THE APPLICATION OF MULTIMEDIA MESSAGING SERVICES: ONLINE ORDERING SYSTEM

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

NOOR SUHAINI MILA BINTI SUPARMAN
Faculty of Electrical Engineering
UNIVERSITY TECHNOLOGY MARA
40450 SHAH ALAM SELANGOR

ACKNOWLEDGEMENT

In the name of Allah, The Most Gracious, Most Merciful and him alone is worthy of all praises.

I would like to express my recognition and most sincere appreciation to my project supervisor, Ir Muhammad Ibrahim for his guidance, counsels, patience and for putting much effort through his valuable advice towards the completion of this project.

My deepest gratitude goes to my beloved parent, En Suparman Bin Salleh and Puan Rohani Binti Ahmad, my siblings and my special friend Nor Azrin Bin Hassan for the endless love and encouragement they have given and for being so understanding for all these years.

Lastly, I am particularly thankful to En Helmi Bin Ibrahim, En Mohd Azri Bin Abdul Aziz and En Meor Azreen for their effort assisting me with the Java Programming.

The kindness, cooperation and supports from the people that have contributed to this work, either directly or indirectly would always be remembered. May Allah bless us.

ABSTRACT

This project entitled Online Ordering System describes an application through mobile phone emulator. It provides the user with ordering services where the user may simply order a list of items on the mobile phone without having to go out for shopping. This is one of Multimedia Messaging Services (MMS) applications. VAS is the main interface which handless the MMS application. VAS may provide services such as purchasing items through mobile phone. This situation held when the provider sets up a VAS application which generates multimedia messages and sends them to one or multiple recipients. In many cases, the user need to first subscribe to the VAS in order to receive corresponding messages. This subscription can be performed by sending a message to the VAS application. In order to operate a VAS, the VAS provider has to establish a service agreement with the MMS provider. The supplier in this project is known as the server while the client is the user. This project is developed using Java 2 Micro Edition. It is a suitable program in creating this application. All the information in the server is stored in the database table structure. The user just needs to place the order with cell phone. In this project, the ordering process information shown in the cell phone is represented by the emulator.

TABLE OF CONTENTS

CHAPTER		PAGE
	ACKNOWLEDGEMENT	i
	ABSTRACT	ii
	TABLE OF CONTENTS	iii
	LIST OF FIGURES	vi
	LIST OF TABLES	vii
	LIST OF ABBREVIATIONS	viii
1	INTRODUCTION	
	1.1 Introduction	1
	1.2 Objectives	1
	1.3 Project Overview	2
2	Multimedia Messaging Services	
	2.1 Introduction	3
	2.2 General Architecture of MMS	4
	2.3 Involved MMS Elements	5
	2.4 MMS Reference Architecture	8
	2.5 Protocol Framework	10
3	Java 2 Micro Edition	
	3.1 Java 2 Micro Edition Definitions	13
	3.2 Java 2 Micro Edition Offers	14
	3.3 The K Virtual Machine (KVM)	15
	3.4 Connected Limited Device Profile (CLDC)	16
	3.5 Mobile Information Device Profile (MIDP)	17

3.6 Java Server Pages 17
3.7 Tomcat Version 18
3.7.1 Tomcat 3.x 19
3.8 JDBC API 20
3.9 Device Emulator 21
3.9.1 Java/J2ME Emulator 22

4 SOFTWARE DEVELOPMENT
4.1 User Interface 23
4.2 Library Used in Source Code 24
4.3 Program Code 25
4.4 Project Design and Implementation 25
4.5 Database and Table Design 29
4.5.1 Database Window 30
4.6 Flowchart of Order Manager 31

5 RESULT AND DISCUSSIONS
5.1 Client Side 32
5.2 Server Side 36

6 CONCLUSION AND FUTURE DEVELOPMENT
6.1 Conclusion 39
6.1.1 Advantages of Online Ordering Systems 40
6.1.2 Disadvantages of Online Ordering Systems 40
6.2 Future Development 41

REFERENCES 42
APPENDIX 43