

Universiti Teknologi MARA

**Restaurant Locator Using Dijkstra
Algorithm**

Mohamad Aliff Hakimi Bin Lukman Hakim

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ABSTRACT

Imagine you are hungry and want to drive from a house to a restaurant that serves delicious food. People usually find it hard to identify the best route to get to the desired location without any navigation tools. As a result, they can be easily lost in the unfamiliar area. People will normally refer to the signboards or ask around for direction in which will either end up reaching the destination or the other way round. These will definitely cause losing lots of time, energy and cost. In this research, a navigation system called ResLoc is being proposed. This system will help users especially for the food lovers in finding their favourite restaurants around Kota Bharu. This route-finding problem is one of the most important computer applications in the transportation industry. In network theory, it's known as the shortest-path problem, and Dijkstra's algorithm is usually used to solve it. Dijkstra's algorithm is one of the classic shortest path search algorithms. Dijkstra's algorithm is the technique that can solve the problem by itself. The algorithm searches in a weighted directed network to find the shortest path from a given node to every other node in the network. For the result, Dijkstra's algorithm will find the shortest path towards the desired restaurants regarding to the user's current locations besides the system will also generate a map towards the locations.

TABLE OF CONTENTS

CONTENTS	PAGE
SUPERVISOR APPROVAL	ii
STUDENT DECLARATION	iii
ACKNOWLEDGEMENT	iv
ABSTRACT	v
LIST OF FIGURES	ix
LIST OF TABLES	x
LIST OF ABBREVIATIONS	xi
CHAPTER 1: INTRODUCTION	
1.1 Background of study	1
1.2 Problem statement	3
1.3 Objective	4
1.4 Scope	4
1.4.1 User	4
1.4.2 Data	4
1.4.3 Technique	4
1.5 Project significant	5
1.6 Summary	6
CHAPTER 2: LITERATURE REVIEW	
2.1 Location Detection	7
2.2 Restaurant	8
2.2.1 History	8
2.2.2 Types of Restaurants	9
2.3 Dijkstra's Algorithm	10

2.3.1	Step by step of Djistra Algorithm	11
2.3.2	Example of Djikstra Algorithm	12
2.4	Mobile Computing	13
2.4.1	Definition of Mobile Computing	13
2.4.2	Type Of Application	14
2.4.3	Android	15
2.5	GPS (Global Positioning System)	17
2.5.1	GPS System Architecture	18
2.5.2	How Does GPS works	20
2.5.3	Location Based Services (LBS)	21
2.5.4	Google GPS API	23
2.6	Existing Application	24
2.6.1	Waze	24
2.6.2	Google Maps	25
2.6.3	Sygie: GPS navigation	25
2.6.4	GPS Phone Tracking Pro	25
2.6.5	PAPAGO!	26
2.7	Summary	27

CHAPTER 3: RESEARCH METHODOLOGY

3.1	Introduction	28
3.2	Research Methodology Framework	28
3.2.1	Detailed Framework	29
3.3	Research Analysis	30
3.3.1	Feasibility Study	31
3.3.2	Developer Requirement	32
3.4	Research Design & Implementation	33