

## BORANG PENGESAHAN STATUS TESIS\*

JUDUL: PROJEK SARJANA MUDA EVALUATION SYSTEM

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***PROJEK SARJANA MUDA EVALUATION SYSTEM***

NIK SUZIATEE BINTI NIK HASSAN

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

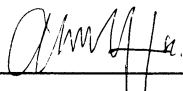
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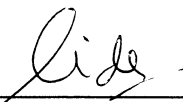
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**DECLARATION**

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  
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## ABSTRACT

PSM Evaluation system is a system that provides some functionality for their users which are the PSM supervisor, evaluator and the committee member. Main functions of PSM Evaluation system are evaluating the student's projects and calculate their marks. This system is developed to detect mark's boundary which is important for determining the grade. Error in calculating the total marks and percentage can be prevented. The system helps communication between supervisor and the committee member. The process of sharing information or students result between supervisor and committee member become easier and more efficient. Committee member can update the evaluation forms effectively to be used by supervisor in evaluation process. The supervisors are kept up-to-date for any updated information made by the committee members. This system is developed using PHP programming language, support with MySQL and Apache server. Rational Unified Process is used for this system since it is the most suitable methodology.

## ABSTRAK

*PSM Evaluation* sistem adalah sebuah sistem yang menyediakan fungsi-fungsi untuk penggunaannya iaitu penyelia, penilai dan ahli jawatankuasa Projek Sarjana Muda. Fungsi utama sistem *PSM Evaluation* ini adalah menilai projek pelajar dan mengira markah mereka. Sistem ini dibangunkan untuk mengesan sempadan markah bagi menentukan gred para pelajar dan kesalahan dalam pengiraan markah serta peratusan juga boleh diatasi. Sistem ini membantu komunikasi antara penyelia serta ahli jawatankuasa di mana ia menjadi lebih senang dan lancar. Ahli jawatankuasa boleh mengubah borang penilaian dengan efektif untuk digunakan oleh penyelia dalam proses penilaian projek. Penyelia akan sentiasa peka dengan maklumat terkini daripada ahlijawatankuasa. Sistem ini dibangunkan menggunakan bahasa pengaturcaraan PHP dan disokong dengan MySQL serta server Apache. *Rational Unified Process* digunakan untuk sistem ini memandangkan ia adalah metodologi yang paling sesuai.

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**LIST OF ABBREVIATION**

CD	-	Compact Disk
DBMS	-	Database Management System
DFD	-	Data Flow Diagram
ERD	-	Entity Relationship Diagrams
FTMK	-	Fakulti Teknologi Maklumat dan Komunikasi
HTTP	-	Hypertext Transfer Protocol
OOAD	-	Object Oriented Analysis and Design
PHP	-	Hypertext Preprocessor
PSM	-	Projek Sarjana Muda
RUP	-	Rational Unified Process
UTeM	-	Universiti Teknikal Kebangsaan Malaysia Melaka

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## **CHAPTER I**

### **INTRODUCTION**

#### **1.1 Project Background**

PSM Evaluation system is a system that provides some functionality for their users which are the supervisor as the evaluator and the committee member. It will help the communication between supervisor and the committee member as it becomes easier and faster.

PSM Evaluation is a system that makes their users especially supervisors easier to calculate or evaluate their students instead of the current system which is using traditional ways (record the data on paper). This traditional way is much slower, less efficient, difficult to generate reports, and unsecured data.

By using the system, the system will benefit their users which are the supervisors and PSM committee members. It also helps the communication between supervisors and the PSM committee members who are responsible in monitoring and keeping all students' results.

In manual processes, there may be an error in calculation. By using manual process calculations are more difficult as there are many steps. The probability of losing files or certain information is high when using manual systems which use papers or files or involve many processes. All evaluations must be done in separate papers. The process of evaluation is not systematic and efficient since the



information is not well kept in a place. More time needed in order for the calculation of total marks and to pass the marks from supervisors or evaluators to the PSM committee member before it is uploaded into the university portal. The supervisors sometimes have to go to see the committee member when they want to pass the students marks. The PSM committee members may need to keep asking the supervisor for the carry marks from time-to-time. This system helps making the process of sharing information or students result between them easier and more efficient. This system will be useful for supervisors or evaluators and PSM committee member. The supervisors can keep all the records well in a place and calculate the marks easily.

Other than that this system is developed to detect mark's boundary which is important for determining the grade. This system is useful as it is database-driven web based system. Storing data using database is much safer than manual way using file. The risk of losing data is lower using database. This web-based system will have an administrator that will monitor and have full access to the system. The database also will be maintained by the administrator. The purpose is to make the system in order and to maintain the flow in the system.

## **1.2 Problem Statement**

This PSM Evaluation System is build to improve the manual system that is used for the evaluation. These are the problems when using manual process:

- a. **Data storing:** The probability of losing files or certain information is high when using manual system which is using papers or files. All the evaluation process and sharing information must be doing in separate papers.
- b. **Searching and data retrieval:** The process of evaluation is not systematic and efficient since the information is not well kept in a place. More time is needed in order for sharing and passing data. The PSM committee members may need to keep asking the supervisor for the carry marks from time-to-time.

- c. Evaluation: There may be an error in calculation. By using the manual process, calculation is more difficult as there are many steps. Sometimes the supervisors have problems in detecting mark's boundary which is important for determining the grade for students.
- d. Security: Data might be lost or can be manipulate by irresponsible persons when using manual process.

### 1.3 Objective

Based on the problems that occur by using the manual system, this system is developed with the objectives below:

- a. To develop a database-driven web based evaluation system and change the way in storing data from manual way using file to using database.  
The supervisors can keep all the records well in a place. Process of calculation the marks will be done easily and the information sharing to the committee member easily and faster.
- b. To make the communication between users easier and more efficient.  
Data sharing and data passing between supervisors and PSM committee members are faster and safe.
- c. To prevent error in calculation and evaluation.  
This system will detect errors in calculation and also mark's boundary which is important for determining the grade for students.
- d. Making a web page that an authorized user can access the page for the internal way in secure environment.  
A web page that have authentication is what user want to see so they can do work safely and free from threat and outsider. Storing data using database is

much safer than manual way using file. The risk of losing data is lower using database.

#### 1.4 Scope

There are few modules to be developed. The modules are divided into two types which are the target user module and the function module.

The target user modules are:

- PSM Committee Members Module

They act as admin in this system. They can view results of all students, update the evaluation requirements and monitoring the database.

- Supervisor Module

They are the one who evaluate student's project and save their result into the system. One supervisor is responsible to 5-6 students. They can only view and monitor the student's result under them.

The function modules are:

- Registration Module

In this module, user can register to the system. System will verify the user every time they try to enter the system.

- PSM Evaluation Information Module

Information about the students and the supervisors will be kept in the system. This information can be search when needed. The student's marks also saved in the database and can be update by authorized users.

- PSM Evaluation Form Module

Forms are provided in the system so that the supervisor will only need to key in the marks based on scheme. This will make their job easier by not need to upload and download file during the process.

- Report Module

In this module, user can generate report from the information in the website. Graph also can be generated through the system.

## 1.5 Project Significance

The PSM Evaluation System is a system to help the PSM supervisors and the PSM committee members in the evaluation process. PSM Evaluation system is a system that provides some functionality for their users which are the supervisors or evaluators and the committee members.

The PSM committee members are responsible for monitoring the students' result and approve it before it will be uploaded to the university's portal. The project significances to the PSM committee members are:

- This system is also very helpful in communication between the committee member and the supervisor.
- The committee members can update the information easily.
- The content of the PSM evaluation forms can only be updated by the committee member.

PSM supervisors are the person who will evaluate the students' project and giving suitable marks for them. The project significances to the PSM supervisors are:

- PSM Evaluation is a system that make their users especially supervisor easier to calculate or evaluate their students instead of the current

system which is using traditional way (record the data on the paper). This traditional way is much lousy, less efficient, difficult to generate report, and unsecured data.

- It will help the communication between supervisor and the committee member as it becomes easier and faster.
- This system is developed to detect mark's boundary which is important for determining the grade. Error in calculating the total marks and percentage can also be prevented.
- The supervisors are kept up-to-date for any updated information made by the committee members.

## **1.6 . Expected Output**

From the proposal, the expected web-based system that will be produced is a web system that has security against threats. By putting a password set by the user, the information in the system will be safe.

Other than that, the web system also has a flexible search engine. The users which are the supervisors or evaluators and committee members can search from a variable way such as by student's name, matrix number or by course.

Most important is this system will be able to help the users which are the supervisors and the committee members doing their job more efficiently. By using the system, they are able to shorten the time to complete the process, reduce errors and definitely making better communication between them.

It will also have a database that will store many data and information in there. The most important thing in a web-based system is the way its page is created. It must be in specific order so that the user will not be lost during they surfing the page. This can be done by following web structural design.

This web-based system also will have an administrator that will monitor and have full access to the system. The database also will be maintained by the administrator. The purpose is to make the system in order and to maintain the flow in the system.

## **1.7 Conclusion**

Evaluation system will be useful for both PSM supervisors and PSM committee members. This chapter had described the important and need for this system to be developed.

Literature review and project Methodology will be discussed on the next chapter. In this chapter, case studies will be conducted to compare this system with the existing systems. This chapter will also discuss about the methodology that will be use to build the system.

## CHAPTER II

### LITERATURE REVIEW AND METHODOLOGY

#### 2.1 Introduction

This chapter will discuss on literature review conducted and methodology used to develop The PSM Evaluation System. A literature review is a body of text that aims to review the critical points of current knowledge on a particular topic. Most often associated with science-oriented literature, such as a thesis, the literature review usually precedes a research proposal, methodology and results section. Its ultimate goal is to bring the reader up to date with current literature on a topic and forms the basis for another goal, such as the justification for future research in the area. (Wikipedia, 2008)

Literature reviews provide us with a handy guide to overview our topic. It is very useful reports that keep us up to date with what is current in the field. It will give a quick idea of the topic and discussion of sources. Literature review used to justify choice of research question, theoretical or conceptual framework, and method and establish the importance of the topic. Literature review also provides background information needed to understand the project. (Wikipedia, 2008)

Methodology is defined as a body of methods, rules and postulates employed by a discipline or a particular procedure or set of procedures. The common idea on methodology is the collection of related resources, the comparative study, and the

individual critique of ideas and methods that are used in a given discipline or field of interest. The used of methodology helps to produce a better quality product to ensure that users' requirement are met completely. (Wikipedia, 2008)

Good methodology chosen will be a systematic guidance on how to develop software successfully, where the guidance manifest with proven approaches, best practices, guidelines, techniques and sequences.

## **2.2 Fact and findings**

### **2.2.1 Domain**

Of the colleges surveyed, those transitioning to the online environment are converting their paper-based evaluation form to a web-based form. This is an important first step but not an optimal use of the web environment. A developed web-based evaluation system serves colleges or universities better by providing information more quickly and clearly and shifting the definition of quality instruction and improvement.

### **2.2.2 Existing System**

#### **2.2.2.1 Instructional Assessment System (IAS) online**

Instructional Assessment System (IAS) provides a method to collect and report student ratings of instruction. It consists of a well-established paper-based system using machine-readable evaluation forms, supplemented by a recently created online system. This system offers a collection of scan able course evaluation forms to assess various instructional formats or educational outcomes, all of which can be