UNIVERSITI TEKNOLOGI MARA

MOBILE NAVIGATION SYSTEM USING GPS

SALMI BT ABD WAHAB

BACHELOR OF SCIENCE (HONS) DATA COMMUNICATION AND NETWORKING
FACULTY OF INFORMATIVE TECHNOLOGY AND QUANTITATIVE SCIENCE

MAY 2006

CERTIFICATE OF ORIGINALITY

This is to certify that I am responsible for the work submitted in this project that the original work is my own except as specified in the references and acknowledgement and that the original work contained herein have not been taken or done by unspecified sources of person.

(SALMI BT ABD WAHAB)

The project paper is submitted to the

Faculty of Information Technology and Quantitative Science

In partial fulfillment of the requirement for the

BACHELOR OF SCIENCE (Hons) DATA COMMUNICATION AND NETWORKING

Approved by the Examining Committee:

Hj Mohamad Izani Bin Mohamed Rawi Project Supervisor

En Shamsul Jamel b Elias Examiner

MARA UNIVERSITY OF TECHNOLOGY
SHAH ALAM, SELANGOR
MAY 2006

ACNOWLEDGEMENT

All praises to Allah S.W.T for all the strength and bless as I am able and manage to complete the thesis project. I would like to take the opportunity here to express my deepest appreciation to the individuals who have been involved in helping me throughout the completing of the project.

My deepest appreciation and thanks goes to my supervisor, Tn Hj Mohd Izani Mohamed Rawi for all the guidance, assistance and positive comments in completing the thesis project.

I would also like to express my appreciation to the respondents who have voluntarily spent their time and energy. Without them, the project will not be a success.
I should also not forget my beloved family for all the moral support, motivation, inspiration and encouragement they have been given all this while.

Finally, my appreciation goes to all my friends and other individuals that were involved and contributed throughout competing of the project.

ABSTRACT

This thesis is about Navigation System Using GPS in which to conduct comparative study on different GPS platforms on Windows Mobile 5 PDA, Palm OS PDA, notebook and GPS60CS and to evaluate user acceptance of replacing paper-based map with the digital map based on effectiveness, ease of use and efficiency. Traditionally, people use paper-based map as the only navigation tool despite the drawbacks such as people find it difficult to locate themselves in an unfamiliar area, map will not be updated frequently and they tend to getting lost while traveling. Therefore, the Navigation System Using GPS on four different platforms are presented as the solution to this problem. As for the methodology, several phases are involved such as data collection, planning, analysis, design, installation and configuration and finally testing. As for the testing, 20 respondents were involved in using the both paper-based map and digital map. For paper-based map use, only two of them managed to reach the destination. For digital map using GPS on the other hand, all respondents managed to reach the destination. From the questionnaire provided, it was found that all respondents prefer digital map to paper-based map and they stated that the digital; map is more practical, effective and easy to handle. From this result, we can conclude that digital map is plausible to replace paper-based map in which Windows Mobile PDA with GPS is the most suitable for normal use and GPS60CS for adventurous use.