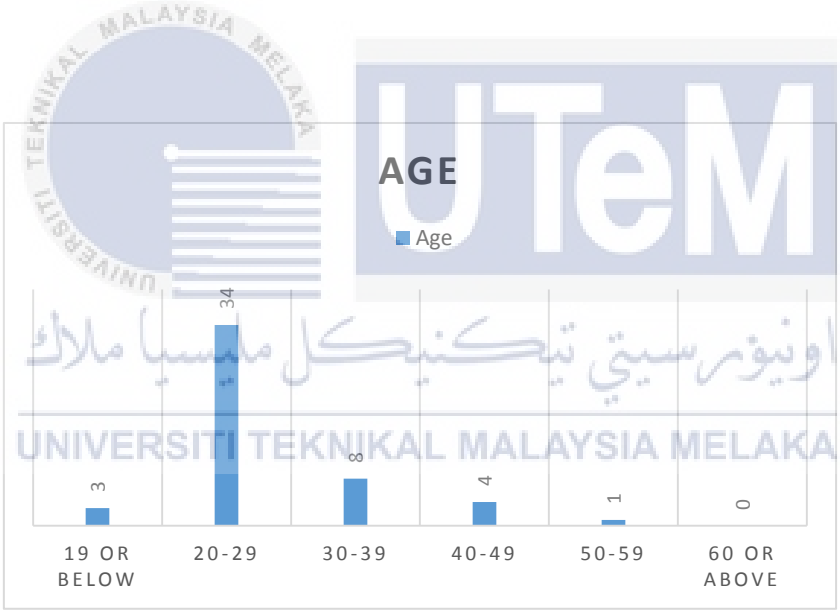

Figure 6.5 Result of Part A Question 2

From the Figure 6.5 above, the highest is 20-29 age group consists of 34 person. Then, follow by 8 person in 30-39 age group and 4 person in 40-49 age group. Besides that, 19 or below age group consist of 3 person and 1 person in 50-59 age group. Lastly, there was no participants is in the 60 or above age group.

Q3. Where is your current place of residence?

A. Malaysia, state: _____

B. Others country: _____

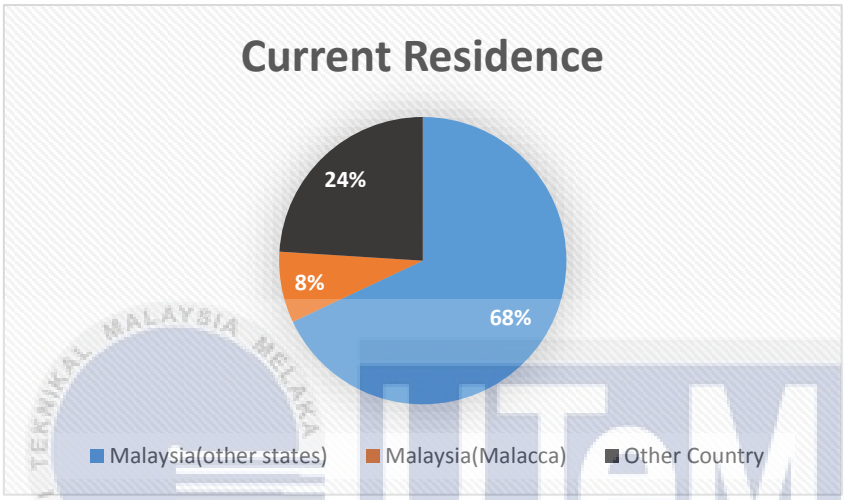

Figure 6.6 Result of Part A Question 3

From the Figure 6.6 above, there was 68% (34 person) of participants came from Malaysia in other states (local tourists) and 24% (12 person) from others country (foreign tourists) and 8% (4 person) from Malacca.

Q4. What is the categories of your current position?

A. Employed
B. Self employed
C. Student
D. Retired
E. Unemployed
F. Housewife/man
G. Others:

Table 6.4 Result of Part A Question 4

Answer	Employed	Self employed	Student	Retired	Unemployed	Housewife /man	Others
No. of participants	23	7	17	1	0	2	0

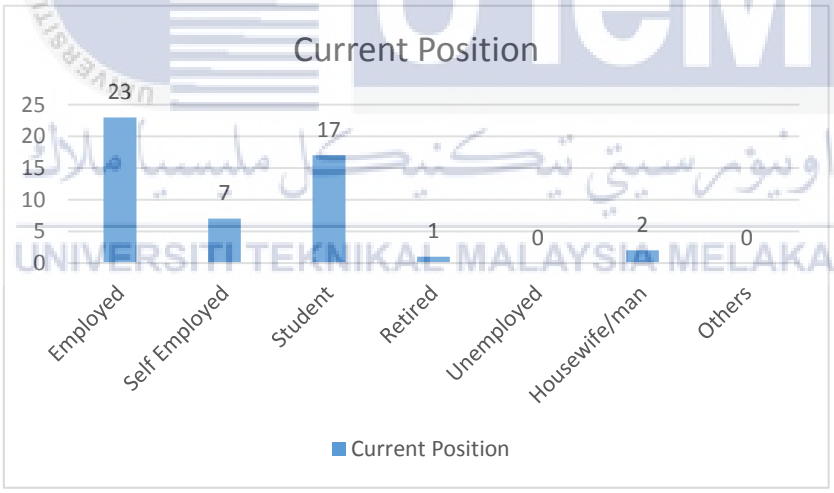

Figure 6.7 Result of Part A Question 4

From the Figure 6.7 above, employed was the highest group of current position among the participants there was 23 persons. Besides that, current position was student has 17 persons and self-employed has 7 person. Next is followed by housewife or houseman was 2 persons and retired was only one person.

Q5. Do you own a smartphone/tablet?

A. Yes

B. No

Table 6.5 Result of Part A Question 5

Answer	**Yes**	**No**
No. of participants	50	0

From the Table 6.5, among of the 50 participants, all have their own smartphone or tablet.

Q6. Do you have mobile application of travel on your smartphone/tablet?

A. Yes

B. No

Table 6.6 Result of Part A Question 6

Answer	**Yes**	**No**
No. of participants	45	5

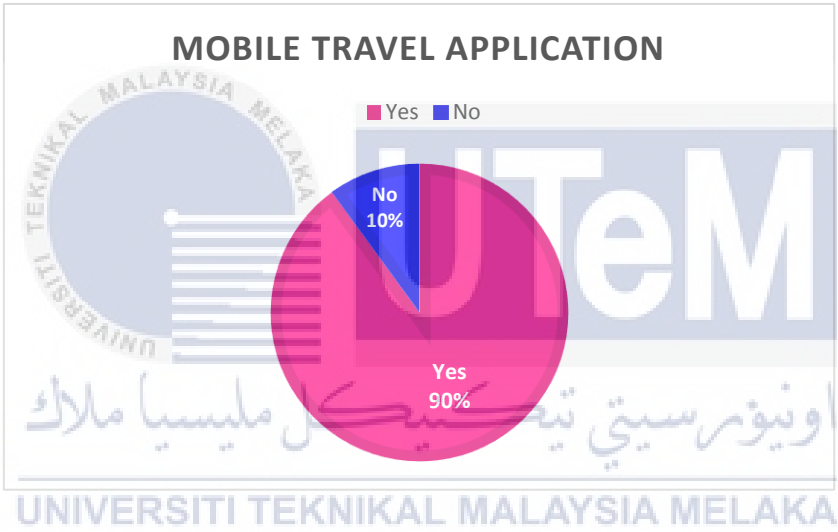

Figure 6.8 Result of Part A Question 6

From the Figure 6.8 above, there was 45 persons (90%) of participants has their own mobile travel application on their smartphone or tablet and 5 persons (10%) there was no mobile travel application on their own smartphone.

Q7. Do you think the mobile travel application will give you advantages in your trip?

A. Yes

B. No

If yes, please describe how the application gives you advantages in your trip.

Table 6.7 Result of Part A Question 7

Answer	**Yes**	**No**
No. of participants	48	2

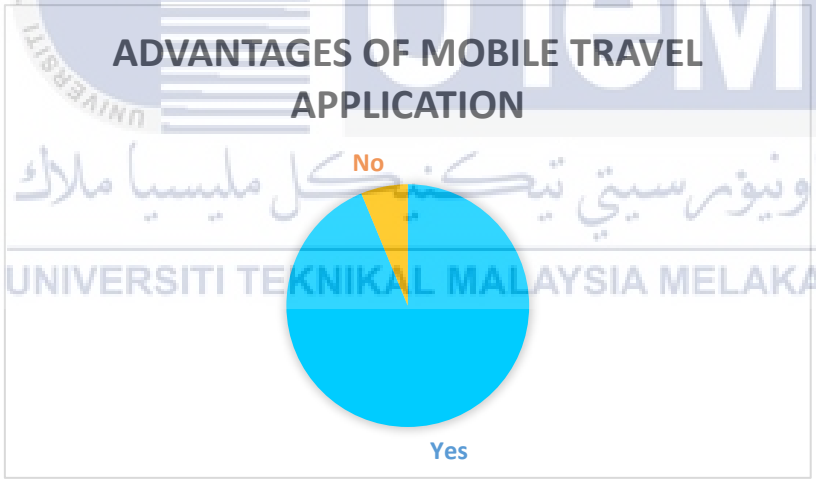

Figure 6.9 Result of Part A Question 7

From the Figure 6.9 above, among of 50 participants, 48 persons agree that the mobile travel application can give the advantages during their trip. But, have 2 persons of participant was not agree that the mobile travel application can give the advantages during their trip.

Besides that, between the 48 participants was agreed have described how the mobile travel application bring benefits during their trip. Following list is the advantages of mobile travel application described by participants.

- ✓ Use mobile application to look for interesting/popular place
- ✓ Use mobile GPS to get the direction
- ✓ Use mobile application to get the mapping features
- ✓ Use mobile application to search the activities/events
- ✓ Use mobile application to check nearby restaurant
- ✓ Use mobile application to check nearby hotel
- ✓ Use mobile application to plan their trip
- ✓ Use mobile application to check the local public transportation
- ✓ Use mobile application to check the weather

Q8. Have you visited to Malacca before?

A. Yes

B. No

If yes, where interesting place have you visited in Melaka?

Table 6.8 Result of Part A Question 8

Answer	**Yes**	**No**
No. of participants	39	11

From the Table 6.8 above, between 50 participants, 39 persons was visited to Malacca before and 11 persons was have not visited to Malacca before. Among the 39 person was visited to Malacca before, most of them have visited to The Stadthuys or Dutch Square, Jonker Street, Melaka River Cruise, Baba And Nyonya Heritage Museum, A Famosa (Porta De Santiago) , Menara Taming Sari, Cheng Ho Cultural Museum and Zoo Malacca. Furthermore, among the 11 persons have not visited to Malacca before, they was first time visited to Malacca.

Q9. Where have you seen advertisements about interesting place of Melaka?

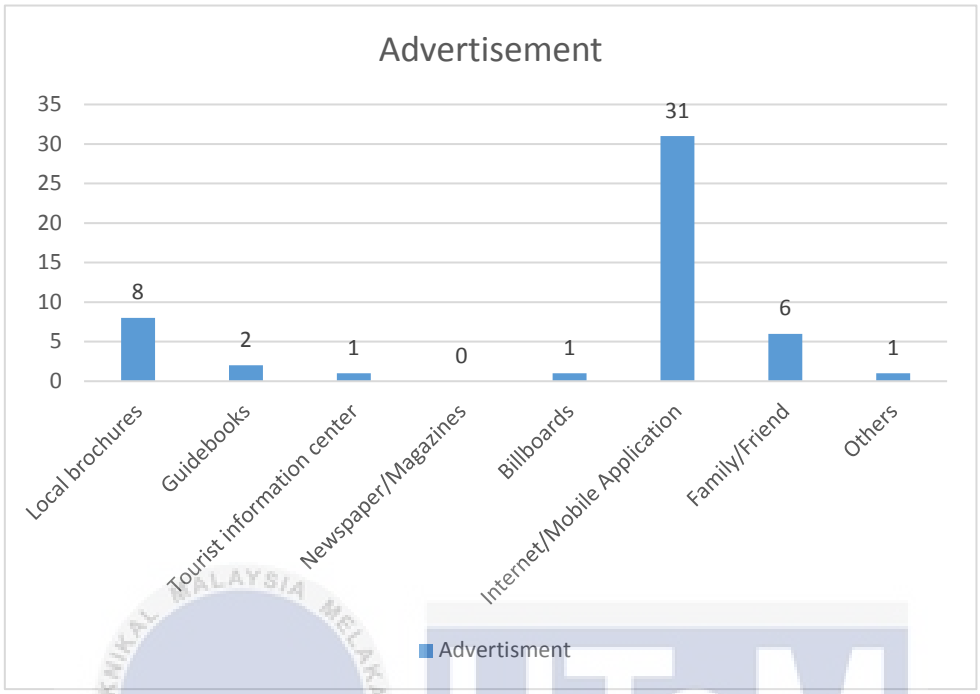

Figure 6.10 Result of Part A Question 9

From the Figure 6.10 above, 31 of the participants seen advertisement about the interesting place during their trip is through Internet or mobile application. Besides that, 8 of participants seen advertisement about the interesting place during their trip is through local brochures and 6 of the participants seen advertisement about the interesting place through family or friend. Furthermore, 2 of the participants seen advertisement about the interesting place during their trip is through guidebook. Moreover, tourist information center, billboards and others such as television, each of advertisement was seen by one participant during their trip in Malacca.

Q10. During the period of your trip, do you participate any event in Malaysia?

Table 6.9 Result of Part A Question 10 (a)

Answer	Yes	No
No. of participants	3	47

Table 6.10 Result of Part A Question 10 (b)

Answer	**No. of participants**
Local brochures	1
Guidebooks	0
Tourist information center	0
Newspapers/Magazines	0
Billboards	1
Internet/Mobile application	1
Family / Friend	0
Others	0

From the Table 6.9 above, there are only 3 participants participate the event in Malaysia during their trip and other 47 participants are not participate the event in Malaysia. Besides that, from Table 6.10 show that among three participants one of them seen advertisements about the event in Malaysia through local brochures, one of them seen advertisements about the event in Malaysia through billboards and one of them seen advertisements about the event in Malaysia through Internet or mobile application.

Part B: Question about the functionality of the mobile application.

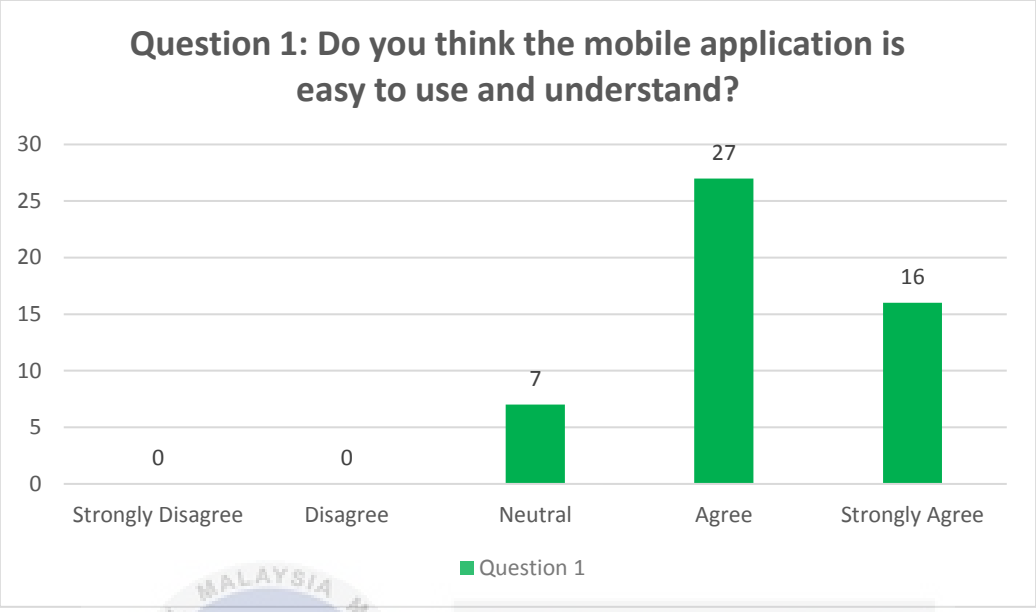

Figure 6.11 Result of Part B Question 1

From Figure 6.11, 27 of participants agree that the mobile application is easy to use and understand. Besides that, 16 of participants strongly agree that the mobile application is easy to use and understand. Furthermore, 7 of participants feel neutral that mobile application is easy to use and understand.

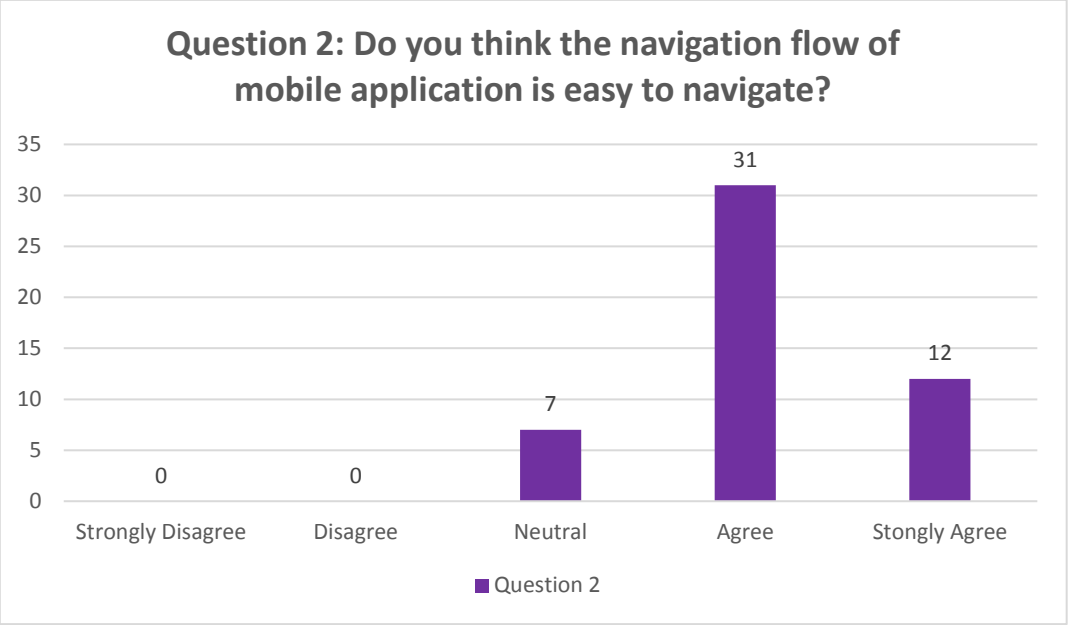

Figure 6.12 Result of Part B Question 2

From Figure 6.12, 31 of participants agree that the navigation flow of mobile application is easy to navigate. Besides that, 12 of participants strongly agree that the navigation flow of mobile application is easy to navigate. Moreover, 7 of participants feel neutral that the navigation flow of mobile application is easy to navigate.

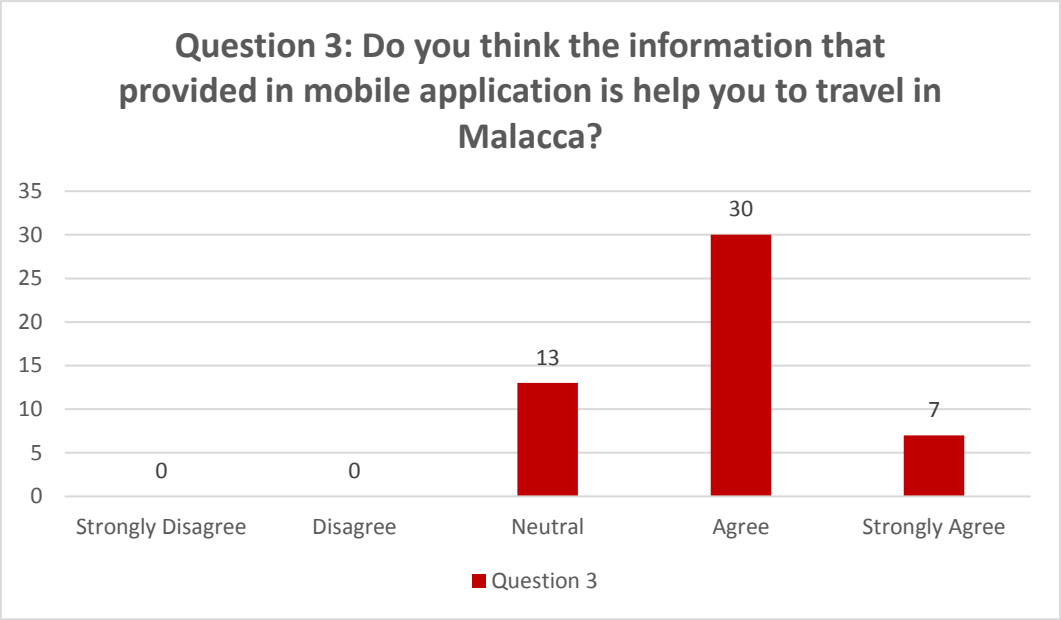

Figure 6.13 Result of Part B Question 3

From Figure 6.13, 30 of participants agree that the information that provided in mobile application is help them to travel in Malacca. Besides that, 13 of participants feel neutral that the information that provided in mobile application is help them to travel in Malacca. Furthermore, 7 of participants strongly agree that the information that provided in mobile application is help them to travel in Malacca.

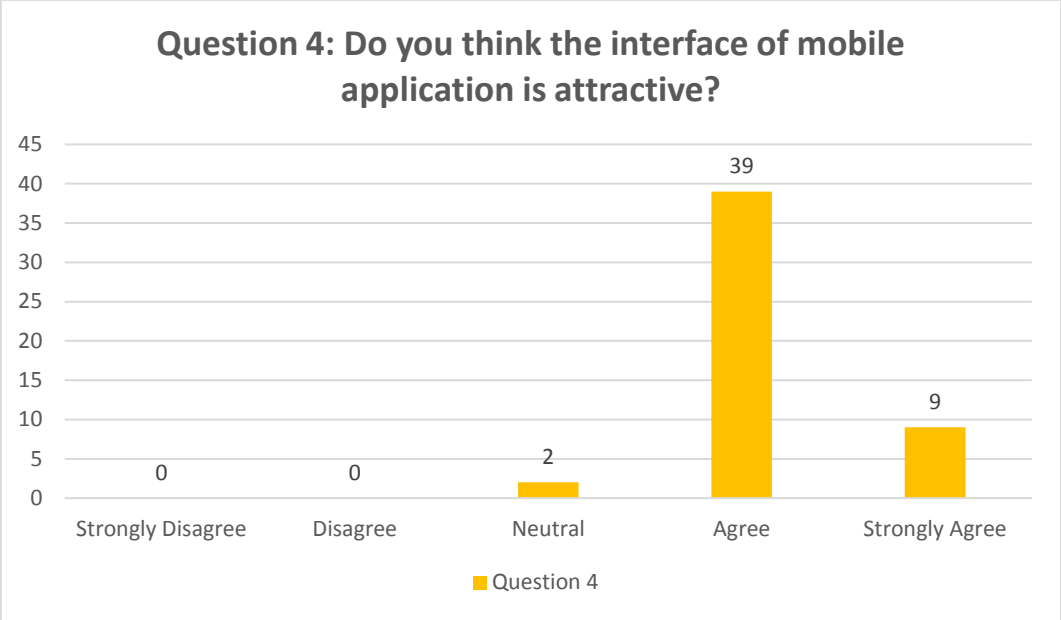

Figure 6.14 Result of Part B Question 4

From Figure 6.14, 39 of participants agree that the interface of mobile application is attractive. Besides that, 9 of participants strongly agree that the interface of mobile application is attractive. Moreover, 2 of participants feel neutral that the interface of mobile application is attractive.

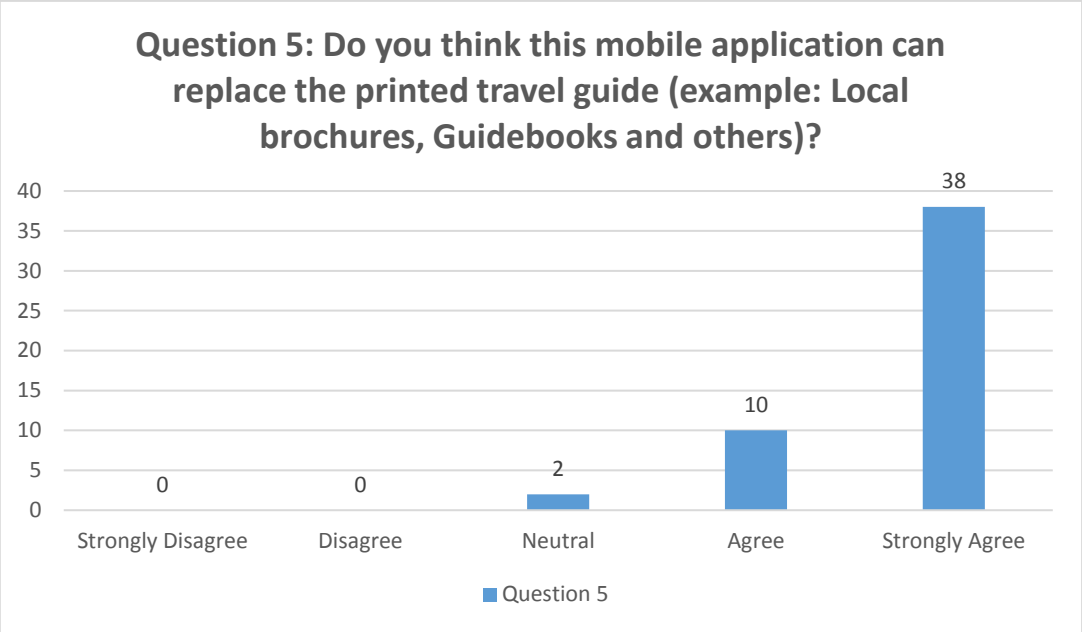

Figure 6.15 Result of Part B Question 5

From Figure 6.15, 38 of participants strongly agree that this mobile application can replace the printed travel guide. Besides that, 10 of participants agree that this mobile application can replace the printed travel guide. Furthermore, 2 of participants feel neutral that this mobile application can replace the printed travel guide.

6.6 Conclusion

This chapter explains about the testing phase of the mobile application. This testing phase included the test plan which was defined who was the participants, where the testing conducted and when it is conducted. After that, a questionnaire is gave to the participants to give the suggestion and feedback. This result was collected and analyzed. Besides that, the result shown that this mobile application is good as well as the participants gave high recommended towards this mobile application. So, this mobile application is fulfill the objective had been stated. In next chapter, the overall conclusion as well as strengths and weakness will be discussed.

CHAPTER VII

CONCLUSION

7.1 Observation on Weaknesses and Strengths

After the testing is carried out and all the feedback and answer is collected, from the result has been analyzed, the weakness and strengths of the mobile application can be observed.

7.1.1 Observation on Strengths

From the result of the questionnaire has been analyzed, most of the participants think that this mobile application can replace the printed travel guide such as local brochures, guidebook, newspaper or magazines, billboard and others. Besides that, most participants found that they can participate the events during their trip. The result from the questionnaire state that only got three persons had participated the event during their trip. So, this mobile application can update the event from event organizer while they are using this mobile application.

Furthermore, they can also found the interesting place at Malacca through this mobile application. This mobile application provide the information about the most interesting places in Malacca so the user can decide where the place should go based on their interest. Next, when they decided where to go, they can use the feature GPS to detect the direction and bring them go to the destination.

Moreover, users can refer the review through this mobile application as reference. Users can write review on this mobile application to share their feelings after visited the interesting places in Malacca.

7.1.2 Observation on Weakness

All the system has developed must have strengths and weaknesses because of the requirement of the users is different with each other. Firstly, the weakness of the mobile application is to introduce interesting place in Malacca only. Some of the participants request for other state in Malaysia while they are willing to travel to the other state.

Besides that, the weakness of this mobile application is the feature provided too least. For example, some of the participants are looking for the nearby restaurant and hotel to rest while they are tired. This feature was not provided in this mobile application. Furthermore, the language of this mobile application provided is only English. Even though English is the international language, but some people use native language as custom, so they do not really understand English.

7.2 Propositions for Improvement

In this section, after the weaknesses of the mobile application is find out, there are some suggestion for improve the weakness of the mobile application.

For the first suggestion is to enlarge the scope of the interesting place by adding more interesting place of each state in Malaysia on this mobile application. From the questionnaire, some of the participants give that suggestion to add other state in Malaysia on this mobile application while they are willing to travel to the other state.

Furthermore, another suggestion is to add more feature into this mobile application. For example, add searching the nearby restaurant and hotel from the user current location or searching for the public transportation. This will made this mobile application more functionality to fulfill different requirements of users.

Next, the suggestion is to add more language into this mobile application. This is because some people use native language as custom, so they do not really understand English. This mobile application can add more language such as Japanese, Chinese, Italian or French to let the foreign tourist utilize use it during travel in Malaysia.

7.3 Project Contribution

After this mobile application is developed and tested, it can be used to compliment and aid more attraction to the existing traditional printed travel guide. This mobile application used to introduce the interesting places in Malacca and events in Malaysia. Compare with the printed travel guide, this mobile application present to the users in interactive way. For example, user can felt annoying while they are not understand the content has provided in the printed travel guide. In addition, the feature of GPS can give the direction until destinations through this mobile application. So user can go the destination without lost when they are first time come to Malaysia.

7.4 Conclusion

In conclusion, this chapter discussed about the strengths and weakness of the mobile application and suggestion for improvement. At this stage can conclude that, this project "Place Hunt: A Mobile Application to introduce interesting place in Malacca and events in Malaysia" had been developed and had meet the objective stated before. This mobile technology has growth rapidly over the past few years. Due to this technology, this mobile application can use by public and to aid the tourism in Malaysia.

REFERENCES

Michael Kenteris, Damianos Gavalas, Daphne Economou. (2007). “An innovative mobile electronic tourist guide application”

Annika Hinze and Saijai Junmanee. (2005). “Travel Recommendations in a Mobile Tourist Information System”

Alexander Smirnov, Alexey Kashevnik, Andrew Ponomarev, Nikolay Shilov, Maksim Shchekotov, Nikolay Teslya. (2014). “Smart Space-Based Intelligent Mobile Tourist Guide: Service-Based Implementation”

The Nielsen Company (2007). The State Of Mobile Apps. Retrieved from: http://www.nielsen.com/content/dam/corporate/us/en/newswire/uploads/2010/09/NielsenMobileAppsWhitepaper.pdf

David Vaughan (March 25, 2007). DIFFERENCES, ADVANTAGES AND DISADVANTAGES OF A GIS. DIGITAL MAP AND PRINTED MAPS. Retrieved from: http://bcb710.blogspot.my/2007/03/differences-advantages-and.html

APPENDIX A

PROJECT MILESTONE

Activity/Task	Week													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Proposal PSM : Submission & Presentation	■													
2. Proposal Correction Chapter 1		■												
3. Chapter 1 (System Development Begins)			■											
4. Chapter 1 & Chapter 2				■										
5. Chapter 2					■									
6. Chapter 2 & Chapter 3						■								
7. Project Demo & Chapter 3 Chapter 4							■							
8. Project Demo & Chapter 4									■	■				
9. Project Demo											■			
10. Project Demo & PSM Report												■	■	■

APPENDIX B

Questionnaire

Thank you for answering this questionnaire. I am a degree level student at University Technical Malaysia Melaka and I am currently doing my final year project. This project is to identify the mobile application can efficiently promote the interesting place in Malacca and event in Malaysia.

***The information that you give in this questionnaire is only for academic purpose and will kept confidential.**

Thank you very much in advance for participating.

Part A: Question about the profile of participants and the motivation and destination choice of participants.

Please choose the answer and fill in the blanks when necessary.

Q1. Please indicate your gender.

A. Male
B. Female

Q2. Please indicate your age group.

A. 19 or below
B. 20-29
C. 30-39
D. 40-49
E. 50-59
F. 60 or above

Q3. Where is your current place of residence?

A. Malaysia, state: _____

B. Others country: _____

Q4. What is the categories of your current position?

A. Employed
B. Self employed
C. Student
D. Retired
E. Unemployed
F. Housewife/man
G. Others:

Q5. Do you own a smartphone/tablet?

A. Yes
B. No

Q6. Do you have mobile application of travel on your smartphone/tablet?

A. Yes
B. No

Q7. Do you think the mobile travel application will give you advantages in your trip?

A. Yes
B. No

If yes, please describe how the application gives you advantages in your trip.

_____

_____

_____

Q8. Have you visited to Malacca before?

A. Yes
B. No

If yes, where interesting place have you visited in Melaka?

_____

_____

Q9. Where have you seen advertisements about interesting place of Melaka?

A. Local brochures
B. Guidebooks
C. Tourist information center
D. Newspapers / Magazines
E. Billboards
F Internet/Mobile application
G. Family / Friend
H. Others:_____

Q10. During the period of your trip, do you participate any event in Malaysia?

A. Yes
B. No

If yes, where have you seen advertisements about the event in Malaysia?

A. Local brochures
B. Guidebooks
C. Tourist information center
D. Newspapers/Magazines
E. Billboards
F Internet/Mobile application
G. Family / Friend
H. Others:_____

Part B: Question about the functionality of the mobile application.

Please tick (/) to the following questions.

1	2	3	4	5
Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**

Please tick (/) to the following questions.	1	2	3	4	5
1. Do you think the mobile application is easy to use and understand?					
2. Do you think the navigation flow of mobile application is easy to navigate?					
3. Do you think the information that provided in mobile application is help you to travel in Malacca?					
4. Do you think the interface of mobile application is attractive?					
5. Do you think this mobile application can replace the printed travel guide (example: Local brochures, Guidebooks and others)?					

Any suggestions or improvement about this mobile application?

_____

_____

_____

APPENDIX C