

**Universiti Teknologi MARA**

**Baby Vaccination Management System  
(BVMS)**

**Farah Syazwani Binti Zolkofly**

**Thesis submitted in fulfillment of the requirements for  
Bachelor of Information Technology (Hons.) Business  
Computing  
Faculty of Computer and Mathematical Sciences**

**January 2017**

## STUDENT DECLARATION

I certify that this report and the project to which it refers is the product of my own work and that any idea or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.



.....  
FARAH SYAZWANI BINTI ZOLKOFLY  
2013835164

JANUARY 25, 2017

## ABSTRACT

Management Information System (MIS) is a system that converts data into information, communicated in an appropriate form to managers at levels of an organization. Currently the clinic in Malaysia still rely on conventional method in terms of handling the baby vaccination information. The problems occurred when the baby vaccination information are recorded into books that both books are kept by the nurse and the mother. This process lead to difficulty in searching and retrieving the information as well as setting appointment for scheduling baby vaccination. Thus, the aim of the project is to develop Baby Vaccination Management System (BVMS) to make the management of the baby vaccination information become easier. BVMS has been developed to allow the nurse to keep all the vaccination information of the baby in system. There are five phases to complete this project which are define the requirements, design, build, implement and testing. The methodology that used to develop this system is adapted waterfall model. The system has been tested by an expert and thirty (30) respondents. The highest mean is 4.10 with standard deviation of 0.66 has been achieved for the ease of use section. As conclusion, this system gives some benefits to the user which are for the nurse and the mothers. The nurse can keep the baby vaccination information into the system. It can make the management of baby vaccination information can manage systematically. For the mothers, they can view their baby vaccination date easily because they can do that anytime at anyplace without bring the book.

## TABLE OF CONTENTS

<b>CONTENT</b>	<b>PAGE</b>
<b>SUPERVISOR APPROVAL</b>	<b>ii</b>
<b>STUDENT DECLARATION</b>	<b>iii</b>
<b>ACKNOWLEDGEMENT</b>	<b>iv</b>
<b>ABSTRACT</b>	<b>v</b>
<b>TABLE OF CONTENTS</b>	<b>vi</b>
<b>LIST OF FIGURES</b>	<b>x</b>
<b>LIST OF TABLES</b>	<b>xi</b>
<b>LIST OF ABBREVIATIONS</b>	<b>xiii</b>

### **CHAPTER ONE: INTRODUCTION**

1.1	Project Background	2
1.2	Problem Statement	3
1.3	Project Objectives	6
1.4	Project Scope	6
1.5	Project Significance	7
1.6	Project Framework	7
1.7	Gantt Chart	8
1.8	Expected Outcome	11
1.9	Conclusion	12

### **CHAPTER TWO: LITERATURE REVIEW**

2.1	Introduction	13
2.2	Management Information System (MIS)	13
2.2.1	Definition of MIS	14
2.2.2	Benefits of MIS	14

2.3	Children Immunization	15
2.4	System Development Methodology	15
2.4.1	Waterfall model	16
2.4.2	Spiral Model	17
2.4.3	V-shaped Model	18
2.5	Similar Appointment Management System	19
2.5.1	myMemorizer	20
2.5.2	Pediatric Oncall Child Health Care	21
2.5.3	Vaccidate	21
2.5.4	Comparison of Features between the Existing System	22
2.6	Implication of Literature Review of Project	23
2.7	Conclusion	25

### **CHAPTER THREE: RESEARCH METHODOLOGY**

3.1	Introduction	26
3.2	Methodology Overview – Adapted Waterfall Model	26
3.3	Phase 1: Project Identification and Planning	29
3.3.1	Preliminary Study	29
3.4	Phase 2: Requirement Gathering and Analysis	30
3.4.1	Primary Data	30
3.4.2	Secondary Data	30
3.5	Phase 3: Design	31
3.5.1	Flowchart	31
3.5.2	Context Diagram	34
3.5.3	Data Flow Diagram (DFD) Level 1	35
3.5.4	Entity Relationship Diagram (ERD)	37
3.6	Phase 4: Development	39
3.6.1	User Requirements	39
3.6.2	System Requirements	40
3.6.3	Data Structure	40