

ENHANCING CAFÉ HOPPING EXPERIENCE THROUGH MOBILE APPLICATIONS

Chua Li Huang

Bachelor of Applied Arts with Honours (Design Technology) 2019

		•
UNIVERSITI MALAYSIA	SARAWAK	
	Grade: A	-
	Please tick (/)	
	Final Year Project	
	Report Masters	
	:#3	
	PhD	
DECLARATION OF ORIG	INAL WORK	
This declaration is made on the23 day of I	May 2019	
Student's Declaration:		
I Chua Li Huang, 55749, Faculty of Applied and Creative		
Enhancing Café Hopping Experience Through Mobile A		
copied from any other students' work or from any other		
acknowledgement is made explicitly in the text, nor has any	part been written for me by a	nother person.
23/5/2019		
Date	Chua Li Huang (557	749)
Supervisor's Declaration:		
1 Mr Sylvester Wielding Ak. Jussem hereby certifiv that the	work Enhancing Café Hoppi	ing Experience
Through Mobile Application was prepared by the above	named student, and was su	bmitted to the
"FACULTY" as a * partial/full fulfilment for the conferment	of Bachelor of Applied Arts	with Honours
(Design Technology) and the aforementioned work, to the	best of my knowledge, is the	said student's
work.		
Received for examination by:	Date: 23.5	5.2019
(Mr Sylvester Wielding Ak.Jusse	em)	
Sylvester W. Ak. Jussem		
Faculty of Applied and Creative Arts	<u> </u>	

I declare this Project/Thesis is classified as (Ple	ease tick (√)):
Act 1972)*	ricted information as specified by the organization h was done)*
Validation of Project/Thesis	
	willingness declared that this said Project/Thesis shall be information Services with the abide interest and rights as
 The Centre for Academic Information of academic and research only and no The Centre for Academic Information Local Content Database. The Centre for Academic Informat Project/Thesis for academic exchange No dispute or any claim shall arise fronce it becomes sole property of UNI. This Project/Thesis or any unaterial 	ion Services has the lawful right to digitize the content to for the between Higher Learning Institute. om the student itself neither third party on this Project/Thesis
10.00	Supervisor signature Sylvester W. Ak. Jussem Lecturer Faculty of Applied and Creative Arts UNIVERSITI MALAYSIA SARAWAK NTIAL or RESTRICTED, please attach together as e period and reasons of confidentiality and restriction.
[The instrument was duly prepared by	by The Centre for Academic Information Services]

ENHANCING CAFÉ HOPPING EXPERIENCE THROUGH MOBILE APPLICATIONS

Chua Li Huang

This project is submitted in partial fulfillment of the requirements for the degree of Bachelor of Applied Arts with Honors (Design Technology)

Faculty of Applied and Creative Arts

UNIVERSITI MALAYSIA SARAWAK

2019

UNIVERSITI MALAY	YSIA SARAWAK	
	Grade :	
	Please tick (/)	
	Final Year Project	
	Report Masters	
	PhD	
DECLARATION OF O	RIGINAL WORK	
This declaration is made on the da	y of May 2019	
Student's Declaration:		
I Chua Li Huang, 55749, Faculty of Applied and Ci		
Enhancing Café Hopping Experience Through Mol		
copied from any other students' work or from any		
acknowledgement is made explicitly in the text, nor has	s any part been written for me by and	other person.
Date	Chua Li Huang (5574	49)
Supervisor's Declaration:		
I Mr Sylvester Wielding Ak. Jussem hereby certifiy th	nat the work Enhancing Café Hoppin	g Experience
Through Mobile Application was prepared by the a	bove named student, and was sub-	mitted to the
"FACULTY" as a * partial/full fulfilment for the confer	ment of Bachelor of Applied Arts w	vith Honours
(Design Technology) and the aforementioned work, to	the best of my knowledge, is the s	said student's
work.		
Received for examination by:	Date:	
(Mr Sylvester Wielding Ak	Jussem)	

I declare this Projec	ct/Thesis is classified as	s (Please tick $()$)			
CONFIDENCE	Act 1972 (Contains where res	2)*	mation under the Offici		
Validation of Proj	ect/Thesis				
		=	declared that this said Fervices with the abide in	=	
 The Centre of academ The Centre Local Con The Centre Project/Th No dispute once it become it become	e for Academic Informatic and research only and e for Academic Informatient Database. The for Academic Informatient Database or academic exchange for academic exchange or any claim shall arise tomes sole property of the ct/Thesis or any material and material academic and material academic academic exchange of the ct/Thesis or any material academic Informatical Academic In	ation Services has d not for other pu ation Services has rmation Services ange between Hig se from the studes UNIMAS. erial, data and i	the lawful right to digi	ke copies for the purp tize the content to for to make copies of rty on this Project/The	the the
Student's signature _		Sup	ervisor`signature	,)
Current Address: No 2 , Jalan 3/27 Ta 86000 Kluang Joho	<u> </u>	,		,	,
			ESTRICTED, please a reasons of confidentiality		
[The inst	rument was duly prepai	red by The Centre	for Academic Information	tion Services]	

The project entitled Enhancing Café Hopping E	Experience Through Mobile Applications
was prepared by Chua Li Huang and submitted	to the Faculty of Applied and Creative Arts
in partial fulfilment of the requirements for a Bac	chelor of Applied Arts with Honours Design
Гесhnology.	
	Received for examination by:
	Mr. Sylvester Wielding Ak Jussem
	,
	Date:

ACKNOWLEDGMENT

First and foremost, I would like to thank my supervisor for his support and direction, Mr Sylvester Wielding Ak Jussem. His advices and guidance are always help in solving problems I faced throughout the research. Besides that, a group of project advisors: Dr Siti Shukhaila bt. Kamel, Dr Salmiah bt. Abdul Hamid, Dr Mastika B Lamat, Miss Noorhaslina Bt. Senin and Dr Louis Ringah Kanyan for giving comment to improve my project. My sincere thanks go to my fellow friends who give me support and my family who provide me financial support throughout the final work.

TABLE OF CONTENT

ABSTRACT	xi
ABSTRAK	xii
CHAPTER 1 INTRODUCTION	
1.1 Background of study	1
1.2 Problem statement	1-2
1.3 Research questions	2
1.4 Objectives of study	2-3
1.5 Scope of study	3
1.6 Significance of study	3-4
1.7 Target audience	4
1.8 Media	4
1.9 Limitation of study	4
1.10 Conclusion	5
CHAPTER 2 LITERATURE REVIEW	
2.0 Introduction	6

2.1 Service design	6
2.2 Service design tools	7
2.2.1 Customer journey map	7
2.2.2 Persona	7
2.2.3 System map	7-8
2.3 Online services	8
2.3.1 Chatroom	8
2.4 Usability vs User Experience (UX)	9
2.5 User Interface (UI)	10
2.6 Colour	10
2.7 Layout Design	10
2.8 Usability Testing Design	11
2.8 Conclusion	11
CHAPTER 3 RESEARCH METHODOLOGY	
3.0 Introduction	12
3.1 Phases of research	12-13
3.2. Research Design	14

3.3	Data collection techniques	14
	3.3.1 Qualitative approach	14-16
3.4	Data analysis method	16
3.5	Qualitative approach	17
	3.5.1 Online Surveys	17
3.6	Conclusion	18
CHA	APTER 4 FINDINGS AND DATA ANALYSIS	
4.0	Introduction	19
4.1	Interview	19
	4.1.1 Visitors from Selangor	19-21
	4.1.2 Owner of Indah House Café Kuching	21-23
	4.1.3 Target Audience Interview Data	24-26
4.2	Data analysis	26
4.3	Findings in SUS usability testing of competitors apps	26-33
4.4	Findings in SUS usability testing of Hop! Apps	33-34
4.5	Conclusion	34

CHAPTER 5 PROPOSED DESIGN

5.0 Introduction	35
5.1 Design analysis	35-36
5.2 Idea development	36
5.2.1 Mobile application design	36-37
5.2.2 Logo design	38-42
5.2.3 Icon design	42-43
5.2.4 Interface design	43-50
5.3 Promotion and strategy	50
5.5 Tromotion and strategy	
5.4 Conclusion	51
5.4 Conclusion	51
5.4 Conclusion REFERENCE	51 52-54
5.4 Conclusion REFERENCE APPENDIX A	51 52-54 55-57

LIST OF FIGURE

Figure 1.1 Kuching Map	3
Figure 2.1: Example of Chatroom	8
Figure 4.1: Interview session with Lee	20
Figure 4.2: Interview session with owner of Indah House Café Kuching	22
Figure 4.3 : Hop! Mobile Apps	33
Figure 5.1: Design process of research	36
Figure 5.2: Proposed logo 1	38
Figure 5.3: Proposed logo 2	39
Figure 5.4: Proposed logo 3	40
Figure 5.5: Proposed logo 5 (Final)	41
Figure 5.7: Icon design for features	42
Figure 5.8: Sketches of information architecture	43
Figure 5.9: Blueprint of information architecture	44
Figure 5.10: Sketches of wireframe I	45
Figure 5.11: Sketches of wireframe II	46
Figure 5.12: Sketches of wireframe III	47

Figure 5.13: Sketches of wireframe IV	48
Figure 5.14: Interface design	49
Figure 5.15: Promotion set up	50
LIST OF TABLE	
Table 3.1: Phases of research	13
Table 4.1: Data tabulation of persona 1	24
Table 4.2: Data tabulation of persona 2	25
Table 4.3: Data tabulation persona 3	25-26
Table 4.4: SUS Score on Cupper Apps	28
Table 4.5: SUS Score on Beanhunter Apps	29
Table 4.6: SUS Score on Kopipass Apps	29
Table 4.7: SUS Score on Best Coffee Apps	30
Table 4.8: Personas in usability testing	31-33
Table 4.9: SUS Score on Hop! Apps	33

ABSTRACT

"Hop" is a mobile application which is specifically created for the users to enhance their experience while visiting any café. This study is created based on the problems and experiences faced by café lovers. The design is focused on the interface and user experience which may assist the user with different kinds of experience.

ABSTRAK

Hop! merupakan aplikasimobil yang direka khas bagi meningkatkan pengalaman pengguna yang mengunjungi kafe-kafe tempatan. Kajian rekaan adalah berdasarkan masalah dan pengalaman yang dihadapi oleh pengunjung kafe. Rekaan yang dihasilkan ini menitik beratkan aspek antara muka dan pengalaman pengguna bagi memudahkan penggunaan dan memberi pengalaman yang berbeza kepada pengguna.

CHAPTER 1

INTRODUCTION

1.1 Background of Study

Cafés come with nice ambience to enjoy good food with friends and family. A café is a place where everyone can gather and chill in a comfortable environment. Nowadays, there are many cafés in Kuching. Gratefully, Kuching has a lot of cafés that bring different kinds of ambience and feelings when one enters it.

When you are looking at a café, how do you find your guide while looking for something new about it? Do you look for a app or through google search? We rarely realize that we use different types of mobile app in everyday lives and how important they really are until we rely on the features or information that has been placed in the apps to guide us through in looking for information regarding a café without feeling frustrated, anxious or disoriented. It brings convenience to get to know all of the details of a café and it also improves the user experience of cafés hopping in Kuching. This field is also known as environmental graphic design.

1.2 Problem Statement

Majority of the café lovers or tourists would like to look for a café like a local when travelling to elsewhere, in a nod to the experiential travel needs. According to Maclean (2004), the younger travellers want to have more authentic, deeper travel experiences towards looking for a café with different ambience and feel. Hence, walking was the preferred method of getting around in Kuching. There are many interesting cafés that are hard to discover by tourist themselves when searching through the internet. They need a guide to have access to the hidden places in order to have more authentic and deeper travel experiences. At the same time, the

search of a café on browser platform like Google doesn't give the users the full and accurate information about it. The users may feel ill-informed about which café to visit when they come to Kuching, and it was not easy to find information about these places (Edwards & Griffin, 2013). Thus, this research is generally aimed to examine the function of mobile applications towards the tourist and café lover and how it solves the problems faced by them and consequently increases the user experience.

1.3 Research Questions

This research will be based on several research questions:

- 1. What are the current problems faced by café hoppers or visitors in searching for cafes in Kuching?
- 2. Why is it important to study the usability functions on mobile apps in order to enhance user experience?
- 3. How can effective mobile applications towards the user experience of café hoppers design system ensures the needs are being met?

1.4 Objectives of Study

There are three objectives to be achieved at the end of the study:

- 1. To identify the weakness of current café hopping problems faced by the café hoppers or visitors when looking for cafés in Kuching.
- 2. To analyse the function of mobile applications towards the user experience of café hoppers to make sure the needs are being met.

- 3. To design a mobile applications prototype towards the user experience of café hoppers system that is more appealing and directly benefits the café hoppers/visitor's needs.
- 4. To validate the user experience of café hoppers mobile application.

1.5 Scope of Study

Figure 1.1: Kuching Map

The research main focus is in Kuching. Figure 1.1 shows the research main location, Kuching which consists of a lot of cafés. The validation test will also be carried out at the same location.



Figure 1.1: Kuching Map

1.6 Significance of Study

The significance of the research is aimed to examine the function of mobile applications towards the user experience towards café hoppers. The insights from this study may be useful for developing a good and effective mobile application that can help to solve the café hoppers main problem on which cafe to visit while they are in Kuching will be known better by visitors

in order to experience a authentically local café that will improve the café hopping experiences. As the problem is solved, the number of café lover will be increased due to the enhancement of their café hopping experience in Kuching.

1.7 Target audience

The target audience for this research will be focused on café lovers, café discoverers, visitors or travellers who visit Kuching. Majority of them have their own mobile gadgets for communication and information searching when travelling. Data collection will be collected from café lovers, café discoverers and café hoppers who visit cafés in Kuching and the owner of cafés in order to accomplish this research.

1.8 Media

The media in this research include promotional posters, bunting, brochure, flyer, mobile application design and promotion video. These media are used to promote the features and advantages of the mobile application.

1.9 Limitation of Study

The limitation of the study when carried out the research is the time limit while collecting data and completing the project. Besides that, the researcher has to often travel to and fro all cafés in Kuching to look for café lover and café discoverers from a further distance to conduct this research by observation and interview. On top of that, not everyone would give full attention during interview session.

1.10 Conclusion

The research aims to design an effective mobile applications towards the user experience of café hoppers design system to ensure the needs are being met. In addition, element and principles of mobile apps design system need to be analysed in order to produce a mobile application design system that produces information of café more effectively.

CHAPTER 2

LITERATURE REVIEW

This chapter will discuss about the literature review on service design, service tools including customer journey map, personas, system map, chatroom. A new service design is used to improve the existing service for a better interaction between service provider and users.

2.1 Service Design

Service design is an application of established design process and skills to the development of services. It is a creative and practical way to improve existing services and innovate new ones (Moritz, 2005). According to French (2016), customer experience and the quality delivering are considered as an important key of success in human-centred approach for service design.

"Service design is the activity of planning and organizing people, infrastructure, communication and material components of a service in order to improve its quality and the interaction between service provider and customers. The purpose of service design methodologies is to design according to the needs of customers or participants, so that the service is user-friendly, competitive and relevant to the customers." (Service Design Network, 2008)

In addition, service design is a main part in planning and organising users, infrastructure, communication and material components of a service. Aim of service design is to consider the improvement of both quality and interaction between service provider and customer. Service design works as a tool to fulfil the users and customers with the design of service.

2.2 Service Design tools

2.2.1 Customer Journey maps

Customer Journey Map functions as a tool that shows both of the best and worst sides of user's experience. In another word, the journey begins long before an action is taken by the customer. This map delivers the whole user experience of the service from their perspective. Customer Journey Map is compulsory co-creative as it works with customer. It can be used either in the analysing stage or throughout the whole project as a tool to identify problems in a current service and gradually generate suggestions for improvements where different stakeholders become involved (Meroni and Sangiorgi, 2011).

2.2.2 Persona

A profile of a person is a representation of a group of people with similar interests. Personas are developed based on thorough research of the service users. Target audience should be interviewed and surveyed to collect data for the use of analysis and gathering based on the common characteristics to reflect the needs of users. Moreover, it can help to verify the fulfilment of the needs through a developed idea as if there has no any conflict with the proposed service (Segelström, 2013).

2.2.3 System map

According to Segelstrom (2013), the structure of a service system can be understood through a system map. A system map has different components including their mutual links and the flows of materials, energy, information and money through the system. The system map is able to show the working model of the system from the point of view of a provider by imagining the elements which can be connected among them. Generally, it is mainly used to evaluate the

feasibility of an idea at the beginning of service design process. It is also crucial for service provider and customer to understand their relationship and how they affect each other in the service system (Meroni and Sangiorgi 2011).

2.3 Online Services

2.3.1 Chat room

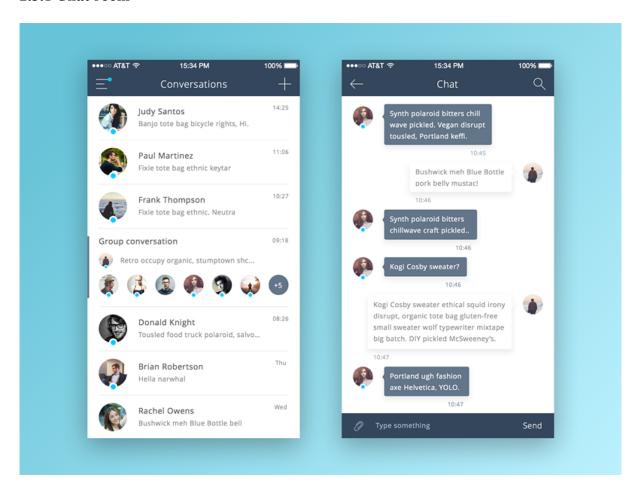


Figure 2.1: Example of Chatroom

Chat room is a platform provided for everyone to communicate with friends and family in a channel. Due to the advancement of technology, majority of the businessmen use chatroom to distribute work and task to their share-hold or workers. When a user types a message, each character would show up on the screen of the other users as they were being typed in real time. By using chatroom, users can build an engagement with groupmates.