

# TESIS ^ APPROVAL STATUS FORM

JUDUL: ONLINE COUSE EVALUATION (OCE)

SESI PENGAJIAN: 2004/2005

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^ Tesis dimaksudkan sebagai Laporan Project Sarjana Muda (PSM)



## **ONLINE COURSE EVALUATION (OCE)**

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This report is submitted in partial fulfillment of the requirements for the Bachelor of Information and Communication Technology (Software Development).


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

**2004**

## ADMISSION

I admitted that this project title name of  
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STUDENT :  DATE: 22/10/2004  
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## **DEDICATION**

To my beloved parent

To my beloved family member

To my supervisor



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## ABSTRAK

Projek OCE ialah satu aplikasi web yang digunakan untuk menilai subjek dan mengawal sistem penilaian subjek. Sistem OCE dibangunkan untuk memberi peluang kepada pelajar untuk menilai subjek yang ditawarkan di KUTKM and juga membolehkan staf untuk melihat laporan penilaian subjek bagi proses pengajaran and pembelajaran melalui sistem ini. OCE dibangunkan untuk mengurangkan masa yang diperlukan untuk mengisi borang penilaian subjek di dalam kelas dan juga mengurangkan penggunaan kertas. Melalui sistem OCE, staf senang mendapatkan statistik penilaian bagi pengajaran dan pembelajaran. Untuk menyempurnakan projek ini, kaedah kitaran hayat pembagunan system (SDLC) digunakan untuk memastikan sistem OCE dapat mencapainya satu taraf yang memuaskan. Pada masa akan datang, sistem OCE juga boleh diperkembangkan dengan penggunaan teknologi yang canggih supaya sistem dapat memenuhi permintaan orang ramai termasuk pengguna mobil.

## ABSTRACT

Online Course Evaluation System (OCE) is a subject assessment and management system for web development. OCE is developed to provide a web-based system which allows student to evaluate subjects and for staff to view reports regarding the teaching and learning (T & L) process of subjects offered at KUTKM. OCE is supposed to be able to reduce time taken to fill-in subject assessment forms during class hours and to save on paper usage. Through OCE the staff can easily obtain statistics relevant to teaching and learning. In this project, the system development life cycle (SDLC) methodology is used to ensure OCE achieves a certain standard for implementation. OCE may be further enhanced to accommodate with the latest technology and mobile users.



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## LIST OF ABBREVIATIONS

<b>Abbreviation</b>	<b>-</b>	<b>Description</b>
CEI	-	Course Evaluation Instrument
CPU	-	Central Processing Unit
DFD	-	DataFlow Diagram
ERD	-	Entity Relationship Diagram
FKE	-	Fakulti Kejuruteraan Elektrik
FKEKK	-	Fakulti Kejuruteraan Elektronik dan Kejuruteraan Komputer
FKM	-	Fakulti Kejuruteraan Mekanikal
FKP	-	Fakulti Kejuruteraan Pembuatan
FTMK	-	Fakulti Teknologi Maklumat & Komunikasi
IE	-	Internet Explore
IIS	-	Internet Information Server
KUTKM	-	Kolej Universiti Teknikal Kebangsaan Malaysia
OCE	-	Online Course Evaluation
OOA	-	Object- Oriented Analysis
OOD	-	Object-Oriented Design
OOP	-	Object-Oriented Programming
PSM	-	Projek Sarjana Muda
RAM	-	Random Access Memory
SDLC	-	System Development Life Cycle
SET	-	Student Evaluation of Teaching Instrument
TCP/IP	-	Transmission Control Protocol / Internet Protocol
T&L	-	Teaching and Learning
UML	-	Unified Modeling Language
URL	-	Uniform Resource Locator

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# CHAPTER I

## INTRODUCTION

### 1.1 Preamble/Overview

Nowadays, there are many colleges and university in Malaysia whether is belong to government or private. Those colleges and university will provide course for students to continuous their study after students completing studies at secondary school.

Every year, there have thousand graduates which graduated from colleges or public university. Quality of the student to fulfill the company requirement is based on knowledge that students get in the colleges or university. Lecturers in university and colleges is person who important to guide and lead the students.

To assess and evaluate how effectiveness of learning and teaching in university or college, university or college request student's to fill out the course evaluation survey to evaluate subject that student's taken in the current semester. Through this survey, university and college can use the survey result to analyze and access lecturer performance and subjects that offer by KUTKM.



Traditionally, the course evaluation survey will be done by print out the question on paper and request the student's to fill in. After student's fill-in the form, KUTKM staffs need to collect back and analyze all form. But, KUTKM staffs need to spend much time to manage, calculate the statistic from the survey result and also conducted the survey.

To solve this problem, the topic called Online Course Evaluation (OCE) system for Projek Sarjana Muda (PSM) is proposed. This OCE system is the web-based system that allow student to evaluate the subject through the web site. This web site will help the KUTKM to collect the information for evaluation after student complete evaluates the subject in the end of semester.

## **1.2 Problem Statement**

Since the KUKTM founded, there not have a standard system use to evaluate the subject and lecturer performance. This make the university can not assess the subject that KUTKM offer and also the lecturer performance.

However, some KUTKM lecturers conduct the course evaluation survey in their lecture class. But this survey only done for several classes and the result for survey is just for the certain subject only. The questions for the survey also done by lecturers themselves is mostly based on specify subject, that survey form can not be use to assess other subject in the KUTKM.

Another problem that faces by KUTKM staff's is time needed to analyze the survey form and calculate survey result. KUTKM staffs need to spend much time to

look the form one by one. By develop the online course evaluation, this work will be done by system automatic and this will save staff's time.

### 1.3 Objective

The main objective for this OCE system is to improve the quality and effectiveness of the teaching and learning. This course evaluation survey is use for student to evaluate the subject in their perspective. The result for the survey can be uses by the academic service centre to assess the subject that offer by KUTKM.

By using this OCE system, students are giving a chance to express their comment about the subject. The answer for the students will be collect and become the references to faculty and academic service centre to assess and figure out the syllabus for the subject.

One the more important thing that this web site have is can automatic calculate the statistic for the survey result. The result for the survey can display in the chart or percentages type make easy academic service centre fast getting the result and analyze the result. Administrator or lecturers can view and print out the report for the survey from system and this will save the time compare with the survey result is calculate by human.

From survey report, staff will know how students feel to subject like whether they can handle the assignment or project, whether need to add more topic for this course or what benefit they get after attend the class. This is valuable information

will give a chance to KUTKM staffs make the subject syllabus more comfortable for student in next semester.

OCE system is the web-based system which allows student's completed for survey question through internet. Students can complete survey once their computer is connected to internet. This will save the time resource and paper (paperless) to print out the questionnaire and do the survey in lecture section.

OCE system not only use for evaluate the subject which students taken in this semester but indirectly use for assess the lecturer performance. This OCE system can help the staffs to evaluate the lecturer performance to check whether that lecturer suitable for teaching this subject. This also helps the faculty to assign suitable lecturer to teach the specify subject.

#### **1.4 Scopes**

OCE system is a system that will be use in KUTKM to evaluate the subject after it completed. This system just allows the KUTKM student, administrator and lecturer to access it. User can access to the OCE system through the Internet Explore 5.5 and above by insert the url to retrieve the web page. This system will be located in the KUTKM server.

Users not need to do the registration to this system individually because student and lecturer username and password will be inserting by the administrator into the system database. The password and username for access this system same



with the username and password that use when registers in KUTKM web site. Student, lecturer and administrator need to login to the page before using this system.

For student, student's just allows filling the survey form for the subject that student's taken in current semester and year but students are not allowed to view the statistic for the survey result. Student need to choose which subject that he or she likes to evaluated. After completed all the questions for the survey, student's need to submit the survey form and the result for this survey will save into the database. Student's can not change the result for the survey once is submitted button is clicked.

For Administrator, she or he can change and modify the questions, subject and user profile in time to time but this can not be done by the lecturer. Administrator also can add the new questions, subjects and users into the database. For unwanted data, administration also can delete it from the database.

The most important feature for this system is can auto calculates and generates the survey report based on student evaluation. Three ways are use to display the survey result which are bar chart, percentages and pie chart report. Administrator and lecturers also print out the report for doing the research and development.

## **1.5 Contributions**

OCE system is a web-based system which use for evaluates subject that offer by KUTKM and indirectly those result also can use to assess the lecturer performance. To bring up the colleges or university reputation, the colleges and

university must pay more attention to manage the lecturer and scheme for the subject.

The main signification for this project is to evaluate the subject that offer by the KUTKM. This course evaluation survey is needed to know whether the subject is more quality and thus deserving to continuous. Furthermore, the result for the survey can use by the academic service centre to determine the syllabus, skills, needs and interest of students for the subject. This can improve the effective of the administrator in academic service centre to plan the subject topic and syllabus to make is more useful and benefit after students attend the class.

The most hard work need to do is analysis and view the form that student fill in. Administrator need to spend must time to analyze and calculate the result survey. By using OCE system, survey result will be calculated automatically by system. This makes the lecturers and administrator easy and fast access the report for survey and time resource and paper will be saved.

## **1.6 Expected Output**

This OCE system is very useful system if it implementation in the KUTKM. This system will help KUTKM to assess and analyze the quality and effective of teaching and learning to guide KUTKM to achieve the standard of ISO.

OCE system consist seven main functions for student, lecturer and administrator to assess subjects, view survey result and manage the database which are:



### **1. Evaluate subject**

This function is use by student to evaluate the subject that taken by student for current year and semester. Student can not evaluate the subject that has been complete evaluate before.

### **2. View report**

This function allow the lecturer to view the survey report based on the subject that lecturer teach for current year and semester. Three types of report is use to display the survey result which is bar chart, percentages and pie chart report. Administrator and coordinator can view the report for all lecturers. The report also can be printed out also.

### **3. Manage user**

This function only use by administrator to add, delete and modify the user details whether for student or lecturer. Besides that, administrator can add, delete or modify student enrollment and lecturer classes for current or future year and semester.

### **4. Manage question**

This function use by the administrator to add, delete and modify survey question. Administrator also need to determine and selected the survey questions for specify year and semester through this function.

### **5. Manage subject**

This function use by the administrator to add, delete and modify the subject data into or from or existing in the database.

### **6. Manage data**

This function allows the administrator to update table student, lecturer, stuent enrollment and lecturer classes. Besides that, it also allow to delete unwanted student, lecturer, student enrollment, lecturer classes, subject, faculty and course record from database based on the specify value.