Universiti Teknologi MARA

Community Marketplace Mobile Application

Muhammad Na'im bin Mohammad Hatta

Thesis submitted in fulfilment of the requirements for Bachelor of Computer Science (Hons) Faculty of Computer and Mathematical Sciences

January 2022

DECLARATION

I certify that this report and the research to which it refers are the product of my work and that any ideas or quotations from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.

(i)

MUHAMMAD NA'IM BIN MOHAMMAD HATTA 2020974837

JANUARY 30, 2022

ABSTRACT

Interaction and the socioeconomic gap between neighbours inside neighbourhood communities become less especially in urban and suburban areas. This work presents one of the solving methods to improve social able interaction inside the community. By introducing the Community Marketplace Mobile Application, it is designed to increase the interaction between neighbours and improve the socioeconomic of the community. The benefit of using modern devices like a smartphone to improve the social interaction and economy of the community is developed and studied. Being developed based on Kotlin which is one of the main languages of building apps on Android. The reason for the development of the app for Android OS is that most people are using it more than other operating systems. System Development Life Cycle (SDLC) Waterfall model was chosen as the development method for this project due to the limited timeframe and the most suitable with the process of the development of the project. Bar charts and tables of results from User Acceptance Test (UAT) questions are being presented. Based on the result, most of the respondents strongly agreed that the mobile app can increase their interaction with their neighbours and also help their neighbours to improve the neighbour business and economy. The Community Marketplace Mobile Application achieved the project objectives: to design a system where customers can set their ideal distances or community from where they want to purchase and develop a platform where all of the residents of a community can gather and discuss any issues about their community.

TABLE OF CONTENTS

CONTENTS

PAGE

SUPERVISOR'S APPROVAL	i
DECLARATION	ii
ACKNOWLEDGEMENT	iii
ABSTRACT	iv
TABLE OF CONTENTS	V
LIST OF FIGURES	ix
LIST OF TABLES	xi
LIST OF ABBREVIATIONS	xii

CHAPTER ONE: INTRODUCTION

1.1	Introduction	1
1.2	Background of Study	2
1.3	Problem Statement	4
1.4	Project Question	5
1.5	Project Objective	5
1.6	Project Scope	6
1.7	Significance of the Study	6
1.8	Conclusion	8

CHAPTER TWO: LITERATURE REVIEW

2.1	Concept Map	10
2.2	Introduction	11
2.3	Overview of Community Neighbourhood	11
2.4	Overview of E-Commerce	15

2.5	Specific Research Related to The Community	17
	Marketplace Mobile Application	
2.6	Techniques used to develop the Community Marketpla	ace
	Mobile Application	
	2.6.1 Web-Based Technique	19
	2.6.2 Native Mobile Based Technique	20
	2.6.3 Hybrid Web and Mobile Based Technique	21
	2.6.4 Comparison of Techniques	23
2.7	Common Features Related to The Community	
	Marketplace Mobile Application.	
	2.7.1 Neighbourly	25
	2.7.2 Carousell	26
	2.7.3 Facebook Marketplace	27
	2.7.4 Comparison between Neighbourly, Carousell a	nd 29
	Facebook Marketplace	
2.8	Chosen Techniques and Features	31
2.9	Summary	32

CHAPTER THREE: METHODOLOGY

3.1	Methodology	33
3.2	System Development Life Cycle (SDLC)	33
3.3	Phase 1: Planning	35
3.4	Phase 2: Information Gathering and Analysis	38
3.5	Phase 3: Design	40
	3.5.1 System Architecture	40
	3.5.2 System Flow Diagram	41
3.6	Phase 4: Implementation	45
3.7	Phase 5: Testing	47
3.8	Phase 6: Documentation	49
3.9	Summary	52