E-learning

MINI PROJECT – I

SYNOPSIS

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SUBMITTED TO: -

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Acknowledgement

It gives us a great sense of pleasure to present the synopsis of the B.Tech mini project undertaken during B.Tech III Year. This project is going to be an acknowledgement to the inspiration, drive and technical assistance will be contributed to it by many individuals. We owe special debt of gratitude to Mr. Mandeep Singh, Technical Trainer , for providing us with an encouraging platform to develop this project, which thus helped us in shaping our abilities towards a constructive goal and for his constant support and guidance to our work.

His sincerity, thoroughness and perseverance has been a constant source of inspiration for us. We believe that he will shower us with all his extensively experienced ideas and insightful comments at different stages of the project & also taught us about the latest industry-oriented technologies. We also do not like miss the opportunity to acknowledge the contribution of all faculty members of the department for their kind guidance and co-operation.

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ABSTRACT

The study described in this research report focused on variables which were posited to capture students' experiences of the online tutoring service, e-Learning, and relationships with the students' perceptions of their academic capabilities and academic performance. A theoretical model incorporating variables from the Technology Acceptance Model, the Theory of Planned Behaviour, and Social Cognitive Theory was developed and tested. A total of 506 undergraduate students from a university located in Sydney, Australia, completed an online survey. Data were analysed using confirmatory factor analysis (CFA) and structural equation modelling (SEM). The results suggested that the perceived usefulness of E-Learning had a direct positive relationship with academic self-efficacy, and an indirect positive association with the students' academic grades through academic self-efficacy. There was a direct positive relationship between academic self-efficacy and students' academic grades. The implications of these results and directions for future research are discussed in this report.

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INTRODUCTION

The emergence of modern technologies has had profound impacts on the education landscape, with online learning now an integral part of the learning process. The main advantages of online learning are flexibility and accessibility (Wu, Tennyson, & Hsia, 2010). Student access to educators to assist them is no longer restricted to the hours of operation of schools and universities, but can be provided anytime and anywhere. Face-to-face tutoring is a well-established, and effective, instructional method. However, there is a need for more empirical research to be directed toward investigating users' experiences with online tutoring services, their impact on academic confidence (self-efficacy), and achievement scores. The purpose of this project is to develop a back-end application for e-learning applications and queries using graphical user interface.

SOFTWARE AND HARDWARE REQUIREMENTS

- JSDK1.5
- WebSphere Application Developer(WSAD)
- Tomcat 4.1
- Oracle 8i
- Ethernet Adapter
- 512 MB Ram
- Window 10

PROJECT DESCRIPTION

The purpose of this project is to develop a back-end application for e-learning applications and queries using graphical user interface. It allows for flexible data format and deliver of its data so that each analysis application can receive only the information it needs and in the format required.

The project is divided into 3 modules – student, course expert and administrator. The roles of the modules are as follows:

- **Student :**

  The student selects from various courses available. The student **t**akes a test on a course. There might be courses, which has only test modules. Each question has multiple choices with only one correct answer. The test will be time bound. Student can see the test schedule. New Users will be able to register themselves in the system as students. All students will be able to modify their own profile. Student views previous test reports, receives feedback for a test taken Student can go to the discussion board and browse through questions and answers and discussing solutions of questions asked in test. Student can chat with course expert. Student can also send messages to the course expert.

- **Course Expert :**

  Creating test questions for the course**,** test questions will reside in the Draft area if either it is saved while creating/modifying or it has been rejected by admin. Modifying test questions, deleting the entire test, browse through the tests that students have submitted, just as a student would., view the results of those students that have taken test for his courses. Replying back to the messages from students.

- **Administrator:**

  Publish tests submitted by Course Experts. Before publishing test questions it is customary to get it reviewed by admin. After going through its content either it gets approved or gets rejected**.** Modify the profile of other users registered in the system. Change user status from inactive to active.

WORKING

A student has to register his profile for a course, by authentication and authorization and chat with others. A student can join discussion forums,

send mail to instructor(s) of the course and provide feedback about the test

given. A student can view test schedule, take test to assess his knowledge, view test report and edit his/her profile.

A course expert creates a test for the course, test questions will reside in the Draft area if either it is saved while creating/modifying or it has been rejected by admin. Modifying test questions, deleting the entire test, browse through the tests that students have submitted, just as a student would., view the results of those students that have taken test for his courses. Replying back to the messages from students.

Publish tests submitted by Course Experts. Before publishing test

questions it is customary to get it reviewed by admin. After going through its content either it gets approved or gets rejected. Modify the profile of other users registered in the system. Change user status from inactive to active

IMPLEMENTATION

Java script is a scripting language used to enhance the functionality of the browser. Java script is integrated with HTML and navigator 2.02. Java script facilitates the developer with properties related to document windows, frames, loaded documents and link. The J2EE platform specifies the logical application components within a system and defines the role played in the development process.

The J2EE platform uses a distributed multitiered application model for enterprise applications.

Java Server Pages (JSP) is a technology based on the Java language and enables the development of dynamic web sites. JSP was developed by Sun Microsystems to allow server side development. JSP files are HTML files with special Tags containing Java source code that provide the dynamic content.

Tomcat started off as a servlet specification implementation by James Duncan Davidson who worked as a software architect at Sun. He later helped in making the project open-source and in its donation by Sun to the Apache Software Foundation.

Oracle is a trade mark of Oracle Corporation and in common usage refers to the database engine (which actually looks for the data) and the range of frontend products. Oracle 8i is the largest selling SQL-based RDBMS and a most commercially useful product.

REFERENCES;

Books:

- JSP
  Web Development with java Server pages

  Duane K Fields

  Mark A Kob
- Core Servlets and JSP – Marty Hall
- Java
  Java2 Complete Reference

  Sun java Documentation
- Professional Java Server Programming

J2EE 1.3 Edition

a! aprèss publication

Websites:

- www.java.sun.com
- www.google.com
- www.javawrench.com
- www.javaworld.com
- www.projectdeveloper.com

Faculty Guidelines:

Mr. Mandeep Singh (Technical Trainer in GLA University)

GitHub Repository link:

https://github.com/Deeptisingh16/Mini-project.git