

ONLINE FINAL YEAR PROJECT TITLE BOOKING SYSTEM

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Honours**

**FAKULTI KEJURUTERAAN ELEKTRONIK DAN KEJURUTERAAN
KOMPUTER
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ABSTRACT

This project is very useful system for the Faculty of Electronics and Computer Engineering (FKEKK), UTeM. The project title is Online Final Year Project Title Booking System. The system was developed to guide the faculty lectures and students. This system manage is the systematic application that make the registration of final year project using online. Users easy to manage and save more time by wasting time finding each lectures who available and confirm the FYP title. The methods that use in developing this system by using PHP programming language. This system also helps to improve final year project registration compared to the traditional methods and minimize the usage of paper.

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CHAPTER 1

INTRODUCTION

1.1 Introduction of Project

Online Final Year Project Booking System is mainly designed for lectures and student in FKEKK. The purpose of this project is to guide the faculty lecture and students who taking final year project in fourth year. The lectures need to add project title and the student need to choose and lectures will confirm their student. In the current situation the lectures and student are facing a lot of problems in a manual system. To ensure the problem solve, we decide to design this system that called Online Final Year Project Booking System. This project develops a system application, using database used for academic purposes. To manage is the systematic application that makes the registration of final year project using to communication. This system is using PHP programming language. The FKEKK lectures and final year students can use the web application anywhere and anytime. It will make them easier and save more time by wasting time finding each lecture who available and confirm the title.

1.2 Problem Background

Currently, the system is working manually. Normally, final year student registers their final year project subject via online before starting fourth year. Then the lecturers need to submit their titles to committee members of final year project management. After the procedure, the committee members will patch the list of titles in FKEKK board to the students. The student needs to choose the title at FKEKK board. After the students choose their project title, then the student needs to meet the lecture to confirm they are project title selection. Then the student needs to walk the lecture room from door to door to know whether the titles are still available or already taken by other students. The manual system is made hard and took a lot of time to lectures and students. The same time, students also pressure with choosing a project title and change title for final year project. It will make them wasting time finding each lecture who available and confirm the title.

1.3 Project Aim

The aim of this project is to make the lectures and students save their time. Beside that via this project we can less the usage of paper.

1.4 Objective Project

- The objective is the final results to be achieved. The main objective is to develop this system to improve follow with new counters.
- To design a new online system that's capable of handling final year project registration.
- To develop a database server using MYSQL that can communicate with the online final year registration system to store specific data from both lecturers and students.
- To verify and validate the efficiency of the application.

1.5 Scope of Project

This system has two scopes which are user and system.

1.5.1 User Scope

The scope of user is based on the user that will use who is a lecturer and student.

The scopes are described below.

a. Administrator

- Have privileges to add, update, and access system modules for lectures and student.
- Have privileges to add an announcement to lectures and students.
- Responsible storing data or full database backup and restore.

b. Lectures

- Have privilege to add a title, to accept student who had selected title and update project title.
- Have privileges to view announcement that post by admin.

c. Student

- Have privileges to view lectures name and titles.
- Have privileges to view announcement that post by admin.
- Responsible to make decisions for their final year project title.

1.5.2 System Scope

The system will automatically unlock the title, when the lecture selects the student the system will unlock the two titles that the student chose before. One student can select three titles before the lectures approve, after the lecture approve, the system will unlock the other two titles to other students.

1.6 Significance of the Study

The signification of the study is the proper registration of title backing of final year project interactive using Graphical User Interface by Adobe Dreamweaver 8. This could help the admin, lectures and students choose their final year project title by online.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

In order to complete this project, a literature review is needed. It has played an important role as the early phase in developing this project. This chapter will discuss the information from the website, and research that has been done. From the research in the internet, the literature review is meant a process and documentation of the current relevant research literature regarding a particular topic or subject of interest. In addition, it also consists the knowledge and how these elements related and combined with each other.

2.2 Manual System at FKEKK

Currently in FKEKK using the manual system to choose Final Year Project Title. In computer technology improvement department still using paper to choose and select Final Year Project Title.

2.2.1 List of Final Year Project Title

Before starting 4th year for final year students the lectures should provide their title. Each lecture need provide maximum four project title. The faculty lecture needs to do manual list and paste in faculty PSM main board.

UTeM
UNIVERSITI TEKNIKAL MALAYSIA MELAKA

Senarai tajuk projek tahun akhir Semester 1 Sesi 2013/2014 FKEKK

Pensyarah Jabatan Telekom

No	Nama Pensyarah	Tajuk Projek	Kecapaian pelajar (SEN)			
			T	R	A	U
	Nor Azlan Bin Mohd Aris Room No.: B3-8	Rural Virtual Probe Variability In Malaysia Based On Tropical Rural Measuring Meters Data	X	X		
		Development Of The Rural Visualization And Analysis System For Ruralside Propagation Application	X	X		X
		Impact Of Modulation To The Prediction Of 1-MHz Band Integrated Rate Rate Statistics From ITU-R Recommendation P.837-6	X	X		
1	Dr David Yap Room No.: A3-8	Low cost oxide power generation system	X	X	X	X
		Artificial Intelligence In Engineering Applications (Using AB)	X	X	X	X
		PHC based remotely operated underwater vehicle (ROV)	X	X	X	X
3	Hazura Binti Haron Room No.: B3-10	PCA/ANN-based PCA based optical image compression	X	X	X	X
		Analytical Modeling of Serially Cascaded Mirroring Resonator for Design and Optimization of Micro-Lattice Based optical filter	X	X		X
		Multi-channel WDM resonator based on single micro-ring resonator	X	X	X	X
4	Engr Norbayah Steff Yusop Room No.: B3-1	Design Parameter Investigation of Single Mode Silicon-Optical Isolator (SOI) Parallel Cascaded Mirroring Channel Dropping Filter	X	X		
		VLP receiver design for capturing freek observations for low cost system	X	X		
7	Zaharah Binti Manap Room No.: A3-11	OFDM detection using signal system	X	X	X	X
		Lighting characterization to not utilize from TRM analysis	X	X		
6	Taufiq Bin Hj Abdul Wahab Room No.: A2-15	Performance Evaluation of AQDN for mobile ad hoc networks using NS2	X	X		
		Performance Evaluation of DSDN for mobile ad hoc networks using NS2	X	X		
		Performance Evaluation of DSDN for mobile ad hoc networks using NS2	X	X		
		Performance Evaluation of LEACH protocol for wireless sensor networks using NS2	X	X		
8	Dr Abd Majid Darsono Room No.: A3-18	Coupled Optical Amplifier	X	X		
		Microcavity Photonic Crystals and Hyperparameters	X	X		
9	Mc Syafiqah Binti Md Isah Room No.: A3-18	Analogous Optical Fibre Audio Video Transmission System	X	X		
		Analogous Optical Fibre Audio Video Transmission System	X	X		
		Development of audio source separation using independent component analysis	X	X		X
10	Dr Muzakki Binti Abu Room No.: A3-18	Development of speech recognition system for keywords recognition	X	X		X
		Automated User Registration System using Neural Network	X	X		X
		Feature extraction of data using discriminative matrix factorization	X	X		X
11	Dr Muzakki Binti Abu Room No.: A3-18	Monitoring system for router's security in wireless communication	X	X		X
		Portable wireless IP/DG light system	X	X		X
		Derivative Harmony Search Algorithm based Genetic Algorithm for Coverage in WSN Networks	X	X		X
12	Dr Muzakki Binti Abu Room No.: A3-18	Optimal prediction of light system	X	X		X
		Photonic Thermocouple Efficiency Improvement Using Antenna Magnetic Conductors	X	X		X
		Comparison Between Electromagnetic Bandgap Antenna Absorption	X	X		X

Figure 2.1: List of Final Year Project Title

Figure 2.1 shows the sample of the list of final year project title. After the lecture post the project title the students need to check by manually.

2.3 Previous Projects

2.3.1 E. Shafie, Al-Ajlan, K. Bajahzar and Y. Al-Saawy Software Technology, “Online Registration System”, Research Laboratory (STRL), 2011. [7]

This paper discussed about the educational process, such as developing good study plans and the efficiency of teachers and others. This system developed for academic purposes to control and save student attendance data. The main three types of users can use this system is instructive, students and administration. Three main types of users can have different options to use the system. The student access the application to show his/her school timetable and history of attendance or other module activities. The instructor can use the system to register the student attendance and to show the student's attendance history. The same time the instructor has a choice to update the student attendance. The system administrator controls the system by managing (add, delete, update) student, module, instructor and program data.

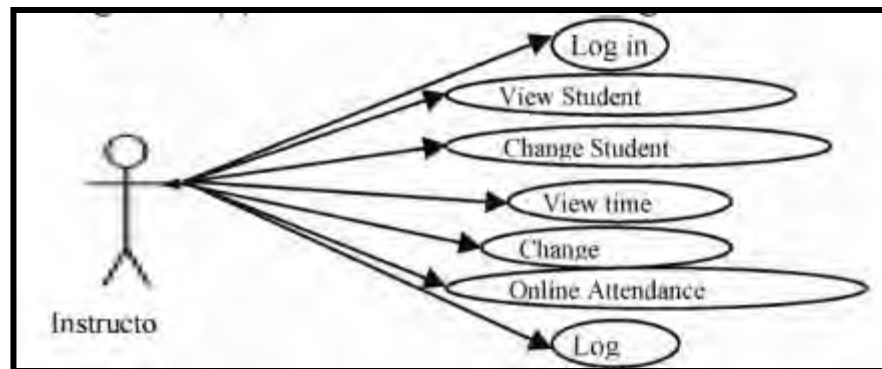


Figure 2.3: Use Case Diagram of Instructor

This figure 2.3 has had seven use cases allocated for instructional users, which are login, logout, view time table, view student attendance, online attendance register, change student attendance and change password.

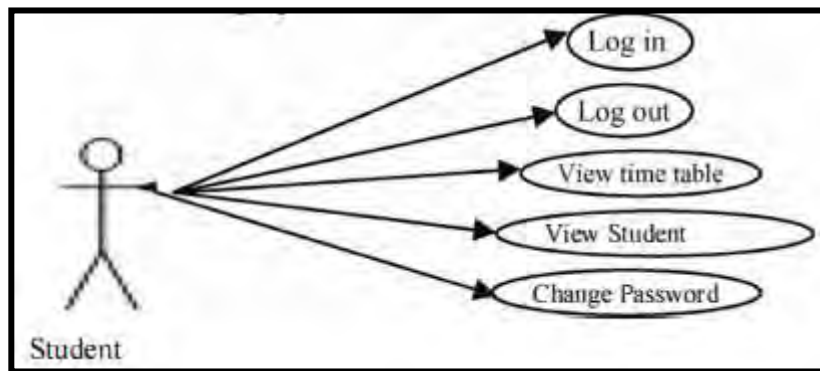


Figure 2.4: Use Case Diagram of Student

Figure 2.4 is five use cases allocated for student users, which are login, logout, view time table, view attendance history and change password. The administrator use case has been prioritized to make sure that the use cases with the higher priority will be implemented. All other lower priority use cases are less related to the attendance system and have actually been developed before. The two figures requirements are always used to determine the functions of the system or the components of these functions.

It could be processing data, calculations, organizing instruction or other things needed to be done by the system regarding user requirements. So, in this system, there are some functions determined which are registered and update student attendance by instructors. Then the system shows the timetable for students and instructors. Its produce some statistics for students about their attendance and the manage system also logins. This figure shows the different types of data depending on the users access rights.

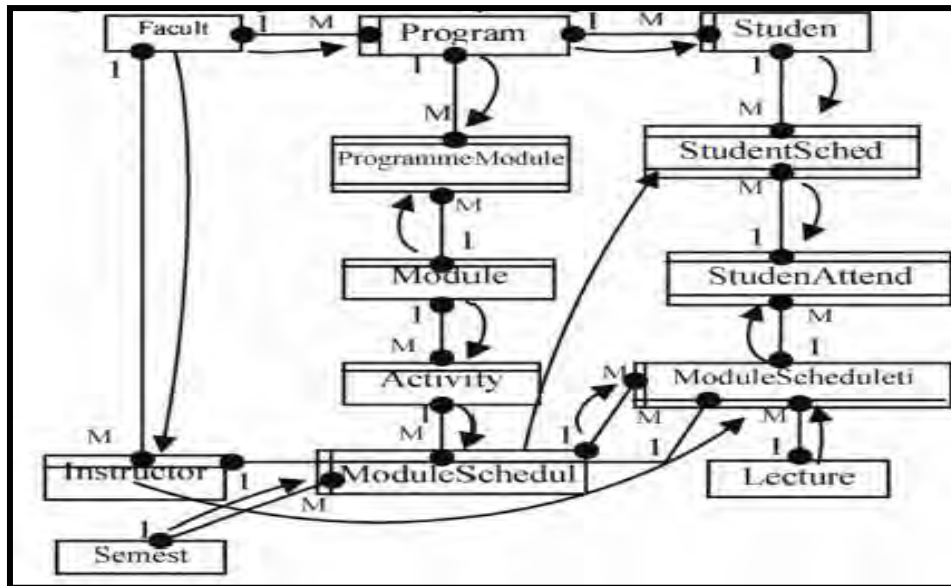


Figure 2.5: Entity Relationship Diagram

Figure 2.5 shows the preferred flow system before system running. This system files with other system components saved in C:\j3t\webappfolder\WEBINF\JSP folder and the same time all jsp files should be defined in router file. But the tomcat server configuration with MYSQL database by modifying the web.xml file. Tomcat configuration is by editing web.xml to define the servlet mapping (router). The same time also to define the database connection and the database used by running tomcat serve and mysql database engine.

The system database is prepared to save the data will sort in sequence variable (loop). The loop defines the variable, whereas each row in the table has id used to determine other variable in the same row. Every code above used the loop to process all parameters from the submitted page, then used as key to another parameter. Then the data will be stored in the database.

Finally the design and develop a user-friendly online registration system for the academic usage, which would allow students to tick their attendance through online academic login procedure, assists instructors to keep track of student attendances and allows administrators to keep track of student records.

2.3.2 Aliza Bt. Salon, Wan Fatimah Bt Wan Ahmad, “Student Industrial Internship: Web Portal”, Dismas Bismo Universiti Teknologi PETRONAS,2008. [5]

The Student Industrial Web Portal is developed to automate the current manual business process. This portal allows internship eligibility checking, registration, student-lecturer assignment, visit schedule, online-logbook submission and monitoring as well as a grade book of industrial internship. This system using the PHP 5, Easy PHP 2.0, Macromedia Dreamweaver MX 2004, MySQL Database and Apache Web Serve. The phased development model used in the development process by applying business process improvement technique. The prototype can be used as a communication medium for all parties involved during the industrial internship program. The system can be easily used as an aid for the internship program.

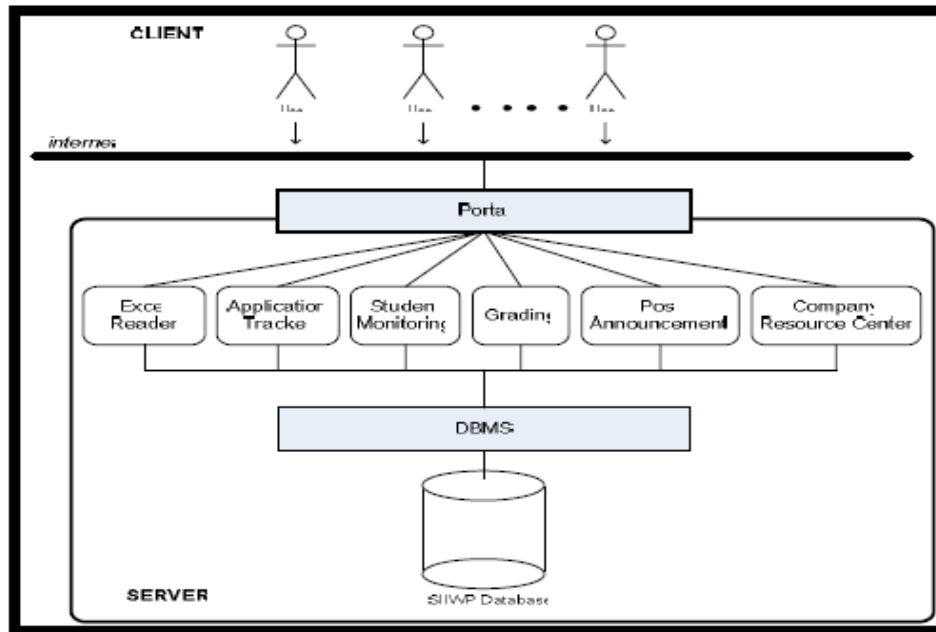


Figure 2.6: System Architecture

The SIIWP system architecture adopts the combination of data-centered and client-server architectural model. A client-server system modal is associated server(s) and organized as a set of services and clients that access and use the services. The system architecture is as a server itself or one of the servers (s), contains a database where data are stored, thus it adopts data centered architecture.

As SIIWP meets all functional and nonfunctional requirements and built specifically on top of a well-studied and improved SIIU business process match closely to users' expectations. Then the same time SIIWP also able to solve the distant learning problem in SIIP. The implementation of SIIWP can help SIIU to ensure the success of SIIP by providing optimal and high quality service. The same time, the new system is may be able to become a central internship and job resource central for UTP students.

2.3.1 Carl's Restaurant Delivery Online System by Farah Nabila Bt Md Nawi (source from his final year project report), Universiti Teknikal Malaysia, Melaka.[4]

Carl's system improves with the current system because the current system doesn't provide online ordering. When starting to order the customer need to call customer service to make their order. The current system makes problems for staffs to handle all customers, especially during the promotion time. The project is to provide an online ordering system.

The system is important to all users is admin, staff and customer for Carl's Restaurant to control and handle delivery order online. This system use hardware is laptop, printer, and using software its Window 7, Adobe Dreamweaver and MySQL.

This system is very important to customer knows the status order and customer also can add the other order anytime at the same day. The customer knows the status total price order to control their order according their budget.

CHAPTER 3

METHODOLOGY

Methodology is the key to succeeding in finishing a project within time and being able to satisfy the user's requirements. It is also a description of the selected approach that will be used when developing the project. Every step in the selected methodology will be used.

3.1 Reviews of Project Methodology

The process of the whole project has to be sketched properly in earlier stage so that the project is assured to be on the right route towards the defined objectives. Methodology is the key to succeeding in finishing a project within time and being able to satisfy the user's requirements. It is also a description of the selected approach that will be used when developing the project. Every step in the selected methodology will be used. As a summary, the methodology of this project will include the brief introduction of the project title and objectives, a flow chart of project progress, a Gantt's Chart of the planned progress.

3.2 Project Implementation

This chapter reveals the proposed method of implementing the project. Of this project consists of two main parts, the methodology discussion would be separated with respect to each part. The important on this is systematic planning and implementation in order to complete system on time.

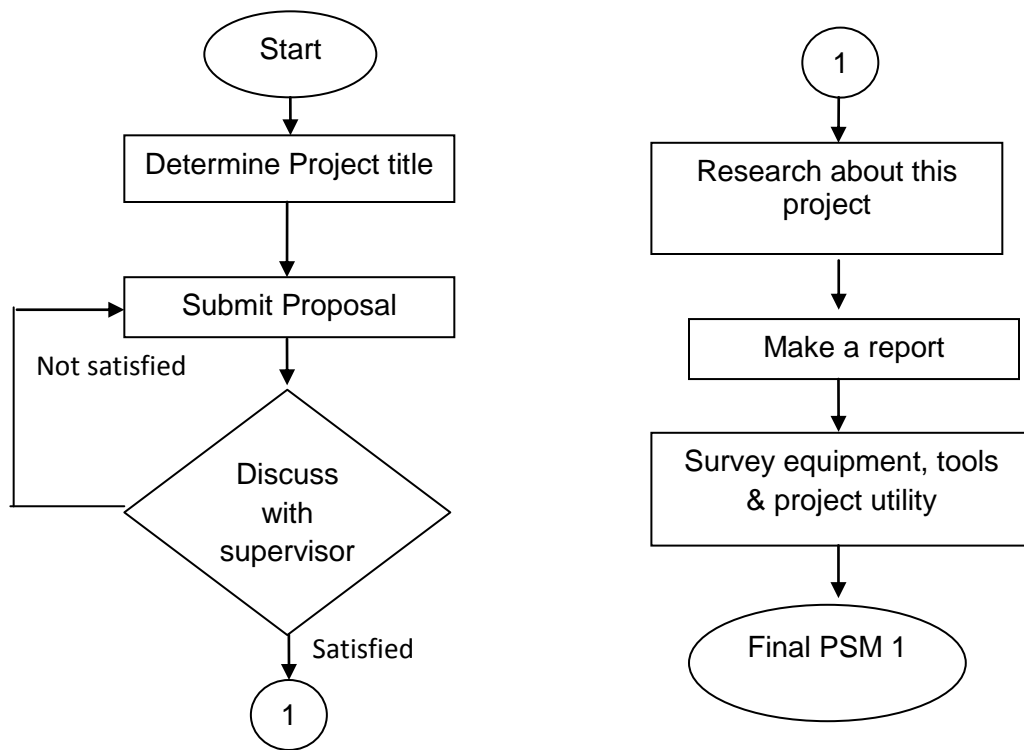


Figure 3.1 Flow Chart for PSM1

The explanation for the elements in figure 3.1 is shown below:

- Choose the title of the final year project. The idea must be related with the problem statement, objective and scope of the project.
- Presented about the project idea to supervisor. Then had selected two titles and proposed to supervise for giving ideas regarding the title.
- Submit the detailed project proposal. The proposal submitted and evaluates by a supervisor and need to make corrections to improve on the proposal.
- To understand the design of project and find some similar web application in internet. For the additional information could be accessed from the internet, journal, reference books, supervisor guidance and etc.
- Next, start to do a report about this project. The report should include with three chapters, its introduction, literature review, methodology and expected result of this project.
- Then, the report proceeds to be evaluated from the supervisor and panels based on the performances of the students and perception of the projection.