

**Universiti Teknologi MARA**

**DOCTOR APPOINTMENT BOOKING  
SYSTEM**

**Muhammad Juwaidi Bin Muhar**

**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 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.

.....  
MUHAMMAD JUWAIDI BIN MUHAR  
2014497834

JANUARY 29, 2017

## **ABSTRACT**

Managing patient booking record is a routine process for clinic. Conducting the process manually require patient to make a call, wait for approval and confirm booking. Since there is increasing number of patient, processing of multiplying number of booking is time consuming and require more manpower. Therefore, the computerized system was purposed to help Dr. Len clinic to handle appointment booking in more systematic way. The system is called Doctor Appointment Booking System (DABS) and was developed based on System Development Life Cycle (SDLC). The model has requirement gathering, design, coding, testing, deployment and maintenance. DABS was tested by 30 respondent and 3 expert users. Overall, the highest mean is 4.2 (SD=0.61) for user interface evaluation. In the future, the system can be enlarged to include complete module where user can choose the doctor based on their preference depend on doctor availability.

# TABLE OF CONTENTS

<b>CONTENTS</b>	<b>PAGE</b>
<b>SUPERVISOR'S APPROVAL</b>	ii
<b>DECLARATION</b>	iii
<b>ACKNOWLEDGEMENT</b>	iv
<b>ABSTRACT</b>	v
<b>TABLE OF CONTENTS</b>	vi
<b>LIST OF FIGURES</b>	x
<b>LIST OF TABLES</b>	xii

## **CHAPTER 1: INTRODUCTION**

1.1. Background of Study	1
1.2. Problem Statement	2
1.3. Objective	5
1.4. Project Scope	5
1.4. Project Significance	6
1.5. Gantt chart	6
1.6. Project Framework	7
1.7. Expected Outcome	8
1.8. Conclusion	9

## **CHAPTER 2: LITERATURE REVIEW**

2.1. Introduction	10
2.2. Web-based Application	11
2.3. Appointment Booking System	12
2.4. System development model	13

2.4.1 System Development Life Cycle (SDLC)	13
2.4.2 Waterfall model	14
2.4.3 Prototype model	15
2.4.4 Spiral model	16
2.4.5 Agile model	17
2.5. Similar existing system	18
2.5.1 DocAppointments	18
2.5.2 SuperSaaS	19
2.5.3 AppointmentPlus	20
2.5.4 Doc pulse	21
2.5.5 Doc ASAP	22
2.6. Implication of Literature Review in Project Development	23
2.7. Conclusion	23

### **CHAPTER 3: RESEARCH METHODOLOGY**

3.1 Introduction	24
3.2 Methodology overview	24
3.2.1 Adapted Waterfall model	26
3.3 Preliminary Study	26
3.5.1 Context Diagram	28
3.5.2 Data Flow Diagram (DFD) Level 0	29
3.5.3 Entity Relationship Diagram (ERD)	31
3.5.4 Functional Hierarchy Diagram (FHD)	32
3.5.5 Interface of the System	33
3.6 System Development	34
3.6.1 Hardware Specification	34
3.6.2 Software Specification	35
3.7 Testing and Evaluation	36
3.7.1 Expert Evaluation	37
3.7.2 User Evaluation	38