PATIENT APPOINTMENT AND SCHEDULING SYSTEM

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UNIVERSITI TEKNIKAL MALAYSIA MELAKA

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JUDUL: Patient Appointment and Scheduling System (PAS)

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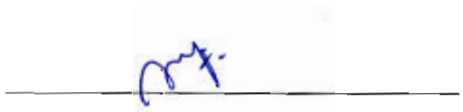

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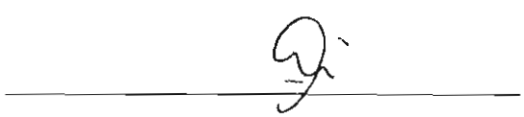

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CATATAN: * Tesis dimaksudkan sebagai Laporan Akhir Projek Sarjana Muda(PSM)

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TING SIONG KWONG

This report is submitted in partial fulfilment of the requirements for the Bachelor of Computer Science (Software Development)

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY
UNIVERSITI TEKNIKAL MALAYSIA MELAKA
2011

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DECLARATION

I hereby declare that this project report entitled

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is written by me and is my own effort and that no part has been plagiarized without citations.

STUDENT : _____ Date: _____

(TING SIONG KWONG)

SUPERVISOR : _____ Date: 7/7/201

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DEDICATION

To my beloved parents, your love and support are my greatest inspiration.

To my friend, i appreciate your sacrifices, encouragement, and support.

To my lecturer, for being receptive and critical, and challenging me to be a better student.

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ACKNOWLEDGEMENT

In order to confer the degree of Bachelor of Computer Science (Software Development), degree student from Universiti Teknikal Malaysia Melaka (UTeM) is required to involve in final year project or known as "Projek Sarjana Muda" (PSM) for a prerequisite for graduation. With this PSM, the student is able to work in individual and real working environment with the knowledge and skills learned in university. Student are required to complete the PSM within the period of time that fixed by university in order to identify time management. The product of PSM will produce a system and documentation, which will indirectly improve the soft skills in reports. Therefore, i feel grateful to UTeM because provide such important information, facilities and services prior completing my bachelor degree project.

For appreciation, I would like to express my fullest gratitude towards my supervisor Dr Mohd Khanapi bin Abd Ghani for patience and guidance me to carry out the PSM in the university. I am very grateful for the invaluable advices and time allocate to lead me the right way to accomplish the project. Apart from that, i would like to thanks my parents because they support me in moral and physical. Last but not least, gratefulness is shown to my friend and course mate for the infinite moral support to complete my PSM.

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ABSTRACT

Patient Appointment and Scheduling System (PAS) is a system that use to arrange the appointment between patient and doctor. Through this sytem, the patient doesn't need to come to hospital's counter to make the appointment. They only need to send a sms to this system and the system will send back a sms whether the appointment is acceptable or not. Besides that, staff or nurse also can make appointment with the patient that walk in to the hospital's counter. PAS will be develop based on Object-Oriented methodology with language JAVA and the database using is hypersonic SQL (HSQLDB).

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ABSTRAK

Sistem Temujanji Pesakit merupakan satu sistem yang digunakan untuk menyusun masa temu janji antara pesakit dan doktor. Sistem ini memudahkan pesakit supaya tidak perlu datang ke kaunter hospital untuk menyemak dan membuat pertemuan. Mereka hanya perlu menghantar sms kepada sistem ini untuk membuat janji temu dan system akan maklumkan balik melalui sms sama ada tarikh temujanji itu diterima atau tidak. Selain itu, jururawat juga boleh membuat temujanji dengan pesakit yang ingin membuat temujanji di kaunter hospital. Sistem ini memudakan proses membuat temujanji menjadi lebih lancar. Sistem Temujanji Pesakit ini direka dengan menggunakan Object-Oriented methodology, dengan menggunakan bahasa JAVA dan database yang akan digunakkan ialah hypersonic SQL (HSQLDB).

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TABLE OF CONTENTS

CHAPTER	SUBJECT	PAGE
	DECLARATION	**iii**
	DEDICATION	**iv**
	ACKNOWLEDGEMENT	**v**
	ABSTRACT	**vi**
	ABSTRAK	**vii**
	TABLE OF CONTENS	**viii**
	LIST OF TABLE	**xiii**
	LIST OF FIGURES	**xv**
CHAPTER I	**INTRODUCTION**	
	1.1 Project Background	1
	1.2 Problem Statements	2
	1.3 Objective	3
	1.4 Scope	4
	1.5 Project Significance	5
	1.6 Expected Output	5
	1.7 Conclusion	6

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CHAPTER II	**LITERATURE REVIEW AND PROJECT METHODOLOGY**	
	2.1 Introduction	7
	2.2 Facts and findings	8
	2.2.1 Domain	8
	2.2.2 Existing System	8
	2.2.3 Technique	10
	2.3 Project Methodology	11
	2.4 Project Requirements	14
	2.4.1 Software Requirement	14
	2.4.2 Hardware Requirement	14
	2.4.3 Other Requirement	15
	2.5 Project Schedule and Milestones	15
	2.6 Conclusion	15
CHAPTER III	**ANALYSIS**	
	3.1 Introduction	16
	3.2 Problem Analysis	17
	3.3 Requirement Analysis	18
	3.3.1 Data Requirement	18
	3.3.2 Functional Requirement	20
	3.3.2.1 Use Case Actor	21
	3.3.2.2 Use case Description	22
	3.3.3 Non-Functional Requirement	23
	3.3.4 Others Requirement	24

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3.3.4.1 Software Requirements 24

3.3.4.2 Hardware Requirements 26

3.3.4.4 Network Requirements 26

3.4 Conclusion 27

CHAPTER IV DESIGN

4.1 Introduction 28

4.2 High-Level Design 29

4.2.1 System Architecture 29

4.2.2 User Interface Design 30

4.2.2.1 Navigation Design 30

4.2.2.2 Input Design 30

4.2.2.2 Output Design 31

4.2.3 Database Design 31

4.2.3.1 Conceptual and Logical Database Design 31

4.2.3.1 Data Dictionary 33

4.3 Detailed Design 34

4.3.1 Software Design 34

4.3.2 Physical Database Design 34

4.3.2.1 Data Definition Language(DDL) for PMS 34

4.4 Conclusion 38

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CHAPTER V	**IMPLEMENTATION**	
	5.1 Introduction	39
	5.2 Software Development Environment Setup	40
	5.2.1 Database Environment Setup	41
	5.3 Software Configuration Management	41
	5.3.1 Configuration Environment Setup	42
	5.3.2 Version Control Procedure	43
	5.4 Implementation Status	44
	5.5 Conclusion	45
CHAPTER VI	**TESTING**	
	6.1 Introduction	46
	6.2 Test Plan	46
	6.2.1 Test Organization	47
	6.2.2 Test Environment	48
	6.2.3 Test Schedule	50
	6.3 Test Strategy	50
	6.3.1 Classes of Tests	51
	6.4 Test Design	52
	6.4.1 Test Description	52
	6.4.2 Test Data	52
	6.5 Test Result and Analysis	53
	6.6 Conclusion	53

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CHAPTER VII	**PROJECT CONCLUSION**	
	7.1 Observation on Weaknesses and Strengths	54
	7.2 Propositions for Improvement	55
	7.3 Contribution	55
	7.4 Conclusion	56
REFERENCES		57
BIBLIOGRAPHY		58
APPENDIX A		59
APPENDIX B		60
APPENDIX C		61
APPENDIX D		68
APPENDIX E		69
APPENDIX F		72
APPENDIX G		82
APPENDIX H		84
APPENDIX I		89
APPENDIX J		102
APPENDIX K		114
APPENDIX L		119

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LIST OF TABLES

TABLE	TITLE	PAGE
3.1	Functional Requirement of PAS	22
3.2	Non-Functional Requirement of PAS	22
3.3	Software Requirement	24
3.4	Hardware Requirement	25
3.5	Network Requirements	26
4.1	User input for Login Screen	72
4.2	Input type for Register Page	73
4.3	Input type for Personal Information Page	74
4.4	Input type for Patient Appointment Page	75
4.5	Input type for Staff Appointment Page	77
4.6	Input type for Staff View Appointment Page	77
4.7	Staff Manage Doctor Page	78
4.8	Input type for Staff Add Doctor Page	79
4.9	Input type for Staff Add Doctor Roster	80
4.10	Data Dictionary for table PMS_PATIENT_BIODATA	83
4.11	Data Dictionary for table PMS_APPOINTMENT_LIST	85

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4.12	Data Dictionary for table PMS_DUTY_ROSTER	86
4.13	Data Dictionary for table PMS_DOCTORINFORMATION	87
5.1	Version Procedure Control of Clinical Support System	42
5.2	Implementation Status of PAS	44
6.1	Overview of Test Organization	46
6.2	Overview of Test Environment	47
6.3	Overview of Test Schedule	49
6.4	Overview of Test Cases for PAS	101
6.5	Test Result and User satisfaction of PAS	112

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LIST OF FIGURES

FIGURE	TITLE	PAGE
2.1	OOAD Phases	12
2.2	Milestones for PMS	58
3.1	Activity diagram of current manual system	17
3.2	Global view of PAS Use Case	20
4.1	System architecture of PAS	38
4.2	Navigation Design	29
4.3	Relation between appointment table and doctor table	30
4.4	Relation between appointment table and patient	31
4.5	Relation between duty roster table and doctor table	32
4.6	Overview of Patient Management System High-Level Class Diagram	67
4.7	Sequence diagram of register new patient	68
4.8	Sequence diagram of patient page	69
4.9	Sequence diagram of staff page	70
4.10	Login page	71
4.11	Register Page	72
4.12	Personal Information Page	73
4.13	Patient Appointment Page	75

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4.14	Staff Appointment Page	76
4.15	Staff View Appointment Page	77
4.16	Staff Manage Doctor Page	78
4.17	Staff Add Doctor Page	79
4.18	Staff Add Doctor Roster	80
4.19	Retrieve data from database	81
4.20	Error Message	81
4.21	Key in PMI No or IC or ID No before search	82
6.1	Testing Environment of Developer	48
6.2	Testing Environment of Tester	48

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CHAPTER I

INTRODUCTION

1.1 Project Background

The Patient Appointment and Scheduling System (PAS) are used by the nurse or staff and patient. This system can be view by the patient to set their appointment through homepage and SMS technology. The main objective of this system is to ease the patient to make an appointment with queue long time at clinic. They can easily make their appointment at home or other place with internet access or hand phone. Nurses also can use this system at clinic by make an appointment for the patient that come to counter. The patient also can cancel the appointment by homepage or using SMS.

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1.2 Problem Statement

The main problem that patient meet when make an appointment

i. Time consuming to make an appointment

For current time, patients need to wait for a long queue at clinic to make an appointment to get doctor's consultation. It is wasting patient's time and they sometime can't make the appointment or the date of appointment is quite long time.

ii. Lack of efficiency to make an appointment

For the current system, patients only can get consultation from doctor after they make appointment at the counter clinic. Sometime, they need to travel far away for make an appointment only.

iii. The quota of appointment may full

The patient might unable to get doctor consultation from doctor because the quota for appointment is limited although they come from far place.

iv. Cannot make appointment with the specific doctor

The patient cannot get the consultation from the same doctor who they meet before. They don't know whether the particular doctor is free or not.

v. Lack of effectively to make an appointment

For current time, the staff or nurse still using manual system that is by using pen and paper to make an appointment. These works are burden for them.

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1.3 Objective

The objectives for this system are as follows

i. Replace the current system

This PAS will replace the current manual system which only using pen and paper to do the scheduling for appointment in front of counter. Sometime, the slip of appointment that gives to patient will miss. This make burden for the nurse or staff to find the schedule or appointment that already made.

ii. Ease the management of clinic regarding the appointment and scheduling

The flow of making an appointment will become easier after using this PAS. The patient will easily know when or which doctors are available by simply click a few button only.

iii. Enable patients diagnose by doctor in short time.

Through PAS, the patients are able to get consultation from the doctor in short time. They no need to waste time in making appointment but they can't diagnose by the doctor in short time. The patients need to wait a few days after making an appointment.

iv. To ease the appointment in receive the sms or request through homepage.

The patients are able to send request through sms, homepage and walk in to make an appointment. This will reduce patient's burden become there are many type of method to make an appointment. By the way, this also can save patient's time.

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1.4 Scope

1.4.1 Modules

i. Maintain Resources

This module is to manage or maintain the resources of the clinic that is the doctor in charge, assign ward, date working and others.

ii. Maintain Schedule

This module is to handle appointments for patient. Patient can select the available timeslot of particular doctor in the hospital to make appointment reservation.

iii. Make Appointment

This module is to make the appointment by the patient through homepage and walk-in. The nurse or staffs are also available to do this function after login to the system.

iv. Cancel Appointment

This module is to cancel the appointments that are already made.

v. SMS Appointment

This module is to ease the patient to do an appointment through sms. The patient doesn't need to walk into clinic from far place to make an appointment. They just need to send a simple message and the staff in charge will arrange the appointment for them.

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1.4.2 Target User

The target users for PAS are as follows:

i. Nurse

ii. Patient

1.5 Project significance

From this Patient Appointment and Scheduling System (PAS), nurse and staff can reduce their burden by managing the schedule and appointment by using pen and paper. The systems are also able to avoid long queue by patients at counter hospital.

By developing PAS, patient can easily make an appointment through three different methods that are by homepage website, SMS and also walk-in to counter. This might reduce patient's time because they can avoid long queue in front of the counter hospital. Patient can check and select the specific or available doctor through this system and make appointment.

1.6 Expected Output

The expected output from developing this system is to ease the process of making appointment whether from nurse or staffs and patients. Hopefully both of the users can gain benefit from this system. The documentation will be produced together with the system.

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1.7 Conclusion

In general, Chapter I briefly describe the introduction overview which includes of background, problem statements, objective, scope, significance of study and expected output of Patient Appointment and Scheduling System (PAS).

The following chapter will be discussing based on project methodology that used to develop the system. The milestones for develop the system will also be done by following of software requirement and hardware requirement. Some analyses need to do such as literature review and some current existing system.

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CHAPTER II

LITERATURE REVIEW AND PROJECT METHODOLOGY

2.1 Introduction

In this chapter, literature review will be discussing based on current and past research relate to the Patient Appointment System such as Google Calendar, Microsoft Outlook and other Patient Appointment System.

The main objective for conducted the literature review is to find the best solution and approach in developing an appointment system. The literature review will be referring to some research paper, article and also thesis papers.

The project methodology also will be discussing through this chapter. Project methodology will cover the details explanation of methodology that is being used to make this project complete and function well. The method that used is to achieve the objective of the particular project that accomplishes us a perfect result.

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