

**THE DEVELOPMENT OF E-LEARNING SYSTEM FOR FKEKK BY USING APACHE, PHP AND MYSQL**

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**This report is submitted in partial fulfillment of the requirements for the award of Bachelor  
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Specially dedicated to my beloved family and those people who have guided and inspired me throughout my journey of education

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## **ABSTRACT**

E-learning System is a system that is developed for lecturer and students of FKEKK faculty. Basically, this system is a medium between lecturers and students to communicate each other that is conducted online. Furthermore, this system provided to support in class activities by giving students opportunities for further exploration, discussion, and exchange ideas outside class while lecturer can managed and uploaded lecture notes, slide presentation, images and artwork directly to the students. The method for developing this system is using by Apache, PHP and MySQL. PHP and MySQL are a powerful combination that makes it easy to create web applications. If we've been creating web pages but want to build more sophisticated sites that can grow and interact with users, PHP and MySQL let us get started easily and then build complex applications on those foundation. The result that is presented shows the basic functions such as uploads and downloads learning material to enable tracking of learning.

## ABSTRAK

Sistem e-learning ialah sistem yang direka khas untuk para pensyarah dan pelajar fakulti FKEKK. Secara amnya, sistem ini merupakan medium perantara di kalangan pensyarah dan pelajar untuk berkomunikasi antara satu sama lain secara talian terus (online). Tambahan pula, sistem ini disediakan bagi menyokong aktiviti kelas dengan memberi peluang kepada para pelajar untuk menyelidik, berbincang dan saling bertukar idea di luar sesi kelas. Pensyarah pula dapat mengurus dan memuatnaik nota-nota, pembentangan slide, imej dan kerja-kerja seni terus kepada pelajar. Sistem ini dihasilkan dengan menggunakan kaedah Apache, PHP dan MySQL. PHP dan MySQL merupakan gabungan perisian yang mantap demi menghasilkan sesebuah aplikasi web. Jika kita mencipta laman web yang sofistikated serta mesra pengguna, PHP dan MySQL memudahkan kita untuk memulakannya dan kemudian menghasilkan aplikasi yang lebih kompleks daripada asas tersebut. Keputusan yang dibentangkan menunjukkan fungsi-fungsi asas seperti muat naik dan muat turun bahan pembelajaran untuk membolehkan aktiviti pembelajaran dikesan.



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**LIST OF TERM**

PHP	- Hypertext Preprocessor
SQL	- Structure Query Language
MySQL	- Multi-User SQL
HTML	- Hyper Text Markup Language
CSS	- Cascading Style Sheets
CFML	- Cold Fusion Markup Language
BDCM	- Board Design Center Malaysia
CGI	- Common Gateway Interface
FAQ	- Frequently Ask Question
FKEKK	- Faculty of Electronic and Computer Engineering
JSP	- JavaScript
IIS	- Internet Information Services
XAMPP	- X Apache, MySQL, PHP & Perl
UM	- University of Malaya
UTM	- University of Technology Malaysia

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## **CHAPTER I**

### **INTRODUCTION**

#### **1.1 Introduction**

Over the last decade, researchers and practitioners have developed a wide range of knowledge related to electronic learning or e-learning. This movement has affected different elements and components; infrastructures, tools, content-oriented applications, human-computer interactions, pedagogical issues, methodologies and models, case studies and projects. This chapter briefly describes the overall idea of the development of e-learning system for FKEKK by using Apache, PHP and MySQL. This chapter includes objectives of the project, scope of work, problem statement and features of project before developed the own sites.

### **1.1.1 Definition of e-learning**

E-Learning has its historical background in about 30 years of development in computer based on the training and education. With the growth of the internet this kind of training became much more accepted and the creation of multimedia contents and systems to manage learning activities went on faster. Additional e-learning is based on a long tradition of teaching and learning experience. The larger worlds Information Technology and Education and Training influenced the new term e-learning and so e-learning became a subset of both of them.

Nowadays, e-learning refers to learning that is delivered or enabled via electronic technology. It encompasses learning delivered via a range of technologies such as the internet, television, videotape, and computer-based training. In principle, e-learning is a kind of distance learning. Learning materials can be accessed from the web or intranet via a computer and tutors and learners can communicate with each other using e-mail, chat or discussion forums.

Therefore, it can be used as the main method of delivery of training or as a combined approach with classroom-based training. It can be valuable when used as a part of well-planned and properly supported education and training environment, but e-learning is not a magic bullet that replaces existing pedagogical theories and approaches. Nevertheless, it has almost everything that those theories need to get implemented. Many learning and technology professionals believe that e-learning will have become state of the art when we will stop referring to it by a separate name and begin considering it as an integral part of a complete learning environment.

### **1.1.4 Features of Project**

1. Enhances computer and internet skills.
  2. Technology tools make collaboration among lecturers and students much easier.
- The online environment is far easier to work in since students don't have to be

face to face.

3. The global e-learning community is at the fingertips with online learning.

#### **1.1.5 Benefit of Project**

1. E-learning brings proven benefits to the business, providing training with savings in both time and cost - effectiveness and efficiency.
2. E-learning can be used for training at initial stages, to get new skills, or for continuous updating training.
3. Learners also have the possibility to get access to experts on special topics to ask questions and get additional information and support.
4. E-learning covers the complete cycle of the teaching and learning process.

### **1.2 Objectives**

1. To create a system that can be used by students and lecturers.
2. To implement the system for easier access to students and lecturers.
3. To create a system using the PHP language and interfacing it using Adobe Dreamweaver.
4. To be able to set up the server and interfacing it with the system.

### **1.3 Problem Statements**

Both e-learning system and workflow system tend to solve the same very general problem of having or many actors executing an activity or graph for activities and producing something. Therefore, the main components of such a system in both cases are actor, activity, and product. The goal of an e-learning system is the “learning”. The main actor, the learner (students) is expected to learn, to acquire new knowledge and competencies, through the execution different structured learning activities.

1. To provide interface between lecturer and student, where student don't needs to go every lecturer room just to make a simple discussion. In fact, this project comes out to upgrade and develop learning process among the students.
2. To provide a medium where students be able to download note, tutorial and lab in the easy way.
3. To provide a medium where lecturers be able to upload and download note, tutorial and lab in the easy way.
4. To provide the system that will support in class activities by giving students opportunities for further exploration, discussion, and exchange ideas outside class. For this purpose, it is necessary to go beyond the learning simple reusability of material in repositories of learning objects and find solutions in order to build significant learning scenarios or programs that enable students to achieve real competency gains while reinvesting learning objects.

#### **1.4 Scope of Works**

The scope of work in this project is stated as given:

1. To develop the system by using Apache, PHP and MySQL.
2. To serves an administrative function by giving student's access to course documents and other course materials for each courses they were taken.
3. To send latest announcement and news that is related for each course.
4. To display course related information on the link and reference item.
5. Provide FAQ (frequently ask question) and add a comments in this system where students and lecturer be able to ask questions and submit their comments.
6. Provide a simple of IQ Test to students.

## 1.5 Methodology

This project involves a few major phases:-

### Phase 1: Literature Review

- i. Gather the information about the project via Internet, journals, magazines, published work and reference books.
- ii. Studying about different programming languages for example php, html, and dynamic html.
- iii. Gathering information about the system, the previous project and the other similar system.

### Phase 2: Learning the different type of programming language

- i. Learning the different type of programming language available like PHP, html, dynamic html, Java, Javascript and etc.
- ii. Searching for basic tutorial online to start learning the basic instruction.

### Phase 3: Developing or creating the interfaces.

- i. The design of interface for the system using Dreamweaver software.
- ii. Dreamweaver is chosen because of it is easy to manage the code of programming.

### Phase 4: Setting up server

- i. Setting up the server for the system does not take a longer time.

### Phase 5: Programming and database

- i. The programming of the system is using PHP.
- ii. The database is created and interfacing it with Dreamweaver.

### Phase 6: Implementation and testing the system

- i. Implementing and testing the system through the server. If a problem occurs,

checking is needed.

Phase 7: Writing the thesis

- i. The written thesis is started

## **1.6 Report Structure**

This thesis is written as a documented report of the ideas gathered, the theories and concepts that are applied, the activities performed during the execution of this project and the final product of this project produced. The thesis consists of five chapters and each chapter is described as shown below:

Chapter 1 is an introduction of the project that consists of definition of e-learning, features and benefit of the project, objectives, problem statements and briefly skim through the report structure.

Chapter 2 talks about the background study of the project along with the literature review and documented related with the project, about the theoretical concept of the project intended. Background study on the FKEKK e-learning system, brief information on similar system like Intel's Ideas Knowledgebase, Universiti Malaya e-learning and Universiti Teknologi Malaysia e-learning are also discussed. Reviews are done on the difference of each systems and why it is important to develop and implement this system. Database, programming languages, and certain software available and used are also explained in this chapter.

Chapter 3 is all about the methodology of the project, design flow that is done throughout the project and ideas of the construction of the system. All the database was created for this project are included and described in this chapter. Brief description is given about each procedure in the completion of the project. The list approaches and what is used in this project are incorporated.