eLEARNING SYSTEM (STUDENT)

RABIATUN ADAWIYAH BINTI MAT ADAM

This report is submitted in partial fulfillment of the requirements for the award of
Bachelor of Electronic Engineering (Computer Engineering) With Honours

Faculty of Electronic and Computer Engineering

Universiti Teknikal Malaysia Melaka

April 2009

UNIVERSTI TEKNIKAL MALAYSIA MELAKA
FAKULTI KEJURUTERAAN ELEKTRONIK DAN KEJURUTERAAN KOMPUTER

BORANG PENGESAHAN STATUS LAPORAN
PROJEK SARJANA MUDA II

Tajuk projek : eLEARNING SYSTEM (STUDENT)

Sesi Pengajian : 2008/2009

Saya RABIATUN ADAWIYAH BINTI MAT ADAM mengaku membenarkan Laporan Projek Sarjana Muda ini disimpan di Perpustakaan dengan syarat-syarat kegunaan seperti berikut:

1. Laporan adalah hakmilik Universiti Teknikal Malaysia Melaka.
2. Perpustakaan dibenarkan membuat salinan untuk tujuan pengajian sahaja.
3. Perpustakaan dibenarkan membuat salinan laporan 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)

☐ **TERHAD*** (Mengandungi maklumat terhad yang telah ditentukan oleh organisasi/badan di mana penyelidikan dijalankan)

☑ **TIDAK TERHAD**

Disahkan Oleh:

_____
(TANDATANGAN PENULIS)

Alamat Tetap : KG. BINJAI BONGKOK,
BUKIT PAYONG, 21400,
MARANG, TERENGGANU

Tarikh : 21 APRIL 2009

_____
(COP DAN TANDATANGAN PENYELIA)
NOOR MAZLINA BT MAHMOD
Pensyarah
Fakulti Kejuruteraan Elektronik Dan Kejuruteraan Komputer
Universiti Teknikal Malaysia Melaka (UTeM)
Karung Berkunci No 1752
Pejabat Pos Durian Tunggal
76109 Durian Tunggal, Melaka

Tarikh : 21 APRIL 2009

"I hereby declare that this report is the result of my own work except for quotes as cited in the references"

Signature   : ....

Author   : RABIATUN ADAWIYAH BINTI MAT ADAM

Date   : 21 APRIL 2009

"I hereby declare that I have read this report and in my opinion this report is sufficient in terms of the scope and quality for the award of Bachelor of Electronic Engineering (Computer Engineering) With Honours."

Signature   : ....

Supervisor's Name   : PUAN NOOR MAZLINA BINTI MAHMOD

Date   : 21 APRIL 2009

Dedicated to my beloved family at Terengganu especially my mother and father and somebody special, whose encouragement and support with a great help in completing it.

ACKNOWLEDGEMENT

Alhamdulillah first thanks to God with her blessing I have completed this report for Final Year Project I. I also want to thanks both of my parent cause of giving the support on doing this report. Thanks a lot to my supervisor, Madam Noor Mazlina binti Mahmod for guide me to success complete this project. Thanks also to all lecturers who had helps me on giving the idea to complete the project. I also want to thank to all my friends also whose have helped me on the development web-based system and PSM report I want to wish thank you. This report is explained the progress from beginning until designing the dynamic web-based. I hope this report wills be guide to all students who will take Final Year Project.

ABSTRACT

eLearning is interaction type of education that suitable to apply nowadays. eLearning is a type of education where the medium of instruction is computer technology. For this project, eLearning system is developed to FKEKK's student where to make student easily to access their learning material for every subject for their course before attend lecture session. Besides that, eLearning system also can be accessed everywhere at anytime. In this project, PHP scripts language is used because the main goal of PHP is to make web developer easily to develop the web that can generate the information and produces the content depends to user information. The whole project involved design and implement server application content based application and database development.

ABSTRAK

eLearning merupakan satu kaedah pembelajaran yang interaktif yang paling sesuai diaplikasikan pada masa kini. Ia merupakan satu pendidikan yang menggunakan teknologi komputer sebagai arahan. System eLearning yang dibangunkan dalam projek ini adalah untuk pelajar FKEKK sahaja dimana untuk memudahkan pelajar dalam mendapat bahan pembelajaran sebelum sesi kuliah bermula. Selain itu, pelajar dapat mencapai internet di mana-mana sahaja pada bila-bila masa sahaja. Dalam projek ini, bahasa pengaturcaraan PHP digunakan kerana matlamat utama PHP adalah untuk memudahkan pembangun web untuk membina laman web yang memproses maklumat dan menghasilkan kandungan bergantung kepada maklumat yang dihantar oleh pengguna. Keseluruhan projek ini melibatkan rekabentuk dan pembangunan aplikasi pelayan serta pangkalan data.

TABLE OF CONTENTS

CHAPTER	CONTENTS	PAGE

INTRODUCTION

LITERATURE REVIEW

III   **METHODOLOGY**

IV   **RESULT AND DISCUSSION**

CONCLUSION AND SUGGESTION

LIST OF TABLE

LIST OF FIGURES

CHAPTER I

INTRODUCTION

Nowadays, people use technology on their life in many aspects like communication, education, advertisements and many more. eLearning is used to define a specific mode to attend a course of study where the students rarely, if ever, attend face-to-face for on-campus access to educational facilities, because they study online. A learning environment supported by continuously evolving, collaborative processes focused on increasing individual and organizational performance.

1.1 Project Overview

eLearning (student) is an effective web-based to facilitate and support the student learning activities through the use of information communication technologies (ICT). The motivation of system development is to enhance and enrich the learning process via online environment for FKEKK's students since the current traditional way of learning is no more effective to be applied in today's world. This system will be developing using a web-based approach (i.e. PHP) and using MySQL as a database to manage the eLearning information. Through this system, students can experience the learning

process for the way they live. Students can easily access their notes, tutorials, and other learning materials through online. This system also allows effective communication between student and lecturer through discussion board facilities without making any appointments.

1.2   Project Objective

In order for the project to success and to be implemented, the following objectives have to be achieved:

To develop a web-based system that supports the learning process more effective through the use of ICT.

To enhance the effectiveness of interaction and communication between students and lecturers.

To enrich the students experience by teaching the way they live and learn.

1.3   Problem Statement

1. Traditional learning makes the learning process no more effective nowadays.

2. Students not prepared when attending the lecture session because they only get their notes during the lecture. It will get worse if the student is absence, then he/she will miss the entire teaching and learning session for the particular class.

3. The communication between students and lecturer is not encouraging if using the traditional way of learning process, since student and lecturer has to meet on an appointment made when both of them are convenience.

1.4 Work Scope

- Basically, this project is developed to FKEKK to support and resources for online learning and use of educational technologies throughout FKEKK.
- This system provide user with two communications which it will be link between student and admin only.
- The users can access this system anywhere via internet.
- The functions of elearning system are:
  - ➢ Allows the student to access their notes, assessments, tutorials or other learning material for every subject for their courses in the download page.
  - ➢ Student also can view lecturer's announcement for every subject.
  - ➢ Allows student to communicate or discuss with lecturer and others student through discussion board site. So, lecturer and student can easily communicate with each other without making any appointments.
  - ➢ Student also can review their credit hours, subject list, and lecturer's name through course profile site for every batch.

1.5   Methodology Of Project
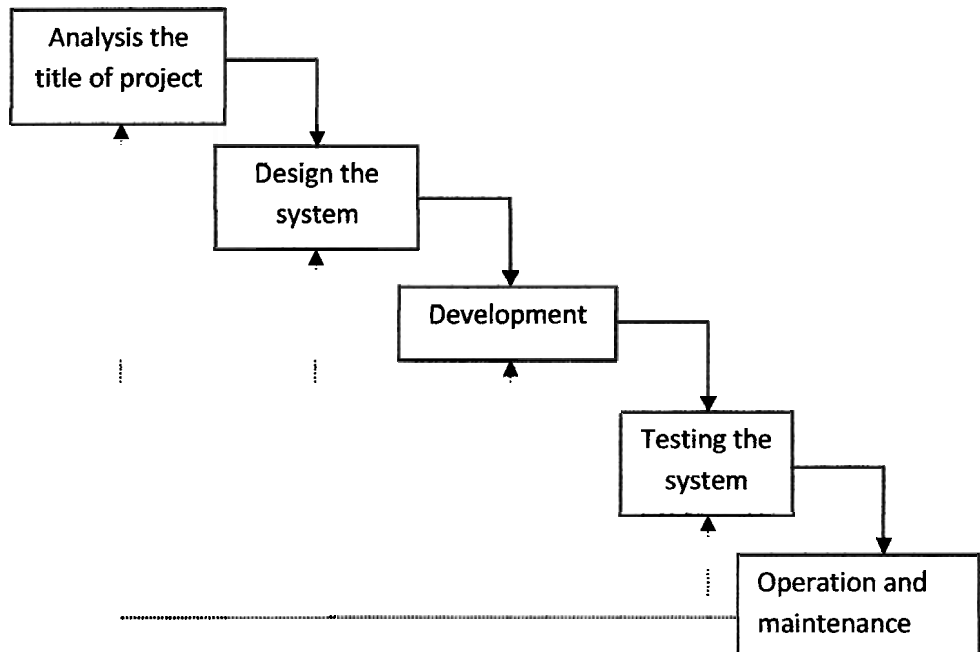
Figure 1.1 project flowchart

1.5.1   Analysis the title of project

In this phase, researches have been alone on elearning process especially on student elearning activities or functions. Some analysis on elearning system that has been developed is used to lecturers and students throughout FKEKK. The system's modules will develop by using the PHP scripts, and use the centralized database (MySQL) to make sure the data can be shared among the system users.

1.5.2   Design the System

To design the system, Macromedia Dreamweaver MX software is used for creates the user interface for the course, as well as a prototype that shows the layout for each screen and the flow of the entire course.

1.5.3 Development

In the development phase, PHP is used. PHP is the programming language used with the MySQL programming language to create the elearning system. It is for server-side scripting, but can be used from a command line interface or in standalone graphical applications.

1.5.4 Testing the System

At this phase, the system will be tested before launching to ensure the system is running properly and meet functional specifications. Any stated unambiguously, omission and errors have been detected and corrected.

1.5.5 Operation and Maintenance

In the duty operation phase, and maintenance phase, systems were installing. Maintenance involves correcting errors discovered in practice and improving system units and enhancing services in response to new requirements.

1.6 Thesis Outline

This thesis is divided into 5 chapters to provide the understanding of the whole project.

Chapter 1 is introduction to overview this project and its objectives. It also explains the scopes of project.

Chapter 2 describe about the literature review that has been used to gather information to complete the whole project. This study is focused especially on all software involve in this project.

Chapter 3 covers up all the project methodology and explains the project implementation to achieve goal. The software technical details are also explained in this part.

Chapter 4 explains the result of this project and the operation of the system. In this chapter the analysis of the project also has been discussed.

Chapter 5 explains on the future recommendation for the project to for future improvement.

CHAPTER II

LITERATURE REVIEW

This chapter describes about the literature review involved to gather information of the project. This includes Macromedia MX, PHP, MySQL server that operates on eLearning system. Many researches are carried out for this project.

2.1 Overview

Electronic learning (or e-Learning or eLearning) is a type of education where the medium of instruction is computer technology. In some instances, no in-person interaction takes place. *E-learning* is used interchangeably in a wide variety of contexts. E-learning naturally suited to distance learning and flexible learning, but can also be used in conjunction with face-to-face teaching, in which case the term Blended learning is commonly used. E-Learning pioneer Bernard Luskin argues that the "E" must be understood to have broad meaning if e-Learning is to be effective. Luskin says that the "e" should be interpreted to mean exciting, energetic, enthusiastic, emotional, extended, excellent, and educational in addition to "electronic" that is a traditional national interpretation.

In companies, it refers to the strategies that use the company network to deliver training courses to employees. In the USA, it is defined as a planned teaching/learning experience that uses a wide spectrum of technologies, mainly Internet or computer-based, to reach learners. Lately in most Universities, e-learning is used to define a specific mode to attend a course of study where the students rarely, if ever, attend face-to-face for on-campus access to educational facilities, because they study online. A learning environment supported by continuously evolving, collaborative processes focused on increasing individual and organizational performance.

Effective eLearning thrives at the nexus of web usability, communication, relationship, document, and knowledge management tools. Knowledge Management is about using information strategically to achieve one's business objectives. Knowledge management is the organizational activity of creating the social environment and technical infrastructure so that knowledge can be accessed, shared and created.

2.2 Concepts of eLearning

Table 2.1 concepts of eLearning

eLearning is	eLearning is NOT
Non Linear - Learners determine how, what and when they access information.	**Linear** - Learners must move through presentation in a predetermined sequence.
Dynamic Process - Transformed, personalized, customized on demand in response to learner and environmental	**Static Event** - Learning is not an event that only happens when scheduled training occurs, it happens continuously.

variables. Available on demand and just in time.	
Learner Controlled - Learner controls their own interaction with the content and presentation. Learner has opportunities for reflection and application.	**Instructor Controlled** - Instructor determines sequence, content, media and timing. Long simulations, or animations or Flash presentations are instructor controlled. Synchronous meetings are instructor controlled.
Reusable Objects - Content of any media that can be chunked down to the most granular, meaningful level to allow combinations of objects to be assembled and dynamically presented for different environments and functional needs.	**Learning Objects** - By focusing the use of an object for only one environment, you remove reusability. Web standard enterprise level portal and CMS platforms should be used.
Informal - Recognizes that at least 70% of learning occurs in meetings, in the corridors and break rooms, through collaboration, in situational communities.	**Formal** - Learning occurs w/o formal training presentations. Training is not the same as learning.