Universiti Teknologi MARA

Heavy Transportation Shortest Route Using Dijkstra's Algorithm (HETRO)

Nurul Aqilah binti Ahmad Nezer

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

January 2017

ACKNOWLEDGEMENT

Alhamdulillah, praises and thanks to Allah because of His Almighty and His utmost blessings, I was able to finish this research within the time duration given. Firstly, my special thanks goes to my supervisor, Puan Suhana binti Sulong that always give me support and guidance to complete this thesis. I also want to credit my special thanks to my CSP600 lecturer, Dr. Hamidah binti Jantan in helping me with the guidance for writing this thesis. Special appreciation also goes to my beloved parents, Encik Ahmad Nezer bin Hassan and Puan Jamaliah binti Sidik who gives me moral support far away from Kedah to complete this thesis.

ABSTRACT

Nowadays, most of heavy transportation company, would like to refer the computerize systems to obtain the information of the shortest path for the delivery. The problem statement of this project is about the planning route for heavy transportation is essential for effective delivery system in transportation system in order to recommend the shortest path or route for deliver the load. Therefore, Heavy Transportation Shortest Route using Dijkstra's Algorithm (HETRO) has been developed as solution due to the problems. The major objective of this project is to develop a computerize system using Dijkstra's algorithm to find the shortest path for heavy transportation to deliver the goods in more efficient way to save cost and fast delivery. The technique used in getting the requirements is by interviewing the company project manager of the company to get the problem statements. The development tools used in developing this project is NetBeans by using Java for the implementation of the coding. The methodology that used for developing this system is the Dijkstra's algorithm. The result findings for this project is the recommended shortest path for the drivers to deliver the goods from one destination to another.

TABLE OF CONTENTS