

STUDENT - LECTURER APPOINTMENT MANAGEMENT SYSTEM

NOR AZRINA BINTI ABDOL AZIZ

Faculty of Computer Systems & Software Engineering

UNIVERSITI MALAYSIA PAHANG



SUPERVISOR'S DECLARATION

I hereby declare that I have checked this project and in my opinion, this project is adequate in terms of scope and quality for the award of the degree of Bachelor of Computer Science (Software Engineering)

A handwritten signature in black ink, appearing to be 'Rosdiana', is written over a horizontal line.

(Signature)


Full Name : Dr. Rosdiana Binti Shahril

Date : 11/12/2018



STUDENT'S DECLARATION

I hereby declare that the work in this thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at Universiti Malaysia Pahang or any other institutions.


(Signature)

Full Name : NOR AZRINA BINTI ABDOL AZIZ

ID Number : CB15095

Date : 11/12/2018

STUDENT-LECTURER APPOINTMENT MANAGEMENT SYSTEM

NOR AZRINA BINTI ABDOL AZIZ

Thesis submitted in fulfillment of the requirements
for the award of the Degree of
Computer Science

Faculty of Computer Systems & Software Engineering
UNIVERSITI MALAYSIA PAHANG

DECEMBER 2018

ACKNOWLEDGEMENTS

First and foremost, it is a great pleasure to complete this report. I would like to express my sincere gratitude to my Supervisor, Madam Rosdiana for the extraordinary effort in providing the guidance and support for successful completion of this project.

Secondly, I would like to thanks to all my friends who always help me from the very beginning to the end of my project. I also want to thank to my mother who always support me and always be by my side.

Lastly, I would like to express my gratitude to Universiti Malaysia Pahang who gave me opportunity to gain my knowledge and finish my project.

ABSTRACT

In this era, technology is very important to ease the human matter. An efficient appointment management system can provide better services for user. Unfortunately, the usage of this system for student and lecturer is not provided in Universiti Malaysia Pahang (UMP). It is because whenever students want to make an appointment with lecturer, they still need to message, email, whatsapp or even need to go to the lecturer's room to make an appointment. This project, named Student-Lecturer Appointment Management System (SLAMS) is aimed to computerize the system including all information about the appointment for lecturer and student. Throughout studies and investigation were conducted on the current manual process and similar or related management system through the internet to expand the understanding of the implementation of the computerized system on appointment. To develop SLAMS, the methodology used is Rapid Application Development (RAD) and the language used is PHP and SQL as the database for the system. This thesis provided an explanation of the background study on the system, the methodology used, system analysis, system design and system development of the system.

ABSTRAK

Di era ini, teknologi sangat penting untuk memudahkan urusan manusia. Sistem pengurusan temujanji yang cekap dapat memberikan perkhidmatan yang lebih baik kepada pengguna. Malangnya, penggunaan sistem ini untuk pelajar dan pensyarah tidak disediakan di Universiti Malaysia Pahang (UMP). Ini kerana apabila pelajar ingin membuat temu janji dengan pensyarah, mereka masih perlu mesej, e-mel, WhatsApp atau bahkan perlu pergi ke bilik pensyarah untuk membuat temujanji. Projek ini, yang dinamakan Sistem Pengurusan temujanji Pelajar-Pensyarah (SLAMS) bertujuan untuk mengkomputerkan sistem termasuk semua maklumat mengenai temujanji untuk pensyarah dan pelajar. Sepanjang kajian dan penyiasatan dijalankan pada proses manual terkini dan sistem pengurusan sejenis atau yang berkaitan melalui internet untuk mengembangkan pemahaman pelaksanaan sistem komputerisasi mengenai temujanji. Untuk membangunkan SLAMS, metodologi yang digunakan adalah Rapid Application Development (RAD) dan bahasa yang digunakan ialah PHP dan SQL sebagai pangkalan data untuk sistem. Tesis ini memberi penjelasan mengenai kajian latar belakang sistem, metodologi yang digunakan, analisis sistem, reka bentuk sistem dan sistem pembangunan sistem.

TABLE OF CONTENT

DECLARATION		
TITLE PAGE		
ACKNOWLEDGEMENTS	ii	
ABSTRACT	iii	
ABSTRAK	iv	
TABLE OF CONTENT	v-vii	
LIST OF TABLES	viii	
LIST OF FIGURES	ix-x	
LIST OF ABBREVIATIONS	xi	
CHAPTER 1 INTRODUCTION		
1.1	Background of Study	1
1.2	Problem Statement	2
1.3	Objective	2
1.4	Scope	3-4
1.5	Significance	5
1.6	Thesis Organization	5-6
CHAPTER 2 LITERATURE REVIEW		
2.1	Introduction	7
2.2	Existing System	7
2.2.1	Institut Jantung Negara (IJN) Appointment Booking system	7-9
2.2.2	Prudential Bank Simpanan Nasional (Bsn) Takaful Appointment System	10-12
2.2.3	E-Kaunseling Universiti Malaysia Pahang (UMP)	12-14
2.2.4	5d 6d Scan Malaysia Appointment System	14-16

2.3	Comparing The Existing Technologies	16-18
-----	-------------------------------------	-------

CHAPTER 3 METHODOLOGY

3.1	Introduction	19
3.2	Methodology	19-20
3.2.1	Requirement Planning	20-22
3.2.2	User Design	22
3.2.3	Construction	22
3.2.4	Cutover	23
3.2.5	General Architecture	23-24
3.2.6	Package Module	24
3.2.6	Software Requirement Specification (SRS)	24
3.2.7	Software Design Document (SDD)	25
3.3	Hardware And Software Requirement	25-26
3.4	Gantt Chart	26

CHAPTER 4 IMPLEMENTATION, TESTING AND RESULT DISCUSSION

4.1	Introduction	27
4.2	Implementation	27
4.2.1	Development Environment	27

4.3	Testing And Result Discussion	29-30
4.4	User Manual	30
CHAPTER 5 CONCLUSION AND FUTURE WORK		
5.1	Introduction	31
5.2	Research Constraint	31
5.3	Future Work	32
	REFERENCES	33
	APPENDICES	
	APPENDIX A SOFTWARE REQUIREMENT SYSTEM (SRS)	35-69
	APPENDIX B SOFTWARE DESIGN DEVELOPMENT (SDD)	70-89
	APPENDIX C GANTT CHART	90-91
	APPENDIX D USER ACCEPTANCE TEST (UAT)	92-102
	APPENDIX E USER MANUAL	103

LIST OF TABLES

Table 2.1	Advantages and Disadvantages of Existing Technologies	16-18
Table 3.1	Hardware Requirement	25
Table 3.2	Software Requirement	26

LIST OF FIGURES

Figure 2.1	Main interface of Institut Jantung Negara (IJN) website	8
Figure 2.2	First interface of IJN Appointment Booking System	8
Figure 2.3	Second interface of IJN Appointment Booking System	9
Figure 2.4	Main interface of Prudential BSN Takaful website	10
Figure 2.5	Prudential BSN Takaful Appointment System(using call)	11
Figure 2.6	Prudential BSN Takaful Appointment System	11
Figure 2.7	Main interface of E-Kaunseling Universiti Malaysia Pahang (UMP)	12
Figure 2.8	Interface of set appointment for E-Kaunseling Universiti Malaysia Pahang (UMP)	13
Figure 2.9	Interface of submit issue for E-Kaunseling Universiti Malaysia Pahang (UMP)	13
Figure 2.10	Main page of 5D 6D Scan Malaysia Appointment System	14
Figure 2.11	First interface of 5D 6D Scan Malaysia Appointment System	15
Figure 2.12	Second interface of 5D 6D Scan Malaysia Appointment System	16
Figure 3.1	Rapid Application Development Model	19
Figure 3.2	Context Diagram for Student-Lecturer Appointment Management System	21
Figure 3.3	Use Case Diagram For Student-Lecturer Appointment Management System	22
Figure 3.4	General Architecture of Student-Lecturer Appointment Management System	23
Figure 3.5	Package Module of Student-Lecturer Appointment Management System	24
Figure 4.1	XAMPP Control Panel	28
Figure 4.2	Environment of PhpMyAdmin	28

Figure 4.3	Database query for SLAMS	29
Figure 4.4	Sublime Environment Interface	29

LIST OF ABBREVIATIONS

SLAMS	Student – Lecturer Appointment Management System
RAD	Rapid Application Development
SQL	Structured Query Language

CHAPTER 1

INTRODUCTION

1.1 Background of Study

Nowadays technology is a crucial thing in this world. Everything was involving technology. In University Malaysia Pahang (UMP), there is an appointment system that used among the lecturers for their meeting. Unfortunately, the system for students to make an appointment with their lecturers still not available. Until now, students still use the manual way to make an appointment with the lecturers.

Before this, every time when student want to make an appointment with the lecturer, they need to contact the lecturer either by message or email. Unfortunately, not every lecturer put their phone number or current number in the UMP's E- community. So, it's really hard to reach the lecturers. Student- Lecturer Appointment Management System (SLAMS) is being developed to help student make an appointment with the lecturer.

SLAMS is an online web-based system and will be created using PHP with Yii Framework 2.0. It is also used Apache web server. The target users for this system are lecturers and students. The purpose of this system is to help student to make an appointment with the lecturer through online system. SLAMS allow students to interact with the lecturers through web.

In this system, the lecturers can set the availability time for student to meet them and lecturers can set their status such as "meeting", "on leave" and so on. So students who want to make an appointment with the lecturer will choose the available time and approve for an appointment. The lecturer needs to approve or reject the appointment and the status will be sent to the student.

1.2 Problem Statement

There are so many problem faced by students and lecturers by using the manual ways to make an appointment. This happen when students want to meet the lecturers and make an appointment with the lecturers.

The first problem is the lecturer is difficult to be found. It is because the students do not know the lecturer's schedule. It is very difficult to find them when lecturer do not in their room. It is hard for student to meet the lecturers especially when something urgent or really important to be discussed.

The second problem is the students do not know the lecturer's phone number and email. Students do not know the lecturer's contact number or email because sometimes the lecturers only give an office number to the students and some of the lecturers do not update their phone number at UMP's E-Community system. So Students cannot reached the lecturers because do not have the contact numbers.

The third problem statement is students do not know the lecturer's available time. Students do not know whether the lecturer on leave, meeting or have a workshop. Students need to go to the lecturer's room and find the lecturers. It took time because sometimes the lecturer does not in their room and not even leaves the memo. So, students need to go to the lecturer's room many times to find the lecturers.

1.3 Objective

The objectives for this system are:

- I. To investigate the requirement on systematic student-lecturer appointment process.
- II. To develop the Student-Lecturer Appointment Management System (SLAMS).
- III. To test the functionality of Student- Lecturer Management System (SLAMS).

1.4 Scope

The system's scopes are as below:

- I. This system is a web based system and need an internet connection to be use.
- II. This user of this system are :-
 - i. Student
 - Student can make an appointment with the lecturer.
 - Student can view the appointment whether it has been approved or reject by the lecturer.
 - Student can direct message the lecturer.
 - ii. Lecturer
 - Lecturer can check the appointment made by the student to her/him.
 - Lecturer need to give approval either approve or reject to the appointment made by student
 - Lecturer can set the availability of their time.
 - Lecturer can direct message the student.
 - iii. Administrator

REFERENCES

1. Kai Hare, J. M. (2000). Web based risk management system and method.
2. Mackay, H., Carne, C., Baynon-Davies, P., & Tudhope, D. (2000). Reconfiguring the User: Using Rapid Application Development. *Social Studies of Science*.
3. P Beynon-Davies, C. C. (1999). Rapid application development (RAD): an empirical review. *European Journal of Information Systems*, 8(3), 211-223.
4. Richard A. Rasansky, L. E. (1998). Scheduling system for use between users on the web.
5. Yao, C. W. (2012). *Web-based Appointment System for Lecturer and Student*. Universiti Teknologi Malaysia.
6. Beynon-Davies, P., Carne, C., Mackay, H., & Tudhope, D. (1999). Rapid application development (RAD): An empirical review. *European Journal of Information Systems*, 8(3), 211-223. doi:10.1057/palgrave.ejis.3000325
7. Vidgen, R. (2002). Constructing a web information system development methodology. *Information Systems Journal*, 12(3), 247-261. doi:10.1046/j.1365-2575.2002.00129.x
8. M. N., S. H., & H. H. (2009). WebML and .NET architecture for developing students appointment management system. *Journal of Applied Sciences*, 9(8), 1432-1440. Retrieved from <http://www.docsdrive.com/pdfs/ansinet/jas/2009/1432-1440.pdf>