EVALUATION OF MALAYSIA ADDRESS SYSTEM USING STREET GEOCODING TECHNIQUE: CASE STUDY IN PERLIS

MADIHAH MARDHATI BINTI MOHD MASHOR 2022800156



SCHOOL OF GEOMATICS SCIENCE AND NATURAL RESOURCES COLLEGE OF BUILT ENVIRONMENT UNIVERSITI TEKNOLOGI MARA MALAYSIA

JULY 2024

EVALUATION OF MALAYSIA ADDRESS SYSTEM USING STREET GEOCODING TECHNIQUE: CASE STUDY IN PERLIS

MADIHAH MARDHATI BINTI MOHD MASHOR 2022800156



Thesis submitted to the Universiti Teknologi MARA Malaysia in partial fulfilment for the award of the degree of the Bachelor of Surveying Science and Geomatics (Honours)

JULY 2024

DECLARATION

I declare that the work on this project/dissertation was carried out in accordance with the regulations of Universiti Teknologi MARA (UiTM). This project/dissertation is original, and it is the result of my work, unless otherwise indicated or acknowledged as referenced work.

In the event that my project/dissertation be found to violate the conditions mentioned above, I voluntarily waive the right of conferment of my degree of the Bachelor of Surveying Science and Geomatics (Honours) and agree be subjected to the disciplinary rules and regulations of Universiti Teknologi MARA.

Name of Student	: Madihah Mardhati Binti Mohd Mashor
Student's ID No	: 2022800156
Project/Dissertation Title	: Evaluation of Malaysia Address System Using Street Geocoding Technique: Case Study in Perlis
Signature and Date	:

Approved by:

I certify that I have examined the student's work and found that they are in accordance with the rules and regulations of the School and University and fulfils the requirements for the award of the degree of Bachelor of Surveying Science and Geomatics (Honours).

Name of Supervisor	: Madam Suhaila Binti Hashim
Signature and Date	:

ABSTRACT

This study concentrates on scrutinizing the accuracy of geocoding derived from the street address. Geocoding is the essential process of turning street addresses into geographic coordinates. It is crucial for a range of applications including urban planning, navigation, and emergency response. To ensure optimal efficacy, a high level of precision is necessary. This study addresses the necessity to evaluate the reliability of geocoded information sourced tailored. The aim of this study is to enhance the accuracy and reliability of geocoding processes by systematically evaluating how variations in address data impact geocoding outcomes. The objective for this research is to create database for address model and to analyze the factors influencing geocoding precision with a focus address formatting and data quality. The research employs an encompassing methodology that integrates field survey and spatial analysis. Address locators were built into ArcMap so that information can be referenced automatically. An address finder is made with a certain locator style. There is a number, a street name, a beginning direction, a suffix type, and a street type for each place in the field. This research anticipates providing valuable insights into the accuracy of geocoding.

Keyword: Geocoding, Address System, GIS, Street Address, Geocode Database

TABLE OF CONTENT

CHAPTER	TITLE	PAGE
	CONFIRMATION BY PANEL OF EXAMINERS	i
	DECLARATION	ii
	ABSTRACT	iii
	ACKNOWLEDGEMENT	iv
	TABLE OF CONTENT	V
	LIST OF FIGURES	viii
	LIST OF TABLES	ix
	LIST OF ABBREVIATIONS	Х
1	INTRODUCTION	
	1.1 Background Study	1
	1.2 Problem Statement	1
	1.3 Research Question	2
	1.4 Aim of Study	2
	1.5 Objectives	3
	1.6 General Methodology	3
	1.7 Scope of Study	4
	1.7.1 Study Area	5
	1.7.2 Software Used	6
	1.8 Significance of Study	7
2	LITERATURE REVIEW	
	2.1 Introduction	8
	2.2 Mailing Delivery System	8
	2.3 Overview of Adress System	9
	2.3.1 Type of Address System	10
	2.3.2 Technological Aspects	11
	2.3.3 Application of Address System	12