UNIVERSITI TEKNOLOGI MARA

BABY’S HEALTH RECORD AND APPOINTMENT MANAGEMENT SYSTEM

WAN NURSHAHIRAH BINTI WAN NAMAT

BACHELOR OF INFORMATION TECHNOLOGY (Hons.) INFORMATION SYSTEMS ENGINEERING

JANUARY 2017
STUDENT’S 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.

..................................................  
WAN NURSHAHIRAH BINTI WAN NAMAT  
2014743079

FEBRUARY 10, 2017
ABSTRACT

Currently, Department of Mom and Child of Klinik Kesihatan Merlimau, Melaka, is using record books and files to record and manage any appointment with its patients. The management faces some problems to manage the medical record of the children and to organize the appointment manually. Some of the problems are version of the record book are frequently change, parent lost the record book or the book in not good condition, parent forgot the appointment and staff manually arrange the appointment date that sometime mistaken arranged the appointment. Thus, an online of baby’s health record and appointment management system has been developed to help the clinic to organize the medical record and appointment systematically. This system also sends notification a day before the appointment date to the parent through Short Messing Services (SMS) automatically. Hence, this system allows solving the problem regarding the queue time between the parent’s patients. It also helps the staff to manage the record of children’s health by keeping the history records for future references. Online system developed using PHP, MYSQL, to enable manage the record and appointment management system through online and communication between online system and user smartphone.
# TABLE OF CONTENT

<table>
<thead>
<tr>
<th>CONTENTS</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUPERVISOR’S APPROVAL</td>
<td>ii</td>
</tr>
<tr>
<td>STUDENT’S DECLARATION</td>
<td>iii</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENT</td>
<td>iv</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>v</td>
</tr>
<tr>
<td>TABLE OF CONTENT</td>
<td>vi</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>ix</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>x</td>
</tr>
<tr>
<td>LIST OF ABBREVIATIONS</td>
<td>xi</td>
</tr>
</tbody>
</table>

## CHAPTER ONE: INTRODUCTION

1. Background of Study 1
2. Problem Statement 4
3. Aim 5
4. Objective 6
5. Scope 6
6. Project Significance 6
7. Anticipated Results/ Outcomes: 7
8. Chapter Summary 7

## CHAPTER TWO: LITERATURE REVIEW

1. Overview of Record Management System 8
   1.1 Reason of Record Management 9
   1.2 Types of Record 10
   1.3 Benefit of Record Management 12
2. Overview of Appointment Management System 13
   2.1 Benefit of Online Appointment Management 14
3. Overview of Immunization 15
   3.1 Type of Immunization 16
2.4 Short Messaging Service (SMS) Versus Push Notification 17
  2.4.1 Push Notification 18
  2.4.2 Short Message Service (SMS) Notification 19

2.5 Web-Based Application versus Stand Alone Desktop Application 20

2.6 Related Work 22
  2.6.1 Patient Management System (PMS) (Gavva, 2015) 22
  2.6.2 Patient Appointment Notification For Uitm Pusat Kesihatan Dental Department (Android App) (Mat Akil, 2014) 22
  2.6.3 SMS-Based Event Notification System (Olaleye, Olaniyan, Eboda, & Awolere, 2013) 24

2.7 Summary 27

CHAPTER THREE: METHODOLOGY 28

3.1 Waterfall System Development Life Cycle 28
3.2 Waterfall Phases 29
3.3 Description of Phases 32
  3.3.1 Requirements and Analysis Phase 32
  3.3.2 Design Phase 33
  3.3.3 Implementation Phase 33

3.4 Hardware and Software Requirements for the Project 34

3.5 Project Timeline 34
3.6 Chapter Summary 35

CHAPTER FOUR: ANALYSIS AND FINDINGS 36

4.1 Requirement and Analysis Phase 36
  4.1.1 Analysis from an Interview 36
  4.1.2 Analysis from Questionnaire 39
  4.1.3 Analyse User Requirement 40
  4.1.4 Finding from Interview and Questionnaire Analysis 41

4.2 Design Phases 45
  4.2.1 System Architecture 46
  4.2.2 Data Design 49
  4.2.3 Interface Design 52

4.3 Implementation Phases 57
4.4 Sitemap of the System 60