WEBSITE DEVELOPMENT FOR ELECTROMAGNETIC THEORY (E-LEARNING)

Project Report is presented in partial fulfillment for the award of the

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ABSTRACT

This thesis presents the development of an e-learning website for one of the degree courses taught in Universiti Teknologi MARA. The course is Electromagnetic Theory. Since this course is very abstract, the website is hoped to aid the teaching and learning process.

Electromagnetic Theory is the study of the electric fields and magnetic fields, around us. Students need to visualize such fields in order to understand the course. If these fields could be displayed through the use of programming software, the teaching and learning process could be further enhanced.

This website is designed to be interactive and user friendly where the user is able to interact and used the website easily. This website contains lecturer's note, tutorials and past year examination question papers obtained from reliable resources such as text books, lecturer's note and other universities website. This website also include interactive program where the user can interact and answer to the given set of questions and also perform mathematical calculation. The user needs to log-in to the website in order to use all the privilege offered.

This project is created and built using PHP: Hypertext Preprocessor as the scripting language. The server used is Apache and MySQL is used for its database.

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CHAPTER ONE

INTRODUCTION

1.1 INTRODUCTION

Most of things around us to day are technology based things. For example, in acquiring knowledge, there are lots of resources available. We can get knowledge from a lot of sources such as books, lecture's notes, journals and the internet. From the World Wide Web, we can access many things which are related with our study at any time and any place. From this, e-learning is introduced.

E-learning is the delivery of learning and training process using electronic media, for example using computers, internet and intranet. In principle, e-learning is a kind of distance learning. Learning materials can be accessed from the web or CD via a computer, and tutors and learners can communicate with each others via e-mail or discussion forums. E-learning also can be used as the main method of delivery of training or as a combined approach with classroom-based learning.

This is why this website is develops. This website is develops as a new process of teaching and learning for lecturer and student. It also acts as a guide for the student where the students will have a better understanding of what the course is all about. Figure 1.1 shows the flow chart for the website development.