

## BORANG PENGESAHAN STATUS TESIS^

JUDUL: KUTEM SUBJECT EVALUATION SYSTEM

SESI PENGAJIAN: 1 - 2005 / 2006

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## KUTKM SUBJECT EVALUATION SYSTEM

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This report is submitted in partial fulfillment of the requirements for the  
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FACULTY OF INFORMATION AND COMMUNICATIONS TECHNOLOGY  
KOLEJ UNIVERSITI TEKNIKAL KEBANGSAAN MALAYSIA  
2005

## **DECLARATION**

I hereby declare that this project report entitled  
**KUTKM SUBJECT EVALUATION 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 God, Allah SWT

To my Greatest idol, Rasulullah SAW

To my beloved parents, Ahmad B. Hussin and Inson Bt Ahmad

To all my sisters and brothers and

To my beloved friends.

## **ACKNOWLEDGEMENTS**

### **“IN THE NAME OF ALLAH S.W.T, THE MOST GRACIOUS, THE MOST MERCIFUL“**

Alhamdulillah, by His bless finally, this report successfully within the period even though there are a lot of circumstances. Without the concern, advises, motivations, instructions and also cooperation from my supervisor, my beloved family, group members and other parties that are support whether direct or indirect, the report might not be finished. Therefore, I would like to give my deepest gratitude to all those are involved in this report.

First of all, thank to Pn Rosleen Bt. Abd Samad that be my supervisor for spending her precious time, energy and knowledge in giving me a helping hand to complete this project report.

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Last but not least, I also want to take this chance to thank my family and friends that give their support and encouragement to complete this project and for everybody who contributed directly or indirectly for the completion of this practical project. Thank you!

## ABSTRACT

The purpose of this report is to propose The KUTKM Subject Evaluation System. The main function of this project is to generate a statistic percentage for every subject in KUTKM. This system can make a survey or poll for a each subject that had been taken by KUTKM student. There are some problems that have been capture and identified such as the current process takes a long time to be completed, the process in current system are manually and paper base, the data maybe disappear or damage because of time, and OMR machine cannot detect the characters comments. There are some solutions to solve this entire problem by developed the KUTKM Subject Evaluation System. This system is an online survey and data will be captured through database. Besides, this system also has admin function like analysis, statistic and report. The methodology that has been choosing to use in this project is Object Oriented Analysis Design. This project has been developed by ASP as web based and the SQL as the database. Meanwhile, the server platform for this project is IIS 1.5. Dreamweaver Mx 2004 and Er Assistant software are used to make sure all the processes development work smoothly. As a conclusion, this project is replace the manual system with the automate system.

## ABSTRAK

Tujuan laporan ini adalah untuk mengusulkan system penilaian subject KUTKM. Fungsi utama sistem ini adalah untuk mengeluarkan peratusan statistik untuk setiap subjek di KUTKM. Sistem ini akan membuat tinjauan untuk setiap subjek yang diambil oleh pelajar KUTKM. Terdapat beberapa masalah yg telah dikenalpasti iaitu system semasa adalah manual dan menggunakan kertas, data mungkin akan hilang atau rosak, system semasa juga memerlukan masa yang lama untuk memperolehi hasil tinjauan, dan mesin OMR tidak dapat kenalpasti komen. Bagi mengatasi masalah ini adalah dengan membangunkan sistem *KUTKM Subject Evaluation System*. Dimana sistem ini akan menggunakan borang kajian penilaian secara *online* dan akan menyimpan semua data secara terus ke pangkalan data. Selain itu, sistem ini juga mempunyai beberapa fungsi Pengurusan seperti statistik, analisis dan laporan. Metodologi yang telah dipilih untuk membangunkan system ini adalah *Object Oriented Analysis Design*. Projek ini dibangunkan dengan menggunakan ASP sebagai *web base* dan SQL sebagai pangkalan data. Selain itu, platform *server* bagi projek ini ialah IIS 1.5. Bagi memastikan proses pembangunan berjalan lancar, *Dreamweaver Mx 2004 and Er Assistant* perisian digunakan. Sebagai kesimpulan, sistem ini akan dibangunkan untuk menggantikan sistem semasa.

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## LIST OF ACRONYMS

<b>OOAD</b>	<b>Object Oriented Analysis and Design</b>
<b>CPU</b>	<b>Center Processing Unit</b>
<b>KUTKM</b>	<b>Kolej Universiti Teknikal Kebangsaan Malaysia</b>
<b>SMP</b>	<b>Sistem Maklumat Pelajar</b>
<b>ASP</b>	<b>Active Server Page</b>
<b>SES</b>	<b>Subject Evaluation System</b>
<b>LAN</b>	<b>Local Area Network</b>
<b>PPT</b>	<b>Pegawai Pembantu Tadbir</b>
<b>OMT</b>	<b>Object Modeling Technique</b>
<b>UML</b>	<b>Unified Model Language</b>
<b>PSM</b>	<b>Project Sarjana Muda</b>
<b>ERD</b>	<b>Entity Relationship Diagram</b>
<b>IIS</b>	<b>Internet Information System</b>
<b>PC</b>	<b>Personal Computer</b>

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## CHAPTER I

### INTRODUCTION

#### 1.0 Introduction

This chapter explain briefly all the processes in KUTKM Subject Evaluation System. The developer must recognize the problem of the current system by doing some research or survey. Therefore the developer can state the objective of the system by specifies scope like user, module and function of this system which explain categories of user and module will be developed. Generally, the developer must identify the project significance to end users and area of research and the expected output as conclusion.

#### 1.1 Project Background

KUTKM subject evaluation system is an online system which is to analysis quality for every subject in KUTKM .This system is developed for *Unit Jaminan Dan Kualiti* at KUTKM. The main function of this system is to calculate the statistic percentage for every subject in KUTKM. This system can make a survey or poll for a subject that had been taken by student in KUTKM for every semester on week 13. This system is developed with ASP and Microsoft SQL server as a database. The database for this system can be related with database from SMP system. Therefore, student can login to this system without register to use this system.

The main idea for this system is to make all process in current system to computerized and more systematic without wasting time and need high cost to develop. For make this system more efficient, some function will be added like graph form statistic percentage, professional summary report and online survey.

## 1.2 Problem statement

After doing an interview with a few user of this system such as students, Professor Madya Syahdan (*Unit Jaminan And Kualiti*) and Pn.Roslina ( Computer Center ). There are some problems occur from the process of current system which state as below:-

The main problem in the current system is manually and wasting time. All the process takes a long time to be completed and not computerized. Time during pass an OMR form with students and lectures take a few days to be completed. Beside that all the data will be input manually to another system call SPSS system from the OMR machine. Furthermore, student not attends to class and cooperation with lecture make more difficult situation to make survey. Therefore, the survey may be not accurate and it also influences the statistic result.

The second problem is the result take along time to come out and always delay on the Unit Jaminan and Kualiti schedule. Although the results come out, not all the subject will be come out together on time. Beside that, the current system cannot survey PPA subjects such as TITAS, Tamadun Islam and etc.

The next problems are maintenance and high costing. As we know all the process in current system are manually and paper base. Therefore, this situation make difficult to *Unit Jaminan Dan Kualiti* to analysis subject evaluation for every semester. They have to check all the data for every subject in every semester on bye one. Besides that, the data maybe disappear or damage because of time.

In the manual system, admin difficult to handle subject comments survey in OMR form. They cannot analysis comments survey for every students because its take time and OMR machine cannot detected the characters comments. From the interview, students always mark OMR form with pen, not read the instruction clearly, and not mark the overall of OMR form. This situation make the OMR machine cannot work perfectly. The last semester survey, half of the survey can not scan clearly and it wasting time and cost.

### **1.3 Objective**

There are a few objectives of KUTKM Subject Evaluation System. The objective of this system is to make sure that the developed system will reached the goals and the objective are stated as below:

- To provide a system that can make all the process smoothly and save more time than the current system. The data can be accessed without any delayed, during the process of survey until the summary subject report.
- To eliminate paper base and filing based in the working enviroment.
- Can make a precise statistic from the captured data and make sure all students fill the form survey for every subject they take.
- To reduce more manpower at management side.
- To develop a survey form web based online which can generate statistic percentage and graph. Admin can also make a professional summary report.

## 1.4 Scope

Following are the two categories of scope:-

- **Users**

There are three users used KUTKM Subject Evaluation System:

- 1) Student make survey with fill in online survey form
- 2) Admin from *Unit Jaminan Dan Kualiti* to manage all result from student survey. They also need to make a summary report for this system.

- **Modules**

To develop the system there are 4 modules which are stated as below:-

- 1) Survey Form Module
- 2) Login Module
- 3) Analysis Module
- 4) Statistic and Graph Module

### 1.4.1 Login Module

Student must login to use this system. Each student can access to the data in his/her own account only. The modification of the data can only be done by the authorized user of each account only. Besides that, this module divide the student including their faculty, section, group and subject taken.

#### **1.4.2 Survey Form Module**

This module is used by student to fill subject evaluation form online. This form is exactly like OMR form but it's more simple and systematic. For example, student did not fill again their subject information to complete the form. Students just fill the lecturer evaluation. Besides that, this module helps admin to manage the survey into group or subject easily.

#### **1.4.3 Analysis Module**

In this module all the captured data will be analyzed. All the result will be recorded into database for each subject and faculty. After that, admin from *Unit Jaminan Dan Kualiti* can write a report for each faculty. Besides that, these modules can analyze the statistic percentage including subjects, faculty, and major course.

#### **1.4.4 Statistic and Graph Module**

After students fill the Form Module, the data will be captured and it is automatically be calculated to generate statistic in percentage for every subject in KUTKM. Admin can also make summary report including the graph for every subject. Besides that, all the survey and graph result will be stored in the database. Therefore, admin can view the statistic and graph for every semester. Basically, the statistic and graph will be come out from the calculation statistic formula.

### **1.5 Project significance**

The proposed system is online web-based system which is managed and calculated KUTKM subject evaluation for every semester. This system will give many benefits to *Unit Jaminan Dan Kualiti* and students. Including this system, *Unit Jaminan dan Kualiti* can make all the process easier and computerized. They can analyze all

survey information faster and reduce the usage of papers and files managing for the activities survey process for the subject evaluation in this system.

Normally, this system helps *Unit Jaminan Dan Kualiti* to capture and analyze data for generate statistic percentage or graph automatically. The analysis result is more persistent and the graph can help admin to make a summary report as their task. The all process of this system is more effective and systematic because all the survey result will be stored at security database which only the authenticated user can access. All student can make their all subject survey in one time only and the *Unit Jaminan and Kualiti* can managed the survey in short time , therefore this system will helping the both *Jaminan dan Kualiti* department and students.

Last but not least, the significance of this system will reduce the management cost. When reducing the papers, the usage of papers and files will be decreased. By reducing the manpower, times required and mistakes in recording the data, the management authority and the management process will be more systematic and well organized.

## **1.6      Expected Output**

The expected output for this system is to make a subject surveys online which can fill by all student in KUTKM. Furthermore, this system can also calculate all the student survey to statistic percentage. From the statistic percentage, this system can also make a summary report based on the graph and analyze all the survey result. KUTKM subject evaluation system can also store all the result in the database. Therefore, admin can view and manage all the result survey for every semester.

## 1.7 Conclusion

As a conclusion, the introduction chapter clarifies briefly about all the flow process based on project background, objective project, problem statement, and project scope. Besides that, this chapter also helps to plan good strategy to develop this system.

The next chapter which is chapter two is to perform literature review of the developed system. By the research the weaknesses can compare to perform a system that will fulfill the current system constraints.

## CHAPTER II

### LITERATURE REVIEW AND PROJECT METHODOLOGY

#### 2.1 Introduction

This chapter will briefly review specific factors that are relevant to educational aspirations and/or deviant behavior. Generally, the purpose of a review is to analyze critically a segment of a published body of knowledge through summary, classification, and comparison of prior research studies, reviews of literature, and theoretical article. Once a broad problem area practical or theoretical is identified the next step is to review the literature on the topic. Examining both the theoretical and research literature on a current process usually will help to narrow the topic and identify a testable hypothesis.

To collect the information to develop KUTKM subject evaluation system, the resources include Books (find more detailed sources), electronic media (internet), printed media (journal articles), and guidance from the lecturer will be refer as a reference. The literature study in current system could give more references in system development process such as interface, flow process and level of security should be improve and enhance from the current system.

The best methodology will affect the flow of development system .The Object Oriented Analysis and Design (OOAD) will be chosen to implement this system.