POINT OF INTEREST IN PENANG INTERACTIVE EBOOK



UNIVERSITI TEKNIKAL MALAYSIA MELAKA

BORANG PENGESAHAN STATUS TESIS*

JUDUL: Point of Interest	in Penang Interactive eBook
SESI PENGAJIAN: 2015 / 201	<u>b</u>
Saya Hong Fu Seng	
Mengaku membenarkan tesis (PSM/S	Sarjana/Doktor Falsafah) ini disimpan di dumat dan Komunikasi dengan syarat-syarat
1. Tesis dan projek adalah hakmilik	Universiti Teknikal Malaysia Melaka.
2. Perpustakaan Fakulti Teknologi M Salinan untuk tujuan pengajian sahaj	laklumat dan Komunikasi dibenarkan membuat a.
	aklumat dan Komunikasi dibenarkan membuat caran antara institusi pengajian tinggi.
4. ** Sila tandakan (/)	
SULIT	(Mengandungi maklumat yang berdajah keselamatan atau kepentingan Malaysia seperti yang termaktub di dalam AKTA RAHSIA RASMI 1972)
TERHAD	(Mengandungi maklumat TERHAD yang
1 5 No () 10 16	Ditentukan oleh organisasi/badan di mana Penyelidikan dijalankan)
TIDAK TERHAD	اويورسيي يتسي
UNIVERSITI TEK	NIKAL MALAYSIA MELAKA
Hong.	
(TANDATANGAN PENULIS)	(TANDATANGAN PENYELIA)
Alamat tetap: 8, Lorong Bunga	Prof. Dr. Faaizah bt Shahbodin
Kanfan 6, Jaman Kerian,	Nama Penyelia
34200 Parit Buntar, Perak.	
Tarikh:38/8/16	Tarikh:

CATATAN: *Tesis dimaksudkan sebagai Laporan Akhir Projek Sarjana Muda (PSM)
**Jika tesis ini SULIT atau TERHAD, sila lampirkan surat daripada
pihak berkuasa.

POINT OF INTEREST IN PENANG INTERACTIVE EBOOK

HONG FU SENG



This report is submitted in partial fulfilment of the requirements for the Bachelor

ONIVERS of Computer Science (Media Interactive)

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY UNIVERSITI TEKNIKAL MALAYSIA MELAKA

í

DECLARATION

I hereby declare that this project report entitled

POINT OF INTEREST IN PENANG INTERACTIVE EBOOK

is written by me and is my own effort and that no part has been plagiarized

STUDENT: 1/40-19 Date: 23 / 8/16

(HONG FU SENG)

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

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 (Media Interactive) With Honours.

SUPERVISOR : Date: 27/8/16
(PROFESSOR DR.EAAIZAH BINTI SHAHBODIN)

DEDICATION

This project is dedicated to my supervisor who have guided me in the project development and my friends that help me in solving problems. Besides that, this project also dedicated to my family that support me all the way.



ACKNOWLEDGEMENTS

I am very appreciate and thanks for the helping and guiding of my supervisor, Professor Dr. Faaizah binti Shahbodin during the development of interactive eBook project. I feel very happy and luckily can complete my final year project within the time. Besides that, I would like to thanks my friends that helping me in solving problems. I feel very grateful that can produce a good product with the amazing assets. Finally, I also like to thanks my family that support me all the time during the development of project.



ABSTRACT

Many peoples like to travel. It becomes a hobby for every person nowadays. Before going travel, peoples like to do a lot of research and preparation in order to have a fun and meaningful journey. So, the peoples would like spend money to buy the travel guide book as their guidelines. Besides that, the tourist also take a lot of brochures when reaching the destination. It is too inconvenient to bring the books and brochures along the journey. So, the interactive eBook titled "Point of Interest in Penang" is developed in order to make the journey meaningful in Penang. It is very helpful and convenient for whom that have a vacation in Penang. The interactive eBook provides the media contents and interactivity like picture, audio, video, button control and also hyperlinks. Hence, interactive eBook has a lot of advantages and solve many problems. In the development of the interactive eBook, there are 45 users tested on this product which are public group and expert group. In overall, most of the users agreed that this interactive eBook is useful and bring convenient as a guideline go to the Penang. However, this interactive eBook has limitation which only provided in iOS platform. In future, it can be developed and provided in others platform like Android OS platform.

ABSTRAK

Kini, ramai orang suka melancong. Ia telah menjadi salah satu hobi untuk semua orang. Sebelum pergi melancong ke sesuatu tempat, pelancong suka banyak membuat penyelidikan dan penyediaan untuk mempunyai satu pelancongan yang bermakna dan menyeronokkan. Jadi, orang-orang akan menghabiskan wang untuk membeli buku panduan sebagai garis panduan mereka. Selain itu, pelancong juga mengambil banyak risalah apabila sampai ke destinasi. Ia terlalu menyusahkan untuk membawa buku-buku dan risalah di sepanjang perjalanan. Jadi, interactive eBook bertajuk "Point of Interest in Penang" dihasilkan untuk memudahkan pelancong yang dating berlancong ke Pulau Pinang. Ia amat berguna dan mudah bagi sesiapa yang berlancong di Pulau Pinang. Interactive eBook menyediakan kandungan media dan interaktiviti seperti gambar, bunyi, video, butang kawalan dan juga hiperpautan. Oleh itu, interactive eBook mempunyai banyak kelebihan dan menyelesaikan banyak masalah. Di samping itu, sebanyak 45 orang pengguna telah diuji menggunakan produk ini. Ia telah dibahagi kepada 2 kumpulan iaitu kumpulan pelancong dengan kumpulan pakar IT. Kebanyakan pengguna bersetuju bahawa interactive eBook ini amat berguna dan memudahkan masa berlancong ke Pulau Pinang. Walau bagaimanapun, interactive eBook ini mumpunyai hadnya iaitu hanya boleh digunakan dalam iOS platform. Pada masa depan, interactive eBook ini boleh dihasilkan dan sokong platform lain seperti Android OS platform.

TABLE OF CONTENTS

CHAPTER	SUBJECT	PAGE
	DECLARATION	i
A MA	DEDICATION	ii
8	ACKNOWLEDGEMENTS	iii
Ä	ABSTRACT	iv
E	ABSTRAK	V
	TABLE OF CONTENTS	vi
.1. 1	LIST OF TABLES	X
مالاك	اويورسيني تيڪ LIST OF FIGURES	xii
CHAPTER I	RSITITEKNIKAL MALAYSIA MELAKA	
	1.1 Project Background	1
	1.2 Problem Statements	2
	1.3 Objective	2
	1.4 Scope	2
	1.5 Project Significance	3
	1.6 Define Project	3
	1.7 Expect Output	3
	1.8 Conclusion	4

CHAPTER II	LITERATURE REVIEW PROJECT	
	METHODOLOGY	
	2.1 Introduction	5
	2.2 Domain	6
	2.3 Review of Previous Research	7
	2.4 Existing System	8
	2.4.1 Comparison of the existing system	10
	2.5 Project Methodology	12
	2.6 Project Requirements	14
	2.6.1 Software Requirements	14
	2.6.2 Hardware Requirements	15
AL	2.7 Conclusion	16
Chi. lin		
CHAPTER III	ANALYSIS	
=	3.1 Introduction	17
E	3.2 Current Scenario Analysis	18
MAINI	3.3 Requirement Analysis	18
1.112	3.3.1 Project Requirement	19
ا سارت	3.3.2 Software Requirement	20
UNIVER	RSIT3.3.3 Hardware Requirement SIA MELAKA	21
	3.4 Project Schedule and Milestone	21
	3.5 Conclusion	23
CHAPTER IV	DESIGN	
	4.1 Introduction	24
	4.2 System Architecture	25
	4.3 Preliminary Design	28
	4.3.1 Storyboard Design	28
	4.4 User Interface Design	32
	4.4.1 Navigation Design	32
	4.4.2 Input Design	32

	4.4.3 Output Design	33
	4.4.4 Template Design	33
	4.4.5 Uploading Files	34
	4.5 Conclusion	35
CHAPTER V	IMPLEMENTATION	
	5.1 Introduction	36
	5.2 Media Creation	37
	5.2.1 Production of Texts	38
	5.2.2 Production of Graphics	38
	5.2.3 Production of Audio	40
IA so	5.2.4 Production of Video	40
Cal. In.	5.2.5 Production of Animation	42
\$	5.3 Media Integration	42
F	5.4 Product Configuration Management	43
E	5.4.1 Configuration Environment Setup	43
MINI	5.4.2 Version Control Procedure	44
5 N.	5.5 Implementation Status	45
امارك	5.6 Conclusion	46
UNIVE	RSITI TEKNIKAL MALAYSIA MELAKA	
CHAPTER VI	TESTING AND ANALYSIS	
	6.1 Introduction	47
	6.2 Test Plan	48
	6.2.1 Test User	48
	6.2.2 Test Environment	49
	6.2.3 Test Schedule	49
	6.3 Test Strategy	50
	6.4 Test Implementation	51
	6.4.1 Test Description	51
	6.4.2 Test Data	51
	6.5 Test Results and Analysis	52

	6.6 Analysis Testing	57
	6.7 Conclusion	62
CHAPTER VII	CONCLUSION	
	7.1 Observation on Weaknesses and Strengths	63
	7.2 Propositions for Improvement	64
	7.3 Project Contribution	64
	7.4 Conclusion	65
	REFERENCES	66
	Appendix A - Gantt chart	67
MAL	Appendix B - Questionnaire	71
AL III	Appendix C - Log Book	91
UNIVERSAL TERM	Appendix D - Turnitin Report	95
با ملاك	اونيورسيتي تيكنيكل مليسي	
UNIVER	SITI TEKNIKAL MALAYSIA MELAKA	

LIST OF TABLES

TABLE	TITLE	PAGE
2.1	Compared between E.S and Purpose Product.	11
2.2	Five Phases in ADDIE Model.	14
2.3	Software Used to Develop Interactive eBook.	15
2.4	Hardware Used to Develop Interactive eBook.	15
3.1	Summary of Software Requirement	20
3.2	Summary of Hardware Requirement	21
3.3	Description of Project Schedule and Milestone	22
4.1	Types of Navigation	32
4.2	Input Design and Function	32
4.3	Output Design and Function	33
5.1	Text used in Application	37
5.2 UI	Different Version of Application LAYSIA MELAKA	44
5.3	Edit Video and Audio Development	45
5.4	Animation Development	45
5.5	Icon and Interface Design Development	45
5.6	Interactive eBook Development	46
6.1	Test User	48
6.2	Test Schedule	49
6.3	Test case and Expected result	50
6.4	Test Data	51
6.5	List of Functionality Testing	51
6.6	Score Improvement	54

6.7	Average Score for Provide Clear and Useful	55
	Information Test Case	
6.8	Average Score for Convenient to Use for Travel	55
	Test Case	
6.9	Average Score for Overall Satisfaction Test Case	55
6.10	Average Score for Easy to Learn and Understand	55
	Test Case	
6.11	Average Score for Easy to Navigate Test Case	55
6.12	Average Score for System is Smooth and Stable	56
	Tost Casa	



LIST OF FIGURES

DIAGRAM	TITLE	PAGE
2.1	Penang Attraction Website	8
2.2	Penang Travel Mobile App	9
2.3	Brochure for My Penang Unforgettable	10
2.4	ADDIE Model	12
4.1	The Overall Flow of System Architecture	26
4.2	Flow Chart	27
4.3	Cover Page	28
4.4	Menu Page	29
4.5	Introduction of Places	29
4.6	Image Gallery Low Image Gallery	30
4.7	Image Gallery (2)	30
4.8 UNIV	Image Gallery (3)	31
4.9	Video or Map Page	31
4.10	Topic Template Design	33
4.11	Image Gallery with Button Template Design	34
5.1	Google Map Icon Design	38
5.2	Information Icon Design	39
5.3	Picture Color Hue/Saturation Adjustment	39
5.4	Audio Editing	40
5.5	Video Editing	41
5.6	Exporting Video	41
5.7	2D Animation	42

5.8	Media Integration	43
6.1	Score Improvement Bar Chart	56
6.2	Provide Clear and Useful Information Bar	56
	Chart	
6.3	Convenient to Use for Travel Bar Chart	58
6.4	Overall Satisfaction Bar Chart	59
6.5	Easy to Learn and Understand Pie Chart	59
	(Expert only)	
6.6	Easy to Navigate Pie Chart (Expert only)	60
6.7	System is Stable and Smooth Pie Chart	61
	(Expert only)	
EKA		

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

CHAPTER I



Nowadays, Apple Electronic Books are an excellent compliment to the Apple devices (iPhone, iPad) and to the needs of travel. Even after the computer revolution, the significant materials demands for searching and viewing were a bone of contention. For a traveller, they need to do research and write into a notebook or buy the travel guide books before going travel. With a advent of slim and increasingly affordable electronics devices, interactive eBook (iBooks) holds the potential to make the travel more exciting and interesting.

Many people buy the travel guide book although the price is cost expensive before travelling. Besides that, people also bring it or take the brochure along the journey to search for the locations manually.

With iBooks, the contents are coming alive in ways that the traveller alike. For traveller, iBooks can make the journey more interesting than ever. Simply using the touchscreen to click the hyperlinks, picture ,video and etc.,then it pops up all the detailed information in interesting ways to fulfill needs of traveller.

1.2 Problem Statement

- Most people find that they hard to bring travel guide books or brochure to travel somewhere.
- Most people find that they take time to search and find location when using travel guide books or brochure.
- Most people find that sometimes the information in travel guide books or brochure does not same with real, because the information is not up-to-date.

1.3 Objective

UNIVERSITI TEKNIKAL MALAYSIA MEL

The objective for this project are:

- To study the elements of interactive eBook.
- To develop an interactive eBook for travel purpose by using InDesign tools.
- To investigate the effectiveness by using interactive eBook when travelling.

1.4 Scope

- Target users age between 15 and 65.
- It required an Apple devices like iPhone, iPad, iPod touch and Mac in order for the application to work.

1.5 Project Significance

- This application will let the traveller experiences the new technology in travelling to somewhere.
- This application can be access in anywhere and anytime with the use of Apple devices (iPad and iPhone).
- This application will bring the convenient to the traveller when travelling.
- The user can easy download the interactive eBook in their Apple devices and view offline.

اونيوسيتي تيكنيكل مليسيا ملاك

1.6 Define Project SITI TEKNIKAL MALAYSIA MELAKA

- I. iBooks An e-book application by Apple Inc. for its iOS and OS X operating systems and devices.
- II. Adobe Indesign CC 2015 A desktop publishing software application by Adobe. The industry-leading page design and layout toolset lets the user work across desktop and mobile devices to create, preflight and publish everything from printed books and brochures to digital magazines, iPad apps, eBooks and interactive online documents.

1.7 Expect Output

- An interactive eBook titled "Point of Interest of Penang" will be developed.
- It holds the concept leaving paper behind to replace paper-based document.
- The iBooks is successfully promoted to the traveller that have a trip to Penang.

1.8 Conclusion

In conclusion, interactive eBook titled "Point of Interest in Penang" will be create to bring the convenient to the traveller which have a trip to Penang. This application is developed and designed by using Adobe Indesign CC 2015. The traveller need to download the interactive eBook into their iOS devices and the use it in anywhere and anytime. The traveller just only touch on the screen and the contents will display on the screen. It provides the alternative ways to display what the information that needed by the traveller like interactive maps.

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

This chapter is all about the introduction of this project. Next chapter will develop the literature review and project methodology. In the next chapter will discuss about the domain of the project, comparison of existing system, project methodology and project requirements.

CHAPTER II

LITERATURE REVIEW AND PROJECT METHODOLOGY



During the development of the project, interactive eBook titled "Point of Interest in Penang" will be create to improve of the existing products. The product is developed and designed for the users who that have a trip or vacation to Penang. Interactive eBook will replace the guidebook or brochure along the trip by using the electronic devices. It provides the basic functions for the user like hyperlinks, view images and videos, maps and so on. Furthermore, the users can get the information that needed easily. Users just need to download it from the iBooks store in their Apple electronic devices at anytime and anywhere.

In this chapter will develop the literature review and project methodology. It will discuss about the domain of the project, review of the research, comparison of existing system, project methodology and also the project requirements.

2.2 Domain

The domain of this project will be focusing on the interactive eBook titled "Point of Interest in Penang" that implemented in the electronic devices, for example: android phones, iOS devices and computer.

What is interactive eBook? Interactive eBook is an electronic book or a digital book is a book-publication in digital form, consisting of text, images, video, animation, audio or both, readable on computers or other electronic devices. Interactive eBook may be readable in low light or even in the darkness. It allows the readers to look up words or find certain information immediately. It usually has a lower cost than paper books (Jeremy Greenfield, 2013, January 9).

Besides that, eBook have a lot of benefits and advantages. It is very simple and easy to purchase and download through internet. eBook take up less space in the electronic devices and also portable. This is because can carry hundreds of books with the electronic devices without worrying about their weight. The eBooks are safely stored and carried from one place to another easily compared to paper books, the readers can read the eBooks anywhere at any time (Remez Sasson, The Benefits and Advantages of eBooks, Retrieved from http://www.successconsciousness.com/ebooks_benefits.htm).

Penang, one of the historic city of the Straits of Malacca has developed over 500 years of trading and exchanges. At the World Heritage Committee Session in July 2008, the capital of Penang, Georgetown was listed as UNESCO World Heritage Sites. Featuring residential and commercial buildings, Georgetown represents the British era from the end of the 18th century (Timothy Tye, George Town UNESCO World Heritage Site, 2009, 4 February).

In conclusion, this project will develop an interactive eBook titled "Point of Interest in Penang" to introduce the attractions in Penang for all the peoples that have a trip to Penang.



Electronic book (digital book, eBook, e-book) is a book publication in digital form which consisting of text, images or both. Sometimes it defines as an electronic version of printed book and exist without any printed equivalent. It is readable on any electronic devices such as handheld devices or computers. In the previous research, eBook reading increasing by 5% adult from 2013 to 2014 in US.

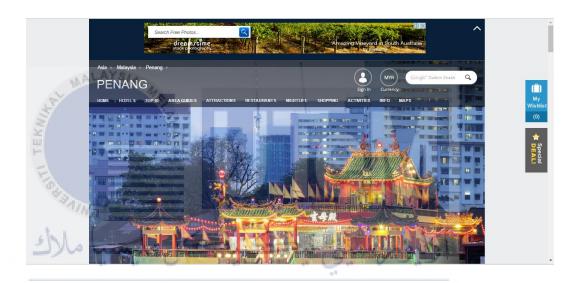
In early 1990's, the eBook is readable in an e-reader which is an eBook reader software that designed primarily for reading eBook. In 2010, Apple Company releases the iPad bundled with an eBook app called iBooks. After that, the idea of the new generation digital book called "interactive eBook" was purposed in 2011. The interactive eBook which consisting of more than text and images, there is video, animation, hyperlink and audio that can interact with the readers efficiently.

2.4 Existing System

There are some websites and mobile applications about the attractions in Penang that exists in present. In this section will discuss the existing system from Figure 2.1 to Figure 2.3 and the interactive eBook will be develop in this project.

i. Website

UNIVERSITI



EKNIKAL MALAYSIA MELAKA
Figure 2.1: Penang Attraction Website

http://www.penang.ws/penang-attractions/#

In the Figure 2.1 shows website about the attractions of Penang. This website provides a lot of information like attractions' address, contact number, operation hour and also map to the users. Besides that, this website allows the users to search and book the hotels around the Penang.