THE APPLICATION OF MULTIMEDIA MESSAGING SERVICES: MOBILE WEB SERVICES

This thesis is presented in partial fulfillment of the Bachelor of Electrical Engineering (Honors)

UNIVERSITY TECHNOLOGY MARA

NOR AZRIN BIN HASSAN Faculty of Electrical Engineering UNIVERSITY TECHNOLOGY MARA 40450 SHAH ALAM SELANGOR

ACKNOWLEDGEMENT

First and foremost, I would like to thank Allah for giving me strength and courage to complete this project.

The highest gratitude and appreciation is dedicated to my project supervisor, Ir Muhammad Ibrahim, who had given a chance to serve under his guidance. It's my great pleasure to be assigned such an interesting and challenging project. Upon his uncompromising demand for quality and his insistence lead me to pursue excellence.

My greatest love and gratitude goes to my beloved parents, En Mohd Abbas Bin Ibrahim and Puan Narimah Binti Ahmad, my siblings and my special friend Noor Suhaini Mila Binti Suparman for being the greatest source of my inspiration.

Last but not least, I wish to convey my thanks to En Helmi Bin Ibrahim, En Mohd Azri Bin Abdul Aziz and En Meor Azreen for their contribution upon Java Programming.

For those people who involved directly or indirectly upon the completing of this project, thank you for the encouragement, supports and guidance. My Allah bless us.

ABSTRACT

This paper describes the Mobile Web Services which offer the user to search information through mobile phone. This is one of MMS application which offers by Telecommunication Company and being handled by the content provider of that telecommunication company. MMS allows the exchange of multimedia messages in the context of person to person and machine to person scenarios. MMS capitalizes on the best features of existing fixed and mobile messaging systems such as SMS, EMS and the Internet electronic mail. MMS has a value added service in its application. In order to operate a VAS, the VAS provider has to establish a service agreement with the MMS provider. A VAS application may provide weather notifications, news update, booking movies and many more services. This application offer three services, namely weather, movies and news. This Web Services application uses Java 2 Micro Edition in order to function smoothly. However, all the output from this project is only take place in the emulator which means there's no transmission take place, just to show the simulation of the services offered.

TABLE OF CONTENTS

CHAPTER	TITLE	PAGE
	Acknowledgement	i.
	Abstract	ii
	Table Of Contents	iii
	List Of Figures	vi
	List Of Tables	viii
	List Of Abbreviations	ix
Į.	INTRODUCTION	
1.1	Introduction	1
1.2	Objectives	1
1.3	Project Overview	2
2	LITERATURE REVIEW	
2.1	Multimedia Messaging Service (MMS)	3
2.2	MMS Structure	3
2.3	Different elements of MMS	4
2.4	MMS Architecture and Interfaces	5
2.5	MMS Advantages	7
.3	JAVA LANGUAGE	
3.1	Java 2 Micro Edition	9
3.2	The Java programming language	9
3.3	Java editions	9.
3.4	J2ME architecture	1.1
3.5	The K Virtual Machine (KVM)	14
3.6	Java for mobile device	14
3.7	The Connected Limited Device Configuration (CLDC)	14
3.8	The Mobile Information Device Profile (MIDP)	15

3.9	J2ME Wireless Toolkit Emulator	16
3.91	Skinning the J2ME Wireless Toolkit Emulator	16
3.10	eXtensible Markup Language (XML)	16
3.10.1	Structure of XML	17
3.10.2	XML Schema	17
3.10.3	XML Parsing	18
3.10.4	XML parsers available for KVM	19
3.11	Tomcat Server	19
3.11.1	Using JDBC and Data Sources	20
4	SOFTWARE DEVELOPMENT	10
4.1	Software Progress	21
4.2	Program Source Code	22
4.3	Project Design and Implementation	23
4.4	Flow Chart Of Mobile Web Services	30
5	RESULTS AND DISCUSSION	
5.1	Mobile Web Services	35
6	CONCLUSIONS	41
7	RECOMMENDATIONS	43
	References	45
	Appendix 1	47
	Appendix 2	49