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JUDUL: E-PROPOSAL MANAGEMENT SYSTEM SESI PENGAJIAN: 2006/2007 Saya FARRA NUR HIDAYAH AHMAD mengaku membenarkan tesis (PSM/Sarjana/Doktor Falsafah) ini disimpan di Perpustakaan Fakulti Teknologi Maklumat dan Komunikasi dengan syarat-syarat kegunaan seperti berikut: 1. Tesis dan projek adalah hakmilik Kolej Universiti Teknikal Kebangsaan Malaysia. 2. Perpustakaan Fakulti Teknologi Maklumat dan Komunikasi dibenarkan membuat salinan untuk tujuan pengajian sahaja. 3. Perpustakaan Fakulti Teknologi Maklumat dan Komunikasi dibenarkan membuat salinan tesis ini sebagai bahan pertukaran antara institusi pengajian tinggi. 4. ** Sila tandakan (/) **SULIT** (Mengandungi maklumat yang berdarjah keselamatan atau kepentingan Malaysia seperti yang termaktub di dalam AKTA RAHSIA RASMI 1972) (Mengandungi maklumat TERHAD yang telah **TERHAD** ditentukan oleh organisasi/badan di mana penyelidikan dijalankan) TIDAK TERHAD (TANDATANGAN PENULIS) En.Amir Syarifuddin Bin Kasim Alamat tetap: Blok 8E-7-7 Mutiara

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e-proposal management system / Farra Nur Hidayah Ahmad.

E-Proposal Management System

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This report is submitted in partial fulfillment of the requirements for the **Bachelor of Computer Science** (Database Management)

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY KOLEJ UNIVERSITI TEKNIKAL KEBANGSAAN MALAYSIA 2006

DECLARATION

I hereby declare that this project report entitled

E-Proposal Management System

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

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DEDICATION

To my beloved parents, family and friends...

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First and foremost, I think to Allah for giving me strength and opportunity to complete my Projek Sarjana Muda(PSM). As a student of Bachelor in Computer Science, it is required for me to finish the Projek Sarjana Muda. Projek Sarjana Muda has benefited me in many ways and aspects. Without support and cooperation including moral encouragement from many parties, I will never be able to finish the task.

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ABSTRACT

Nowadays, there are many web based system that have been build up. Education field, government, private, and other sectors are mostly using web-based for management. The purpose of web-based system is to make the management easier especially for the users. In education field, most university has their own web site for certain purpose only such as for introducing their university, checking student result, and given news to student. Most of universities in Malaysia still use manually technique on submission document, thesis, paper work and etc. This project will be focused in KUTKM itself on how the process of student PSM proposal being approve by PSM Committee starting from the process of submission until approval. Students have to fill the proposal form and after that submit to chosen lecturer. This is cause waste time and some other problem occurs. Lecturers have to check the document one by one to avoid redundant or similar topic or functions. Besides, PSM Committee has to ensure all students having supervisor by checking the student one by one. By developing this E-Proposal Management System, it will help to recover the problem occurs in current manual system. For this project purpose, Waterfall methodology will be used for Implementation and Database Life Cycle to develop database. Besides, some research will be done on searching and calculating keyword on documents for Detect Similar Document function. Active Server Pages (ASP) has been chosen to create interface and scripting. Besides, for this project also, Microsoft SQL server 2000 will be used as Database Management System (DBMS).

ABSTRAK

Pada masa kini, telah banyak pangkalan data berasaskan web dibangunkan. Kebanyakan pangkalan data berasaskan web ini digunakan untuk tujuan pengurusan terutama dalam bidang pendidikan, kerajaan, swasta dan pelbagai sektor lain. Tujuan sistem pangkalan data ini adalah untuk memudahkan pengurusan terutama bagi pengguna. Dalam bidang pendidikan, kebanyakan universiti mempunyai laman web tersendiri yang bertujuan seperti memperkenal universiti masing-masing, menyemak keputusan pelajar dan menyebarkan berita kepada pelajar. Kebanyakan universiti di Malaysia masih menggunakan teknik manual dalam proses penghantaran dokumen, tesis, kertas kerja dan sebagainya. Projek ini akan fokus pada KUTKM sendiri dalam proses pelajar menghantar kertas cadangan PSM sehingga proses projek pelajar diterima oleh AJK PSM. Pelajar perlu mengisi kertas cadangan projek dan menghantar kepada pensyarah pilihan mereka. Ini hanya akan membuang waktu dan menyebabkan masalah lain juga. Pensyarah juga perlu menyemak satu demi satu kertas cadangan pelajar untuk mengelak topik atau fungsi sistem yang sama. Selain itu, AJK PSM akan mengenal pasti setiap pelajar mempunyai satu penyelia dengan menyemak satu demi satu senarai pelajar dari pensyarah yang lain. Dengan membangunkan Sistem Pengurusan E-Proposal ini, ia akan membantu menyelesaikan masalah yang dihadapi dengan menggunakan sistem manual. Projek ini menggunakan Waterfall metodologi untuk pembangunan sistem dan Database Life Cycle (DBLC) untuk pembangunan pangkalan data. Selain itu. penyelidikan bagaimana pencarian dan pengiraan kata kunci dalam dokumen untuk fungsi mengenalpasti Proposal atau projek yang sama. Selain itu, Active Server Pages (ASP) akan digunakan untuk menghasilkan antaramuka. Selain itu, Projek ini juga akan menggunakan Microsoft SQL Server 2000 untuk tujuan pegurusan pangkalan data.

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LIST OF ABBREVIATIONS

KUTKM

Kolej Universiti Teknikal Kebangsaan Malaysia

PSM

Projek Sarjana Muda

DBLC

Database Life Cycle

ERD

Entity Relationship Diagram

DDL

Data Definition Language

DML

Data Manipulation Language

DCL

Data Control Language

DBMS

Database Management System

DFD

Data Flow Diagram

ASP

Active Server Pages

LAN

Local Area Network

LIST OF APPENDICES

APPENDIX	TITLE
Α	Gantt Chart
В	Security Mechanism
C	Test Description, Test Data, Test
	Result & Analysis
D	User Manual
F	Evample of Proposal Form

CHAPTER I

INTRODUCTION

1.1 **Project Background**

PSM Management Portal is the web based-systems that will be developed during the duration to get Projek Sarjana Muda (PSM) qualification. There is no existing system or portal built for PSM before. The current system used is in manual system which the students need to find their own supervisor via email or phone. Then they have to get a supervisor approval before submit the title suggestion to the PSM Committee. These web based-systems will cover all proposal process until proposal approval by PSM Committee. Students using this system must be genuine PSM students for the current semester. Student can upload their title and proposal to PSM Committee online. Besides student, PSM Committee is also a user for this system where they can generate report which provide list of student with their student identification, title of project, supervisor name and contact number. This system also can detect redundancy topic or with previous student. For this, a few methods will be discussed in following chapter before make a decision for the best solution. Next, the to-be system also can assign student to particular lecturer. This web-based system will be used by PSM Committee.

1.2 Problem statements

There is a few problems occur while using manual system. The problem listed as below:

1. Difficulties in manually checking project redundancy.

PSM Committee, have to check one by one topic, between current PSM students to avoid redundancies. Besides that, PSM Committee has to refer previous student title to avoid redundant project too.

2. Unorganized and manual assignments of student to particular lecturer.

Since students choose their favorite lecturer, PSM Committee having problem in assigning student to lecturer and lecturer to student. In some cases, student does not choose particular lecturer.

3. Manual proposal submission is causing time wastage.

Student have to meet lecturer to submit proposal where sometime lecturer not at their room. Beside, some student send proposal via email but lecturer did not give a feedback.

4. Non-efficient report generation.

For current system which is manual system, PSM Committee has to key in one by one all the details into Excel file. The report is based on the Excel file printouts.

1.3 Objectives

The objectives for this project are listed as below:

1. To detect redundancy or similar project.

By using particular method and approach (will be discussed in following chapter), to-be-system will detect redundancy or similar project easier.

2. To automate student - lecturer assignment process

By using particular method and approach (will be discussed in following chapter), to-be-system will assign student to appropriate lecturer regarding to interest, quota, and department of lecturer, appropriately.

3. Online Proposal Submission

Students will upload their proposal by online. It will make student easier rather than meet lecturer or waiting for email respond.

4. Generate report in efficient way

By using the to-be-system, PSM Committee needs to click only a button to list down current PSM student and click Print button to print out the list.

Allow student and lecturer access

Generally, student can check their proposal status besides upload it. Lecturer can view their student information and approve student title.

1.4 Scopes

For this project purpose, the scopes cover function, user and environment or platform. It will be describe as below:

1.4.1 Function

For this system, it has four functions which three of them is the main function for this Project purpose.

· Checking for Similar Project

It will be the core functions for this project. The to-be system will check the student project proposal and detect either similar or not.

Auto assign student to lecturer

It will be the second core function in this project. The system will assign student to particular lecturer regarding to interest, quota and department.

Upload Proposal

Authenticate student only can use this system where student can submit their proposal and get respond on their proposal.

Generate Report

PSM Committee can generate report which list down PSM student with their student ID, title, lecturer or supervisor name and contact number.

1.4.2. User

In this to-be-system the user will be PSM Committee, lecturer/supervisor beside student itself.

PSM Committee

By using this system, PSM Committee will detect the similar or redundant topic and reject student proposal if those case occur. Beside, PSM Committee will ensure that the student is assign to particular lecturer regarding to the three conditions (lecturer interest, quota, and department). Beside, PSM Committee can generate report of student list.

Registered Student

Only registered student (student enrolled PSM) can used this system. Student can upload their proposal and looking for the respond either approves or rejected.

Lecturer or Supervisor

Lecturer or supervisor can generate report of student list conduct by them. Beside, approve or reject student proposal.

1.4.3. Platform

For this project, Microsoft SQL Server 2000 will be used as Database platform. Besides, client-server two-tier technique for storing and retrieve database. Database will