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JUDUL: FTMK LECTURER'S APPOINTMENT SYSTEM (FLAS)

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FTMK LECTURER'S APPOINTMENT SYSTEM (FLAS)

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This report is submitted in partial fulfillment of the requirements for the
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UNIVERSITI TEKNIKAL MALAYSIA MELAKA
2008

DECLARATION

I hereby declare that this project report entitled

FTMK LECTURER'S APPOINTMENT SYSTEM (FLAS)

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

STUDENT : _____ Date : 19 JUNE 2008
(NORAHAYU BINTI MOHD RAMLY)

SUPERVISOR : _____ Date : 19/06/2008
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DEDICATION

To my father and mother,

Mohd Ramly bin Mat Yah and Norhariah Bt. Abdul Talib.

To my sister,

Noratikah Bt. Mohd Ramly.

Who inspired me with their love of learning, supporting and teaching.

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ABSTRACT

The title of Projek Sarjana Muda 1 (PSM 1) is *"FTMK Lecturer's Appointment System"* that will be developed to Faculty of Information and Communication Technology (FTMK). The main objective of the development of this system is to overcome the problems exist in the current manual system. The medium for this system is the Internet so students can access the system wherever they are as long as there is Internet connection. This system will be developed as a web-based platform and will be created using server side scripting such as PHP with Apache Web Server, user side scripting such as HTML and MYSQL as a database for the system. The target users of this system are students, lecturers and administrator. Generally, this system explanation about background project, methodology that will be used, how the analysis executed, design of database and interface, implementation and testing of system. The online system becomes systematic and also regular missing data. Besides, extra features in the system such as security protection by using password.

ABSTRAK

Tajuk Projek Sarjana Muda 1 (PSM 1) ialah *"FTMK Lecturer's Appointment System"* yang dibangunkan untuk Fakulti Teknologi Maklumat dan Komunikasi (FTMK). Objektif utama membangunkan aplikasi ini adalah untuk mengatasi masalah yang dihadapi oleh sistem manual sedia ada. Medium perantaraan untuk sistem ini adalah talian Internet bagi membolehkan pelajar-pelajar melayari sistem ini di mana sahaja mereka berada selagi terdapatnya talian Internet. Sistem ini dibangunkan berlandaskan web dan dihasilkan menggunakan bahasa pengaturcaraan web seperti PHP, HTML dan MYSQL sebagai pangkalan data untuk sistem ini. Sasaran pengguna sistem ini terdiri daripada pelajar, pensyarah dan pentadbir sistem. Secara keseluruhannya, sistem ini menerangkan latarbelakang projek, metodologi yang digunakan, bagaimana analisis dilaksanakan, rekabentuk pangkalan data dan antaramuka, perlaksanaan dan seterusnya melaksanakan pengujian kepada sistem tersebut. Sistem yang berasaskan komputer lebih sistematik dan teratur serta mengelakkan kehilangan data. Selain dari itu, fungsi-fungsi tambahan yang ada pada sistem seperti penggunaan katalaluan sebagai langkah keselamatan.

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LIST OF ABBREVIATIONS

FLAS – FTMK Lecturer's Appointment System

ERD – Entity Relationship Diagram

DFD – Data Flow Diagram

FTMK – Faculty of Information and Communication Technology

PHP – Hypertext Preprocessor

HTML – Hypertext Markup Language

MySQL - Multi-user, SQL (Structured Query Language)

CHAPTER I

INTRODUCTION

1.1 Project Background

FTMK Lecturer's Appointment System (FLAS) is a proposed system for the Projek Sarjana Muda (PSM) that allows students to book appointment with their lecturers in order to reduce difficulties between students and lecturers. The medium for this system is the Internet so students can access the system wherever they are as long as there is Internet connection.

This system will be developed as a web-based platform and will be created using server side scripting such as PHP with Apache Web Server, user side scripting such as HTML and MYSQL as a database for the system.

The target users of this project are students, lecturers and administrator. The system is develop to help students makes an appointment online with lecturer that they want to meet depends on the lecturer's timetable. Only students who had registered can use this system. User must login before use this system.

In this system the lecturer must always update new information in their timetable so that the students will know about new information of the lecturer whether the lecturer is on leave or have a meeting. Students can check the timetable of the lecturer before going to meet the lecturer. The task of administrator is to register the new user, edit or delete the information of the users. Other than that,

administrator also can add/edit latest news or information about faculty or other related news about Information Technology.

The main purpose of FTMK Lecturer's Appointment System (FLAS) is to provide more easy and convenient way of booking appointment and to propose new way of data management and data processing. The main task for the system is to process all the data and provide a good result.

1.2 Problem Statement

Generally, process of making appointment or booking consultation hour between lecturers and students still using manual way. This system is develop to solve the list of following problems :

i) Students difficult to meet lecturers

There are many situations that students did not find lecturers in their room even that lecturer was in consultation hour. Sometimes the lecturers did not write a notice or announce if they have meeting or other important things. Students also don't know lecturer's timetable and contact's number.

ii) Difficult to manage appointment records

From manual system, appointment record of students just only kept in lecturer's notebook. With this proposed system, record of appointment time will be store more systematic and regular that means the lecturer did not worry about losing their notebook. This system will remind the lecturers and students about their appointment.

iii) Apply appointment with lecturers manually

The process to apply or booking appointment with lecturers is still manually. Students need to meet lecturer and request to get permission in order to have an appointment with him/her. If he/she not available in their

room, the student must leave the note to the lecturer or come again to meet the lecturer. It is difficult because the students require spending a lots of time and have to come at lecturer's room for many times Thus, an expert system is needed to reduce waiting time for the lecturers. Students may know the status of the lecturer before going to meet them.

1.3 Objective

In order to ensure that the system will develop smoothly, many objectives had been stated. Objectives of this project are :

- To build a system that has function that can help user manage booking application.
- To build the system with provides user level and security level and manage the certain process with the authorization. The system was complete with the password because some of the data may contain sensitive data and private information.
- To develop computerized lecturer's appointment system that can replace manual system.

1.4 Scope

FLAS is developed based on FTMK lecturer's daily routine to ease the user in managing their task. This part defines the limitations, functionality and target users of the system. The scope of the system is as following :

- Target User
  - The target user of the system is committee members in FTMK who had registered such as lecturers, students and administrator.

- Functionality
  i) Provide user authentication for data security purpose.
  ii) Record users information, schedule information and appointment information.

- Type of System
  - FTMK Lecturer's Appointment System (FLAS) is a web-based system that develop with the properties of custom made software product.

1.5 Project Significance

FLAS is a web-based system that will give a lot of benefit to users and system administrator. The system consists of databases that keep information about lecturer's information, student's information and appointment information. This system will help to reduce time consuming that occurs in daily routine when using manual way.

The database is the most critical part of the system because it requires complex data handling, detail design of the database can help prevent duplicate data and easier for system administrator to maintain the database. Thus, it will reduce workload for administrator to manage and maintain the data in the database. This system also will display in a very user-friendly graphical user interface to ease the users to use the system.

1.6 Expected Output

At the end of the project development, FTMK Lecturer's Appointment System (FLAS) enables users to use computerized appointment system that provides several functions such as booking appointment, view the lecturer's schedule, view list of appointment and view application status.

1.7 Conclusion

The main idea of developing FTMK Lecturer's Appointment System (FLAS) is to improve the current manual system to make the process of making appointment become more manageable, effective, and efficient in order to reduce time consuming. It can bring a lot of benefits to students, lecturers and administrator.

The next activities will be developed is chapter II. This part will review the previous project and make a comparison with project that has been proposed. Besides that, this chapter also explains about the methodology that will be used in this project.

CHAPTER II

LITERATURE REVIEW AND PROJECT METHODOLOGY

2.1 Introduction

This chapter focuses about literature review and project methodology that will be used for developing this system. Literature review are searching, collecting, analyzing and drawing conclusion from all arguments raised in relevant body of literature. It is important to give the explanations of choosing the project. "According to Cooper (1988), a literature review uses as its database reports of primary or original scholarship, and does not report new primary scholarship itself".

Fact and finding will discuss and review about approach and related research, reference and other findings about this system. Besides that, it also states other approaches that will be used in this project by making comparison with previous approach.

2.2 Fact And Finding

There are some reasons that cause the development of the system to solve the existing problems. The sources for the finding in this topic can be found from internet, magazine and book. Then, the literature review can be complete through study, analysis and drawing conclusion from those sources.

2.2.1 Domain

FTMK Lecturer's Appointment System will be use by Faculty of Information and Communication Technology. This system is being developed based on online system that allows users to access through Internet. Other than that, this system will improve the way to make an appointment become more effective and manageable.

2.2.2 Existing System

i) Research for Methodology

Methodology is a collection of methods which apply to all phases of the software development life cycle. There are several types of model in software development life cycle such as Waterfall model, Spiral model, Prototyping model, Rapid Application Development model (RAD), Incremental Model, WINWIN Spiral model, Concurrent Development model, Component-based model and Formal Method model.

ii) Case Study

There are three systems has been used for the case study. Those are list as following :

- Health Campus Universiti Sains Malaysia Quality Bulletin Website Fixed Appointment System

This website is used by health campus of Universiti Sains Malaysia. The scope of implementation of the Fixed Appointment System is to include Nephrology, Cardiology and Hematology Clinics. According to Department of Health & Social Security Report, NHS, UK said that "*The Appointment System succeeded in reducing waiting times where doctors and staff were committed to the implementation of the system, and failed where they were not.*" .

The Cardiology Clinic is among the busiest clinics of HUSM managing approximately 500 patients each month. Cardiologist, Dr. Mohd. Sapawi Mohamed, took on the challenge of implementing the fixed appointment system at the Cardiology Clinic. His team reorganized systems and schedules to ensure clinics were manned and operated according to schedule. Results have been impressive. In August '06, 90% of patients who kept appointment time were seen within 1 hour of the appointment. Staff at the clinic have also benefited from the more orderly outpatient process.

The Nephrology Clinic, headed by AP Dr. Kamaliah herself, brought down waiting times of patients. In February '06, only 12% of patients were seen within 1 hour of appointment, while in the first month of implementation, June '06 this went up to 89%. The below graph is the graph that show statistics of patients see within one hour of appointment.