UNIVERSITI TEKNOLOGI MARA

M-COMMERCE: DEVELOPMENT OF RINGTONE PURCHASING SYSTEM VIA SMS

MARHAINI ABD RASHID

Thesis submitted in fulfilment of the requirements of BACHELOR OF SCIENCE (HONS) INFORMATION TECHNOLOGY
FACULTY OF INFORMATION TECHNOLOGY AND QUANTITATIVE SCIENCE

OCTOBER 2004

ACKNOWLEDGEMENT

All praises to Allah SWT for all His bless that I had during the completion of this research. I would like to express our sincere to those who had involved in contributing their help and support either directly or indirectly in making this work successfully reality. It has been my good fortune to have the advice and guidance of talented people, whose knowledge and skills have enhanced this research in many ways.

First of all, I would like to address my deepest appreciation and sincere thanks to my dedicated supervisor, En. Saharbudin Naim Tahir Shah for his guidance and support and give me opportunity to learn and gain experience from his research. Next, a special dedication to my work advisor; Dr. Norlaila Md. Nor for her encouragement, comment, idea and tolerance that lead me to a better quality of work.

My special thanks to all the helpful people from company or organization that I met for this research purposed. Thank you for tour willingness to share your valuable knowledge and expertise.

Eventually, I would like to express my earnest thanks to my beloved family for their support and understand me. Last but not least, for my dearest friends for help and support in order to complete this work. To all mentioned here, might Allah bless you all in whatever you do. Thank you so much.

TABLE OF CONTENT

ACKNOWLEDGMENT	ii
TABLE OF FIGURES	vi
ABSTRACT	viii
CHAPTER ONE INTRODUCTION	_
1.1 Background of the Research	1
1.2 Poblem Statement	2
1.3 Sgnificance of the Research	3
1.4 Objective of the Research	4
1.5 Project Scope	4
CHAPTER TWO THEORETICAL CONSIDERATIONS	
2.1 SMS@ctive Frameworks	5
2.2 Ringtone Purchasing System via SMS Framework	6
2.2.1 Ringtone Purschasing System	6
2.2.2 Theoritical and Methodology	7
2.2.3 Input	7
2.2.4 Database	8
2.2.5 Output	8
CHAPTER THREE LITERATURE REVIEW	
3.1 M-commerce	9
3.1.1 Evolution E-commerce to M-commerce on an Industry	11
3.1.2 Architecture and Protocol of M-commerce	12
3.2 Short Message Services (SMS)	15
3.2.1 The Element of SMS Architecture	15
3.2.2 Messaging	17
3.2.3 Dynamics	18

3.2.4 Usage 3.2.5 SMS Component	18
	19
3.2.6 Connection	20
3.2.7 SMS Structure	22
3.2.8 SMS Processes	22
3.2.9 Consumer Application Using SMS	23
3.2.10 SMS Center Framework	27
3.3 Introduction to Ringtone	28
3.3.1 Ringtone Basic	28
3.3.2 Ringtone Framework for Polyphonic	29
3.4 Difference Methodology to Solve Similar Problem	30
CHAPTER FOUR METHODOLOGY	·
4.1 System Planning	32
4.2 System Analysis	33
4.2.1 Used-case Diagram	34
4.2.2 Data Flow Diagram (DFD)	34
4.2.3 Entity Relationship Diagram (ERD)	35
4.2.4 Object Model	35
4.3 System Design	36
4.3.1 Flowchart Diagram	36
4.3.2 Hardware and Software Acquisition	37
4.3.3 Database and File Design	37
4.3.4 Interface Design	37
4.4 System Implementation	37
4.5 System Operation and Support	38
CHAPTER FIVE RESULT AND ANALYSIS OF DATA	
5.1 Introduction	39
5.2 Input Data	39

ABSTRACT

Nowadays, there are so many application created on m-commerce field, one of them is the application that allow user to buy a ringtone only using SMS technology. The main purpose of this research is to develop a ringtone purchasing system using SMS technology which is connected to infrared cable to detect mobile phone as a device in order to send input data to the system. Besides, this research tries to seek a different method that can use and easier in developing the system. Perhaps this research will give an awareness and guideline to developers in order to produce a high quality and robust product.