### UNIVERSITI TEKNOLOGI MARA

# PRELIMINARY STUDY OF DEVELOPMENT MOBILE APPLICATION FOR KUALA LUMPUR HOMELESS DISTRIBUTION

### **NUR LIYANA BT ROSMAN**

Thesis submitted in fulfillment of the requirements for the degree of **BSc Geomatics & Surveying** 

Faculty of Architecture, Planning and Surveying

January 2018

**AUTHOR'S DECLARATION** 

I declare that the work in this thesis/dissertation was carried out in accordance with the

regulations of Universiti Teknologi MARA. It is original and is the results of my own

work, unless otherwise indicated or acknowledged as referenced work. This thesis has not

been submitted to any other academic institution or non-academic institution for any

degree or qualification.

I, hereby, acknowledge that I have been supplied with the academic rules and regulations

for post graduate, University Teknologi MARA, regulating the conduct of my study and

research.

Name of study

: Nur Liyana Bt Rosman

Student I.D No

: 2014673766

Bachelor of Science Surveying and Geomatics

Program

: (Honors) - AP220

Faculty

: Architecture, Planning & Surveying

Thesis/dissertation title: Preliminary Study of Developing Mobile Application for Kuala

Lumpur's Homeless Distribution

Signature of student

1 .......

Date

January

2018

iii

#### **ABSTRACT**

Homeless according to Sabine Springer, or known also as houseless based on their research, homeless are defined as those who sleeping rough or using public or private shelters to go through their everyday life. In Kuala Lumpur, the exact numbers of homeless person is still unknown. Thus, the goal of this research is to study about the demographic data of the homeless in Kuala Lumpur. Kuala Lumpur had been chosen as the study area because Kuala Lumpur had been the capital city of Malaysia since independent day. But due to the rose numbers of homeless, this problem need to be overcome. Certain type of data that can be acquired from the JKM and NGOs such as year, gender, age and ethnic. Due to the lacks data stored at JKM and Ngo such as the real numbers of homeless or the hotspot location of the homeless, the idea to develop mobile application had come about. The distribution location of the homeless data later is mapped into a hotspot map based on the demographic data by using Arcgis online software. Android studio is used for developing a prototype of mobile application for user to update the real-time data of homeless in Kuala Lumpur. The purpose of the prototype of mobile application is to gather the data of the homeless then the data later can be used by JKM and NGOs for goodness. The development of the mobile application is something new in Malaysia but it still can be one of the way to overcome the problem that have been faced by the related agencies.

## TABLE OF CONTENT

		Page
CON	ii	
AUTHOR'S DECLARATION		
ABS	TRACT	v
ACK	KNOWLEDGEMENT	vi
TAB	BLE OF CONTENT	vii
LIST	ix	
LIST	x	
LIST	xi	
CHA	APTER ONE: INTRODUCTION	1
1.1	Research Background	1
1.2	Study Area	2
1.3	Problem Statement	4
1.4	Aim and Objectives	4
1.5	Research Questions	5
1.6	Significant of Study	5
1.7	Structure of Thesis	6
1.8	Scope and Limitation	6
1.9	Summary	7
CIL	APTER TWO: LITERATURE REVIEW7	
		7
2.1	Introduction  Congraphical Information System	7
2.2	Geographical Information System  CIS Approach to Locate Certain Area	9
2.3	GIS Approach to Locate Certain Area	12
2.4	Hotspot Analysis and Relation With Homeless	
2,5	Homeless	12

3.9	Firebase Services		47
3.10	Integrated Firebase to Application		
3.11	Firebase Environment		
3.12	Homeless Database Center Application Architecture		52
3.13	Summ	ary	54
СНА	PTER F	FOUR:RESULT ANALYSIS	55
4.1	Introd	uction	55
4.2	Data Demographic of Kuala Lumpur		55
	4.2.1	Developing Initial Mobile Application of Homeless Distribution	55
4.3	Implementation		55
	4.3.1	Splash Screen	57
	4.3.2	Greeting Screen	58
	4.3.3	Home Screen	59
	4.3.4	Take Action Screen	60
	4.3.5	View Screen	61
	4.3.6	Information Screen	63
СНА	PTER I	FIVE: CONCLUSION	64
5.1	Introduction		64
5.2	Conclusion		64
5.3	Recommendation		65
REF	ERENC	CES	66