

# **FINAL YEAR PROJECT**

## **MOBILE PHONE SECURITY NOTIFICATION APPLICATION IN SYMBIAN OPERATING SYSTEM ENVIRONMENT**

**MOHAMAD IZHAM BIN LIMAN**

**BACHELOR OF SCIENCE (HONS)  
INFORMATION TECHNOLOGY  
FACULTY OF  
COMPUTER & MATHEMATICAL SCIENCES  
DEC09-MEI10**

**SUPERVISOR:  
DR NORHAPEA BT ARIFFIN**

## ACKNOWLEDGEMENTS

First of all, I am so thankful to Allah S. W.T for allowing me to complete my Final Year Project even though I have gone through obstacles throughout the making of the project. Without His blessing and guidance, I may have not finished this project.

Special thanks to my supervisor, Dr. Norhapiza Bt Ariffin for all the helps and knowledge given to me as well as the support, tolerance, guidance, the patience and understanding. I would also like to dedicate my deepest appreciations to my final project coordinator, Pn Rozianawaty Bt Osman for their ongoing guidance and also for the great understanding shown.

Million thanks to my parents for being understanding and supportive and also to my colleagues especially who has been very helpful and supportive towards completing this project. Without them, I could not able to get through this. Thank you very much. All your help and guidance are highly appreciated.

## ABSTRACT

Nowadays, the security is important to protect our information or our device. Mobile phone is a technology of electronic device which is small in size but has a lot of capabilities. Nowadays, almost everyone in this world can afford to buy at least one mobile phone. Mobile phone as we all know have store the information and many data and important as a personal computer which is to enable people to access their data or work at anytime and anywhere. The prototype application that will be developed is the Mobile Phone Security Notification Application. This prototype is created mainly for the user that uses Symbian Operating System via Nokia mobile phone. This prototype application is develop on a mobile platform. The Rapid Application Development (RAD) is used as development model in developing this project. The application is develop by using Carbide.C-H-1.3 and using C++ programming language. The main architecture behind the development of the mobile security notification is the function to send SMS notification. In addition, hope that this prototype application can contribute further information regarding a dynamic development of security notification on mobile platform.

## TABLE OF CONTENT

Approval	iii
Declaration	iv
Acknowledgement	v
Abstract	vi
Chapter One: Introduction	
1.0 Introduction	1
1.1 Research Background	2
1.2 Problem Statement	3
1.3 Research Objective	4
1.5 Research Scope	5
1.6 Important of the Study	5
1.7 Research Approach and Methodology	5
1.8 Limitation of the Research	6
1.9 Summary	6
Chapter Two: Literature Review	
2.0 Introduction	7
2.1 Different On Mobile Security	8
2.2 Different On SMS Notification	9
2.3 Overview of Mobile Security	10
2.3.1 Mobile Malware History	11
2.3.2 Mobile Device Vulnerabilities	12
2.3.3 Mobile Threats	13
2.3.4 Mobile Operating System	14
2.3.5 Mobile Virus Protection	14

2.4 Overview of Mobile Application	15
2.5 Overview of Compilation System	
2.5.1 Command Line Tools	16
2.5.2 ARM Processor	18
2.6 Overview of the Similarity Articles	
2.6.1 Implementing Adaptive Mobile Notification Service	19
2.6.2 A Multimedia Alerting and Notification Service for Mobile User	19
2.6.3 Sim Card Security	20
2.6.4 What is IMEI	20
2.6.5 Theft protection for the mobile warrior - Sprint Secure Laptop Guardian does EVDO, anti-theft	21
2.7 Overview of the Applications	
2.7.1 Switching to Carbide.c++	22
2.7.2 Mobile Application	22
2.7.3 The Symbian Platform	23
2.8 Summary	23
Chapter Three: Methodology	
3.1 Introduction	24
3.2 Research Framework	24
3.1.1 Problem Identification and Planning	26
3.1.2 Information Gathering and Analysis	27
3.1.3 Design	29
3.1.4 Development and Testing	31
3.1.5 Documentation	32