

E-GRADING FOR STUDENT PROJECT

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E-GRADING FOR STUDENT PROJECT

MUHAMMAD AZIZI BIN ZAID

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


**FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY
UNIVERSITI TEKNIKAL MALAYSIA MELAKA
2010**

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 citations.

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DEDICATION

To my beloved parents, sibling supervisor,evaluator and my friends for giving help
in completing my degree final project.

ACKNOWLEDGEMENTS

I would like to thank my beloved parents and my family for their support throughout my project.

I would like to thank to my supervisor, Mohd Sanusi Bin Azmi. His support throughout my Degree Final Project is greatly

Lastly thanks to all my classmates and friends for their assistance in this project.

ABSTRACT

Bachelor project report (PSM) explains in details for the deliverables produced which are describing in different chapters in partial fulfillment of the final project requirements. There are Chapter I, II, III, IV, V, VI and VII. Chapter I begin with the explanation of the project background, problem statements, objectives, expected output, scopes and project significance. Chapter II describes literature review finding based on materials and important to get project methodology, project requirement, and milestone. While Chapter III, use to analyze the current system problem. By using activity diagram, the project can be analyze easily. The functional and non-functional illustrated in UML diagram. Then, Chapter IV specifies data collection for application, system architecture, user interface design, software design and database design. Chapter V is describes on implementation of project. Chapter VI, a testing covered up based on test plan, test strategy, test design, test data and test analysis and result.

ABSTRAK

Laporan Projek Sarjana Muda (PSM) menerangkan tentang projek yang akan dibangunkan secara mendalam dalam bab-bab yang berbeza demi memenuhi keperluan projek tahun akhir ijazah.. Bab I bermula dengan membincangkan keterangan mengenai latar belakang projek, kenyataan masalah, objektif, hasil, skop dan kepentingan projek. Bab II menerangkan hasil kajian dapatan berdasarkan bahan-bahan tertentu dan untuk mendapatkan kaedah metodologi projek termasuk keperluan projek, dan jadual. Manakala Bab III diguna untuk menganalisis masalah system semasa. Keperluan fungsi dan bukan keperluan fungsi di keluarkan. Aliran ujikaji, keperluan fungsi dan bukan keperluan fungsi digambarkan menggunakan rajah UML. Kemudian, Bab IV menghuraikan data dan kajian untuk aplikasi, seni bina system, rekabentuk antaramuka, rekabentuk perisian dan rekabentuk pangkalan data. Chapter V menerangkan pelaksanaan projek. Ia bermula dengan huraian kepada pembangunan suasana perisian, pengurusan konfigurasi perisian and prosedur pengawalan versi. Akhir sekali Bab VI, pengujian merangkumi perancangan ujian, strategi ujian, rekabentuk ujian, data ujian dan analisis dan keputusan ujian.

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LIST OF ABBREVIATIONS

EGSP	- E-Grading for Student Project
UTeM	- Universiti Teknikal Malaysia Melaka
FTMK	- Fakulti Teknologi Maklumat dan Komunikasi
PSM	- Projek Sarjana Muda
UML	- Unified Modeling Language
OOAD	- Object Oriented and Analysis Design
ERD	- Entity Relationship Diagram
DDL	- Data Definition Language
SMP	- UTeM's Student Portal

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CHAPTER I

INTRODUCTION

1.1 Project Background

E-Grading for Student Project is developing because it will be use by FTMK. The existing system called E-Document for Student Project is still lack of its functionality, especially for giving a mark and grade to the student. To make the existing system becomes more useful to the users, I propose to add new module name as grading system.

This module will be helpful to the supervisor and evaluator to give a mark to the student project. The system will automatically generate the grade for student based on mark given by them. Each module has its own criteria and admin can set it in the system.

1.2 Problem Statement

This project is developing to manage the *Projek Sarjana Muda* (PSM) and *Projek Diploma* (PD) student's project becomes easier, effective and faster. Actually, this is for enhancing the current system called as E-Document for Student Project to be more functionality. Supervisor (lecturer) is able to assign the mark on each student under them based on assessment made by administrator.

At the end of the semester, the system will evaluate the grade for student based on mark given by supervisor and evaluator. The system can generate report to the administrator. The report includes all student grade and mark in a bar chart format. The interaction of the current system will be applying the ICEfaces technology, since it is the latest technology in industries.

1.3 Objectives

Nowadays, Faculty of Information Technology and Communication (FTMK) still using a hardcopy material to manage the mark and give the grade to the student who are taking the *Projek Sarjana Muda* (PSM) and *Projek Diploma* (PD). Each semester, the marking and grading criteria on the project maybe will change due to the agreement by the FTMK committee members, dean and lecturers. This system will make the situation becomes easy to manage by online.

The problem is to know how the mark and grade are being set, who can set the criteria mark of each module, how the supervisor and evaluator give a mark to their student and what the information need to be include in the report. The objectives to be achieved in this project are:-

- i. To develop online for *Projek Sarjana Muda* and *Projek Diploma* grading system.
- ii. To manage *Projek Sarjana Muda* and *Projek Diploma* mark.
- iii. To develop dynamic online marking and evaluating form for *Projek Sarjana Muda* and *Projek Diploma*.
- iv. To manage security and data recovering for *Projek Sarjana Muda* and *Projek Diploma* data.

1.4 Scopes

Below will describe about scope of user that includes in manage this web base are student, lecturer and administrator. Scope of functionality will describe about module that function in this web based. To describe it more details, there are six (6) module will includes are assignation, login, assessment, reporting, grading and evaluation. Scope of platform is the specific project requirements in terms of software and hardware to develop the E-Grading for Student Project.

1.4.1 Scope of User

The user scopes in this project are:

System scope

- i. To develop new module which call as E-Grading for Student Project.
- ii. Make the system be able to generate a report.
- iii. Applying ICEfaces technology to the system.
- iv. Upload the system to the FTMK server (Only after approve by faculty).

User scope

- i. Administrator (FTMK staff).
- ii. Supervisor (lecturer).
- iii. Evaluator.
- iv. FTMK student who take *Projek Sarjana Muda (PSM)* and *Projek Diploma (PD)*.

1.4.2 Scope of Functionality

This system is divided into six modules of functionality:

i. Assignment Module

This module will be use by administrator to assign lecturer as supervisor or evaluator. Each lecturer has to position, even as supervisor or evaluator. This module will affect the marking and evaluation approach for each lecturer.

ii. Login Module

This module provide login module to verify and validate the right user. Authorized users allow interacting with this system. This module also has a validation on user session. Once log out, their session will terminate. The types of user are administrator, lecturer and student.

iii. Assessment Module

This module will be use by administrator to create the new assessment mark and criteria for *Projek Sarjana Muda* (PSM) and *Projek Diploma* (PD) for particular batch. This assessment is different between diploma and bachelor student. This assessment will be dynamically create by final project community based on current and future criteria or category.

iv. Reporting

This module will be access by staff to make the reporting of *Projek Diploma* and *Projek Sarjana Muda* grading. Reporting is based on the mark and grade for each student. The reporting is categorized based on batch and year.