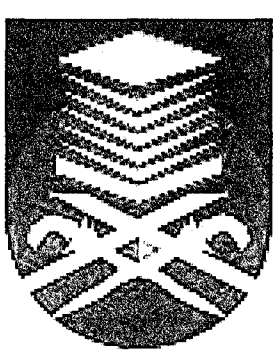
SMS FLOOD ALERT SYSTEM

Thesis is presented in partial fulfillment for the award of the
Bachelor of Engineering (Hons) Electrical
UNIVERSITI TEKNOLOGI MARA (UiTM)



WAN ADLIN HARRIS BIN WAN MOHD ASMARA
FACULTY OF ELECTRICAL ENGINEERING
UNIVERSITI TEKNOLOGI MARA
40450 SHAH ALAM
SELANGOR MALAYSIA

MAY 2011

ACKNOWLEDGEMENT

Alhamdulillah, praise to Allah the Almighty that has given me the strength to finally complete the thesis of SMS Flood Level System. From the deepest of my heart, I would like to give credits to several individuals who stood out among others during the course of this book. These individuals have gone through thick and thin upon completion of this thesis.

Very meaningful thanks to Miss Norhafizah binti Abdul Aziz as the advisor that has given many advice and support throughout this thesis. Throughout her perseverance and constant guidance only did I manage to complete the thesis. Special credit also must be given to my parents, Mr Wan Mohd Asmara and Mrs Zauyah Hussain that has given me the support to complete the thesis. For my wife, Intan Juhana and both my lovely daughters, they have stood behind me all this while. To my classmates (PLK students), whom I regard as special friends as their willingness to cooperate in any ideas and collaboration during years of study. All of your deeds would never be paid duly by the author. Only Allah, the Greatest can pay back all your deeds.

Lastly, to any individuals that have not been mentioned in the thesis, I would like to say thank you for all your kind efforts.

ABSTRACT

Technology never stands still. From the existence of Silicon Valley in the late 60's, technology has developed in rapid phase until now. Among the most radical innovations of all time is the introduction of mobile phones. Mobile phones have also developed from just a communication tool into a miniature PC. Lots of applications have been developed to be used in a mobile phone. However, the most common usage of mobile phones is Short Messaging System (SMS).

SMS Flood Alert System is a project developed to exploit SMS services. This project uses a GSM Module to act as a transmitter. GSM Module has been pre programmed using a PIC to alert users of a sudden rise of water at river banks via SMS. This project is also applicable to be used to monitor water dams, septic tanks and other kinds of water container.

The inputs of the project are 3 liquid sensors that will give input signal to the PIC and also the warning light at the control box. Upon receiving the signal from the sensors, PIC will convey a signal to GSM Module notifying the incident. GSM Module will then send SMS to user informing the incident so that user can take necessary preventive measures as early as possible.

This project is dedicated to help solve issues of late detection of flood at flood prone area. By applying this project into their neighborhood, it is expected to help in faster evacuation during emergency time. This thesis will explain in detail regarding the project of SMS Flood Alert System.

TABLE OF CONTENTS