

ELECTRONIC LEARNING MANAGEMENT SYSTEM

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Tajuk Projek : ELECTRONIC LEARNING MANAGEMENT SYSTEM

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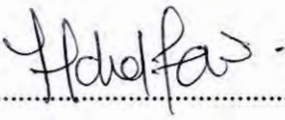
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*Dedicated to my beloved parents;
Jamaludin Bin Lebam and Noor Adida Binti Shahrudin*

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In the name of Allah, The Most Gracious, The Most Merciful. Peace be upon the Messenger of Allah, Prophet Muhammad s.a.w, his companions (r.a) and followers until the end of day. Thanks to Allah, with His blessing, this final project is successfully delivered. First of all, I want to thanks my beloved mom and dad, whom keep prays for me, gives me freedom and show understanding to me as a student because their loves keep me moving forward. Secondly, I want to thanks my supervisor for this final project, Mrs Hanissah Binti Mohamad @ Sulaiman, whom shares knowledge and idea so that I will keep on the right track which leads to this project successful. I also want to thanks all my friends who lend me a hand through out this project. Last but not least, to all people that helping me for this project, thank you for making my life happens.

ABSTRAK

Projek ini adalah satu sistem yang pembelajaran yang boleh diaplikasikan dalam semua pusat pembelajaran. Sistem pembelajaran elearning ini akan memudahkan pensyarah dan pelajar kerana ia amat mudah digunakan selain dapat menjimatkan masa, wang dan tenaga. Pelajar dan pensyarah hanya perlu mempunyai sambungan internet dan komputer untuk mengakses laman web elearning ini. Kelebihan yang diperoleh pensyarah adalah mereka boleh menyimpan nota, latihan, sumber rujukan dan artikel-artikel di dalam website ini untuk tatapan serta rujukan pelajar-pelajar. Ini akan membantu pelajar untuk menjimatkan kos bagi pencetakan serta pembelian buku teks. Kelebihan bagi pelajar pula adalah, mereka tidak perlu untuk berjumpa dengan pensyarah untuk menghantar tugas yang telah diberikan kerana mereka boleh menghantar secara terus melalui website elearning ini. Tambahan pula, pensyarah boleh membuat, tutorial dan quiz di dalam website ini. Kaedah pembelajaran ini akan dapat meningkatkan pengetahuan pelajar, dan mereka akan lebih berdikari untuk menentukan hala tuju pembelajaran mereka.

ABSTRACT

This project is a virtual learning method that can be applied widely in all learning center. It will be easy for students and instructors because it is very user friendly and economical in terms of time, energy and money. Students and instructors only need to have internet and a computer to access this website. The advantages for lecturer that they can keep notes, exercises, reference questions, articles and reference books in this elearning web site and then it can be downloaded by the students. This will help to save the cost of printing and purchasing text book. The advantages of students are they do not need to find instructors to ask questions and to submit the assignments because they can send assignments or make any inquiries to the instructor via this e-learning website. In addition, instructors can also create tutorials and quizzes through this website. This learning methods can be save learning cost in addition to overcoming the students who shy to ask lecturer in class. This learning method also can increase student and lecturer knowledge about internet and computer.

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CHAPTER 1

INTRODUCTION

1.1 Project Overview

Definition of e-learning or electronic learning often vary in line with advances in technology at present. It is also often interpreted in one of the education campaign ads. Generally, e-learning is a teaching and learning method by using electronic networks (LAN, WAN or Internet) to deliver content and interaction. Internet, Intranet, satellite, audio tape / video, interactive TV and CD-ROM was part of the electronic media which is in this category. Elearning method can applied synchronously (at the same time) or asynchronously (at a different time).

Teaching and learning materials can be conveyed through the media has multimedia features such as text, graphics, animation, simulation, audio and video. It should also provide for discussion group and allows guidance carried out on line (Learnframe, 2001). Nowadays, internet technology are frequently used and become growth from time to time. There are a lot of information, articles and reference materials can be looking through the internet. Virtual learning method or e-learning is one of the learning method which is use Internet technology.

In foreign countries like USA, United Kingdom and Australia have long used this method of learning. Also not left behind Malaysia because many universities in Malaysia are already using this method of learning such as UTeM, UTM and UM. Therefore, I have taken the initiative to design a web site based on the article e-learning concept that is name Electronic Learning Management System. This project is a virtual learning method that can be applied widely in all learning center. It will be easy for students and instructors because it is very user friendly and economical in terms of time, energy and money. Students and instructors only need to have internet and a computer to access this website. The advantages for lecturer that they can keep notes, exercises, reference questions, articles and reference books in this elearning web site and then it can be downloaded by the students. This will help to save the cost of printing and purchasing text book. The advantages of students are they do not need to find instructors to ask questions and to submit the assignments because they can send assignments or make any inquiries to the instructor via this e-learning website. In addition, instructors can also create tutorials and quizzes through this website. This learning methods can be save learning cost in addition to overcoming the students who shy to ask lecturer in class. This learning method also can increase student and lecturer knowledge about internet and computer.

1.2 Problem Statement

As e-learning technologies continue to evolve, evaluation studies have likewise multiplied and have attracted researchers, theorists and practitioners in e-learning to continue in their quest to find out and explore the promise of this educational practice. Despite the popularity and growth in e-learning institutions of higher education, many things are not understood about this new way of teaching and learning.

It is therefore, important to know the perceptions of students, faculty members, administrators and technical support staff about the implementation of the e-learning programs. Nowadays, most of the student learns from books, notes and based on the lectures in the classroom. Sometimes, student did not attend the lectures and most of the syllabus is incomplete. Due to that, this e-learning module can enhance the structure of learning.

This can lead to repetitive learning because it will not end when the classroom end. Furthermore, the student can continue access to personalized learning account for an entire year and allow reviewing and revising lesson unlimitedly. Besides, students no need to spend all the time in the library to search for information because, with e-learning module, they can surf through internet. Their opinions could serve as vital tools which could help e-learning implementers to design and prepare online courses, to provide educators with possible solutions, to conduct relevant research, to assist students in achieving meaningful and successful outcomes and finally, to ensure return on their investment. There are several problems that students often encounter in the existing system of learning that is difficulty in getting reference and resource materials related to their learning education. There are several students are not focus on their lecture because of many students in a class and there are few students who are shy to ask in class. Beside that, the cost of buying reference books and the assignment given by the lecturer are very expensive.

1.3 Project Objective

The main objective of this project is :-

- i. To make the teaching and learning process of students and lecturers more easy.
- ii. Students easy to find the reference, teaching resources, reference material and notes relating to subjects taught to students.
- iii. Students easy to ask questions to the lecturer using chat or discussion room which is available on the web e-learning.
- iv. E-learning can make students more discerning in the use of computers and the internet.

1.4 Project Scope

The scope of work for this project is divided into three parts which is project research, project method and project development. The aim of this research is to identify the ways of learning by using e-learning method and find examples of websites that have been used in local universities to compare and to improve the e-learning website. For the project methods, intended to make analysis and search for suitable material of e-learning web site and lists the materials needed to complete this project. For example, the use of server, hosting and domain name. The third scope which is project development, this section is the most important because this is where the project will be developed using the elements that have been selected. At the end of this section, students and instructors will be given opportunities to try this e-learning system in order to learn how to use it.

In first semester, priority will be given to research projects and project methods. In semester 2, the activities for project development will be initiated. At the same time, the thesis for this project will be in synchronize with the development of project.

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Project Development																																																					
Information analysis and recommendations																																																					
Test and identify problems of project																																																					
Discussion and Conclusion																																																					
Tesis																																																					

Table 1 : Project Planning

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

E-learning (or sometimes electronic learning or eLearning) is a term which is commonly used, but does not have a common definition. Most frequently it seems to be used for web-based distance education, with no face-to-face interaction. However, also much broader definitions are common. For example, it may include all types of technology enhanced learning (TEL), where technology is used to support the learning process. Although pedagogy is usually not part of the definition, some authors do include it. For example in this definition, where e-learning is said to be: "pedagogy empowered by digital technology".

It is important to realize that the term e-learning is ambiguous. It is nearly impossible to define what it is, as it has different meanings to different people. Furthermore, it is often used interchangeably with various other related terms, such as distance learning, distributed learning, and electronic learning. The meaning of the term also seems to be dependent on the context in which it is used. In companies, it often refers to the strategies that use the company network to deliver training courses to employees. Lately in most Universities, e-learning is used to define a specific mode to attend a course or programmes of study where the students rarely or never meet face-to-face, nor access on-campus educational facilities, because they study online.

2.2 E-Learning Objective

E-Learning lessons are generally designed to guide students through information or to help students perform in specific tasks. Information based e-learning content communicates information to the student. Examples include content that distributes the history or facts related to a service, company, or product. In information-based content, there is no specific skill to be learned. In performance-based content, the lessons build off of a procedural skill in which the student is expected to increase proficiency. E-Learning can provide for major benefits for the organizations and individuals involved. The aims of this project are:-

- a. Improved performance: A 12-year meta-analysis of research by the U.S. Department of Education found that higher education students in online learning generally performed better than those in face-to-face courses.
- b. Increased access: Instructors of the highest caliber can share their knowledge across borders, allowing students to attend courses across

physical, political, and economic boundaries. Recognized experts have the opportunity of making information available internationally, to anyone interested at minimum costs. For example, the program has made substantial portions of that university's curriculum and lectures available for free online.

- c. Convenience and flexibility to learners: in many contexts, e-learning is self-paced and the learning sessions are available 24x7. Learners are not bound to a specific day/time to physically attend classes. They can also pause learning sessions at their convenience.

2.3 E-Learning Evolution

Ten years ago, training was not done in front of a computer, but in the classroom with a qualified trainer. As technology improved, companies began to integrate training with the computer and the field of e-learning began to take shape. In the early 1990s, market of e-learning system is very limited. Nowadays, the industry represent a very small market and lacked the 'scalability' that is so important in today's applications. (Cooke, 2004) The idea of putting training on video was a good idea, though it was lacking in a few areas Customization based on needs of users, Expensive to maintain and could not be upgraded easily. There is also the issue of employees having to hunt down the proper equipment in order to watch the videos. These videos often had limited interactions which lead to the nearly impossible task of tracking progress and assessment. (Cooke, 2004).

Since it was obvious that video was not the best solution, a new form of training evolved, CBT or Computer Based Training. Windows 3.1, Macintosh, CD-ROMs, PowerPoint marked the technological advancement of the Multimedia Era (Kiffmeyer, 2004). CD-ROMs could be cheaply produced so

that the problem of checking in and out videos was eliminated. Employees would also be able to simply pop in a CD to their personal computer at their desk and complete the training.

Although the CD-ROM Computer-Based Training made advances toward better, it still lacked the ability to track employees' performance in a central database and was also not easy to upgrade. All these problems would disappear with the use of the Internet as a means of delivering content. The problem, when the content was placed on the web, it was simply text to begin with and maybe a few graphics. No one really cared about the effectiveness of this new medium – it was just really cool. (Cooke, 2004)

People in the field of e-learning began to realize that you simply can not put information on the web without a learning strategy for the users, in order to improve the e-learning technology. As a result, e-learning was born. (Clark, 2002)

One of the first innovations in actual e-learning was the LMS or Learning Management System. The first Learning Management Systems (LMS) offered off-the-shelf platforms for front-end registration and course cataloging, and they tracked skills management and reporting on the back-end. (Clark, 2002) This enabled schools and companies to show online courses and be able to track students' progress, communicate with students effectively and provide a place for real-time discussions.

The eClassroom evolved shortly after, which are web-based synchronous events with integrated CBT and simulations.(Clark, 2002) Centra is a great example of an eClassroom that is used quite often today. eClassrooms are often called Live Instructor-Lead Training or ILT. Live instructor-led training (ILT) via the Web can be combined with real-time mentoring, improved learner services, and up-to-date, engaging "born on the Web" content to create a highly-effective, multi-dimensional learning environment. (Kiffmeyer, 2004)

E-learning has come a very long way since its early days of being text-based via the Web or CD-ROM. So what does the future hold? There really is no saying where the field is headed. As long as training is continually geared towards the learners and strategies are used in the training, there is no end in sight for e-learning.

2.4 Growth of E-learning

E-learning affect many learning activities regardless of academic and industri.Industri.

a. Industry

Use e-learning in training has been expanded continuously until the year 2007 increased 20% compared to the existing learning.

b. Institute of Higher Education

In 2006, nearly 3.5 million students who took part in on-line learning at institutions of higher learning in the United States. There are many institutes of higher learning that offers on-line classes. The report found that based on academic leaders say the students who attend classes on-line on average satisfied with the class. The private sector will also become more actively to offer on-line because the cost is low and easy maintain. Trained lecturer should be employed to provide teaching to students on-line. This should consist of lecturer trained in the e-learning field to give the knowledge to the students about the e-learning system.

2.5 E-Learning in Malaysia

Development of e-learning in Malaysia is still new compared to western countries and Singapore. In Malaysia it is directed to distance learning and on-line which mainly offered at universities and private colleges that have joint ventures with foreign universities where fees are very expensive. In Singapore, e-learning 'has been developed in the form of the idea of developing on line repository that helps education industry in the country to develop new elearning courses that allows online modify work. We know that the National IT Agenda (NITA) was launched in December 1996 by the National IT Council (NITC), chaired by YAB Tun Dr Mahathir Mohamad, former Prime Minister of Malaysia. NITA provides guidelines on how information and communication technology, ICT can be used to make Malaysia can be a developed nation configure with Vision 2020 (NITC, 2001). One of NITC early initiative was to create Multimedia Super Corridor, MSC. Strategies that planned by the NITC is the e-community, e-public services', 'e-learning', 'e-economy', and 'e-Sovereignty'. Ministry of Education and the private sector such as MIMOS and Utusan Group has been responsible to ensure the agenda of national e-learning.

2.6 Comparison Between Traditional Learning and E-learning Method

In traditional learning, the learning environment is centered of lecturer. Lecturer is knowledgeable who distribute knowledge to students. It is depend on lecturer whether to use any method or theory that has been studied before, such as 'behaviourisme', 'constructivisme' theory of intelligence and variety. Teaching modules based on textbook knowledge, students knowledge are limited based on textbook only.