BORANG PENGESAHAN STATUS TESIS^

JUDUL: <u>mGUIDE TO MELAKA</u>

SESI PENGAJIAN: <u>2006/07</u>

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^ Tesis dimaksudkan sebagai Laporan Projek Sarjana Muda (PSM)

mGUIDE TO MELAKA

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2007

DECLARATION

I hereby declare that this project report entitled

mGUIDE TO MELAKA

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

STUDENT   : _____   DATE : 12/11/07

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SUPERVISOR : _____   DATE : 12/11/07 .

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DEDICATION

This thesis is dedicated to my parents, who gave me endless support throughout my whole life in no matter what I do. It is also dedicated to my brother's first son, Sean Lee.

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ABSTRACT

The purpose of this research is to explore the use of mobile technology to revolutionize the tourism industry. The current methods of providing information about tourism are still paper-based and some are web-based. But the problem that this project aims to solve is the mobility and portability of the travel guide. With mobile technology expanding from its main purpose of communication to health, leisure and many more, it is the time to explore the potential it has in aiding tourism. To understand the problem faced by tourist, a discussion of the problem that tourist faced and how mobile technology can help them is carried out. To solve this problem, research about the user interface, the content of the application and the navigation of the map are carried out to build the suitable application. Once the analysis is complete, the system is developed according to the result of the analysis phase with the user requirements in mind.

ABSTRAK

Tujuan kajian ini adalah untuk meninjau penggunaan teknologi mudah alih dalam merevolusikan industri perlanncongan yang sedia ada. Kaedah yang masih digunakan untuk penyampaian maklumat mengenai perlancongan adalah menggunakan kertas atau melalui laman web. Masalah utama yang ingin diselesaikan oleh projek ini adalah berkaitan dengan isu mobiliti dan mudah alih panduan perlancongan yang digunakan. Dengan pembangunan yang pesat dalam teknologi peranti mudah alih ini yang berkembang dari fungsi asalnya dalam komunikasi ke dalam bidang kesihatan, permainan dan sebagainya. Oleh itu, kini masanya untuk meninjau potensinya dalam membantu perlancongan. Untuk memahami masalah yang dihadapi oleh pelancong, satu perbincangan dilaksanakan untuk membincangkan masalah yang dihadapi dan bagaimana teknologi mudah alih dapat membantu mereka mengatasi masalah tersebut. Untuk menyelesaikan masalah ini, kajian mengenai rekabentuk halaman, isi kandungan aplikasi dan cara memandu arah dalam peta yang disediakan kelak. Selepas proses analisis, aplikasi tersebut dibangunkan mengikut keputusan yang dicapai dalam fasa analisis dengan mementingkan keperluan pengguna.

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LIST OF ABBREVIATION

ABBREVIATION	DESCRIPTION
PDA	Personal Digital Assistant
ISD	Instructional Design
MB	Megabytes
GB	Gigabytes
MHz	Megahertz
WBS	Work Breakdown Structure
GPS	Geographical Positioning System
GIS	Geographical Information System
POI	Point of Interest

CHAPTER I

INTRODUCTION

1.1   Project Background

The purpose of this research is to build a mobile content for mobile phone user. The mobile content proposed is a portable tourist guide. The mobile content can provide the user with information about tourist attraction for the state of Melaka. This mobile content is built to explore the opportunity of mobile device being the new method or media for travel guide and information. The application can also provide map service so that the user can find the way to their destination. This application is something new because currently the almost similar device is the GPS device, where the user can locate their current location. This application is mainly used for information about tourist attraction location so that the tourist will know what kind of places of interest there are in Melaka and plan their vacation ahead.

1.2   Problem Statement

The current map and tourist guide that our country are using now are printed and some are digital but being restricted to a kiosk or a personal computer or at least a laptop.

Sometime map are very hard to understand or read because some people find it very difficult for them to understand it. Printed guide or map also have limitations that's make it unable to provide and deliver the sufficient information to the tourist. Maps are made to be light and easy to bring. That is why it can only provide the map but not the information of the place of interest. However, if they use the guidebook, which is thick because of all the detailed information, the tourist will have a hard time bringing the book around because it is heavy and bulky. Another problem is tourist always misplaced their map when they stop to rest or leave it in their hotel room when they go out. The digital guide such as CD based applications will be more interesting but it is hard to bring it around because it requires at least a laptop to view it. Sometimes it is also hard for the tourist to find the nearest Tourist Information Centre to ask for help if they are lost or when they need information. Getting help by calling the Tourist Information Centre sometime might not be helpful also because the tourist does not really know the area and verbal guide might make them even more confused. The main reason to make the travel guide into a mobile content is because the current method of travel guides lack portability, effectiveness of information delivery and the ease of use. Sometimes tourists are also burdened by heavy loads of things to bring around. They need to bring their mobile phone, camera, map, travel guide and a few other stuffs. This can be troublesome because it is hard to manage so many things at once. By integrating the map and guide inside the mobile phone which are now usually equipped with digital camera, it sure can help ease the burden of suppose to be relaxing holiday.

1.3   Objectives

The objectives of this project are:
- To develop a portable travel guide for mobile phone.
- To explore the potential of mobile phone technology in tourism.
- To introduce a new way of presenting travel guide to tourists.

1.4 Scope

The scope of this project is to develop portable application that is compatible with all the latest affordable hand phone. Mobile phone is the most common mobile device in the world now and with many new functions and applications included, it has become the most important electronic gadget to human. However for this prototype version, the mobile device that would be used is Nokia N series phones. The mobile content might be tested on PDA also to see if it is compatible or not.

The application is aim to serve as a tourist guide that enable the user to know all the famous tourist attraction of the state of Melaka. The target users for this application are foreign tourist that came to visit Melaka and also local tourist that have their vacation within Melaka. The language option for the mobile content will be in English and Bahasa Melayu just in case the local user might not understand English. However for foreign tourist, only English will be used because it is the international language and they need to at least have some basic in English to enable them to communicate when they are visiting other country.

The application will provide the information of the tourist attraction around Melaka. Lists of available hotels, ranging from 5 stars hotels to hostels will also be provided. A detailed map of Melaka will be the main content of this application. The user can zoom in and out of the map, scrolling through the map and pick the tourist attraction or hotel they want to know more about.

1.5 Project Significance

The target users for this application, which are the foreign and local tourist, will benefit the most from this application. This application will make their vacation more organized because they can plan their vacation or their traveling by checking the

information of all the tourist attraction. For example, they can plan their visit by visiting a few tourist attraction places in one area before going to the next area. This can save time and money for them. By having the travel guide and map in their mobile phones can also reduce the risks of losing their maps or guides because people will bring their mobile phone with them wherever they go. When tourist found out that it is very convenient to travel in Melaka, this will increase the number of tourist visiting Melaka and this can increase the tourism industry for Melaka.

1.6   Expected Output

The expected output of this project is a portable travel guide and map for Melaka which can be operated using mobile phones and PDAs. The application should provide the brief introduction of all the tourist attraction, the road map and some information on the transportation available to go to the destination. User should be able to zoom in and out of the map and use navigation keys to move around the map.

1.7   Conclusion

The application that I want to do a research on and build is for hand phone user. The application is a portable tourist guide and map of Melaka. I do not know whether this software existed yet but I know Malaysia is not using such software currently. The current map and tourist guide that our country are using now are printed and some are digital but being restricted to a kiosk or a computer. The target users for this application are the foreign and local tourist coming to Melaka. The main objectives of this project are to increase the tourism industry in Malaysia and to provide a portable travel guide of Melaka. I estimate that if the application can be successfully built, it will be very useful and make our country a hotspot for tourist. The next activities to be developed are to

prepare a Gantt chart so that the progress of the project can proceed smoothly and according to schedule. A research will be conducted to existing travel guide for comparison so that it can be determine whether this new application is better or not.

CHAPTER II

LITERATURE REVIEW AND PROJECT METHODOLOGY

2.1 Introduction

This chapter specifies literature review and project methodology that will be opted to optimize the development of to-be application. Literature review includes study and research of published materials like journals, thesis, case studies, technical documents and online library. Generally, the purpose of a review is to analyze critically a segment of a published body of knowledge through summary, classification and comparison of prior research studies, reviews of literature, and theoretical articles. Project Methodology describes a set of practices that will be carried out iteratively to produce the application. The ADDIE Instructional Design Model – a systematic approach will be a valuable tool in planning for the effective delivery of this mobile application.

2.2 Facts and Findings

In this section, the findings of previous research and study concerning issues related to tourism and mobile technology are gathered and analyzed.

2.2.1 Domain

The domain of this research is the use of mobile technology to aid tourism. The potential of mobile phone to provide a platform for the newest method travel guide and information will also be explored.

2.2.1.1 Introduction

There are estimated to be 1.5 million mobile phones in the world today (Prensky, 2004). This is more than three times the number of personal computers, and today's most sophisticated phones have the processing power of a mid-1990s PC. These facts, and the range of computer like functionality offered by top-of-the-range devices, are leading some observers to speculate that many people in the not so distant future will start to see the mobile phone as an alternative to a PC. For example, Jeff Hawkins, inventor of the Palm Pilot, was recently quoted (Stone, 2004) as saying, 'One day, 2 or 3 billion people will have cell phones, and they are not all going to have PCs ... The mobile phone will become their digital life'.

2.2.1.2 Tourism and Mobile Technology

Tourism is an activity of great importance both economically and in terms of the pleasure it gives to holidaymakers worldwide. Apostolopoulos et al.(1996) explain that tourism is also an activity that can divide rich and poor, through a negative or parasitical

affect that damages places: touristification'. Nowadays, tourism presents a considerable potential for the use of new mobile technologies because almost everyone possess their own mobile phone and they cannot seem to leave their mobile phone behind. Mobile phones had become an essential tool for mankind. Tourism has been a popular area for mobile information systems and other PDA based systems. Indeed, as mobile phones and other portable devices becoming more advanced, tourism is one obvious application area. However, commercial technologies in this area have only limited success.

2.2.1.2.1 Tourist problem

The first, seemingly straightforward, problem which tourists face in an unfamiliar place is what to do. Unlike work, where tasks are often determined by an overall goal or by other people's plans, tourist is much more open-ended. Tourism encompasses a broad range or activities such as sightseeing, relaxing, shopping, visiting friends and visiting family. Indeed, since tourism can be part of business travel, the boundary between work and leisure is often blurred. Yet whatever tourist do, they must at least make some sort of decision about what to do, often in advance. This decision must take into account the time it takes to get to different places, as well as balancing the attraction of different sites. Along with that, tourists have to manage when they do different activities. Tourism is usually constrained in time, because of the need return home. Time is also a problem in that tourists work with organizations that provide services: opening times must be coordinated with the times of public transport, such as trains or buses.

The second problem is finding where things are. In visiting a city many of the attractions are distributed around the city. There is therefore a need to avoid spending too much time travelling between places, understand what one might see and do along the way, and group together attractions which are close together. In doing so tourists must also navigate public transport, often with limited information, of unfamiliar road systems.

Lastly an important part of a holiday is sharing that holiday with others who are at home. Bourdieu (1990) explains that although the tourist fascination with taking photos or videos has been often criticized, it displays how visitors are not isolated individual but are part of a social group. Tourists record and represent experiences in the form of photos and stories, to remind themselves of the visit and to share with others after they return home. This is a valuable part of tourism. The most successful tourist technology is the camera, specifically designed for this 'taking the visit back home'.

2.2.1.2.2 Tourist Solution

a) Guidebooks

Tourist solves their problems by the use of published information. The two most quintessential tourist publications are the guidebook and the map. These are often used in combination when tourists navigate and find out about what to do in different places and how to get between them. While both have been subject to computerization, this has had only limited success. In part, this limited success can be put down to a lack of knowledge about how maps and guidebooks are actually used by tourists. Guidebooks come in many different forms. One reason why guidebooks are so useful to tourists is that they catalogue, in a structured and relatively standardized form, relevant aspects of the places that tourists visit. They list accommodation (with phone numbers), attractions (with opening times), recommended bars and restaurants, and so on. This standardization can make strange places feel considerably safer to tourists by reducing their uncertainty.

b) Moving with maps

The second popular tourist publication that we saw widely used in our observations was the map. Maps have of course been a well–researched artefact in fields as widespread as cognitive psychology and cultural studies. Lloyd (1989) had concluded

that map users are significantly better at tasks that involve configuration information (such as how far one landmark is from another) than those without maps, sometimes better even than local people with years of knowledge of a place. However, perhaps surprisingly, there is little work that has examined the in–situ, non–experimental use of maps. As Cornell and Heth (2000) argue, there is a need for work which studies "humans navigating real world routes" since little work has looked at the 'naturalistic' use of maps: how they are used in situ without an experimental task.

Tourists also often only had a rough idea of where they were, and would use a map to locate or orient themselves so as to head in a 'roughly correct' direction, rather than along a specific route. So, in using a map, tourists might not know where they were, might have little idea about their orientation, might not know where they were going, and might even be unsure about what they were looking for. So, map use is often less about explicit route planning and more about wandering a city in a 'roughly correct' manner. The routes that tourists used were more directional than specific, with tourists frequently stopping en route, using the map to find the direction to walk in, and then setting off again.

A second feature of map use is their combination with guidebooks. A key aspect of this is how tourists combine characteristics and geography in an attempt to simultaneously solve the problems of where things are and what things there are. One way of doing this that we observed exploits the 'social zoning' of cities. As any frequent traveller will know, one of the most effective ways to find a restaurant in an unfamiliar city is to simply wander around a central area. Although by no means a perfect way of finding particular amenities, walking around exploits the tendency of certain facilities (such as bars and restaurants) to be clustered in particular area. In this way, one can also judge establishments by their appearance and menu, as one walks past. These 'clusters' are exploited in tourists' use of maps. When choosing where to go to, it is often safer to pick an area with more than one potential facility. We observed tourists heading towards a 'restaurant zone' of a city, often with one restaurant in mind, but with the flexibility to go elsewhere should that restaurant prove to be busy or unsuitable. By combining maps