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# **Implementation of College Web Portal - An E-Learning System**

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### Abstract

College web portal is a web based application that enables effective student teacher interaction. It is a user friendly, GUI based application that will help users for storing, retrieving and sharing resources online. It provides facilities such as online assignment uploading and downloading, online videos, tutorials, college faculty information, alerts and notifications etc. This system has the potential to benefit students of all courses and at all levels by providing them the access to the courses accessible until now to the students of only a few 'elite' institutions. This is an efficient educational experience via technology.

Keywords: E-Learning, Web Portal, multimedia.

# Introduction

Education has become the de-facto gateway for the masses to aspire for and achieve a better life and climb the social ladder. The problem with traditional brick-and-mortar classrooms based learning environment is that it requires huge investments in land, constructions, and facilities and above all in human resources involved.

College web portal is a web based application that enables effective student teacher interaction. It is a user friendly, GUI based application that will help users for storing, retrieving and sharing resources online. It provides facilities such as online assignment uploading and downloading, upload/download/view videos and tutorials, viewing alerts, viewing faculty information.

Our institute supports extensive research and focuses on keeping students at par with the latest technologies. In this scenario where an all time communication between students and teachers is necessary, this is limited by the physical boundaries of the organization.

Due to the recent developments in Information and Communications Technology and the spread of Internet, every organization has the opportunity to be part of the process of providing quality learning. The technical know-how, management and huge capital and operational expenditure are the biggest roadblocks in adoption of e-learning systems by all.

The various tools and techniques used in the proposed study will be empirical in nature and will involve collection, classification, compilation and analysis of data related to the field of study. The study would require collaboration and collection of data in the form of questionnaires, personal interviews, presentations and seminars to the above stated group of stakeholders. The findings will lead to drawing a comprehensive list of benefits, challenges and limitations towards creating central e-learning system based on cloud-computing with each of the models, platforms, and architectures discussed with there relative pros and cons and suitability to a particular scenario.

# Background

The current generation of eLearning projects (those since 1995) have been managed using various methods to varying degrees of success. To this, we posed a question: Why? Certainly there are many answers but the one on which we have focused is project management. In more traditional fields, this area has included both the strategic organizational issues as well as those at more tactical project levels – the processes, methods, techniques, rules, principles, languages, and resources it takes to complete things. With respect to eLearning projects, we can see no difference. Strategic vision and commitment along with accurate and professional day-to-day execution go hand in hand.

As defined by the American Society for Training and Development (ASTD), e-learning "covers a wide set of applications and processes, such as Web-based learning, computer-based learning, virtual classrooms, and digital collaborations". In the context of this study e-learning is defined as Internet based learning that is focused on the delivery of content (text, audio, video, animation, simulation) in a training format. Each stage of the e-learning process requires thoughtful analysis and investigation of how to use the Internet's potential in concert with

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instructional design principles and issues important to various dimensions of the e-learning environment. Therefore, institutions and individuals venturing into e-learning initiatives should explore the requirements necessary to create a successful e-learning experience. This is exactly the area where this study can be a helpful tool.

# **Module Functionality**

There are total 3 modules

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- Faculty Module: The faculty can-
  - Login
  - Post message
  - View previous/Upload new assignment
  - View previous/Upload new video
  - View previous/Upload new tutorial
  - View other faculty information
  - Logout
- Student Module: The student can-
  - Login in respective Classroom
  - View Messages
  - View previous/Upload new assignment
  - View previous/Upload new video
  - View previous/Upload new tutorial
  - View other faculty information
  - Logout of respective classroom
- Admin Module: The admin can-
  - Login
  - Post new/ view previous Alerts
  - View/ delete all faculty messages
  - View/delete all assignments
  - View/delete all videos
  - View/delete all tutorials
- View/delete faculty information

Create/Delete Classrooms

**Feature Model:** in this model we have explain the features of E-learning system.



#### Figure 1: Feature Model for College Portal

# Implementation

Here we are representing some of the web pages that we have design.



# Conclusion

This project is a successful implementation of E-learning system which is the perfect platform for efficient student-teacher interaction. It provides all facilities for faculties, administrator and students to upload, manage and download content respectively conveniently and efficiently and thus use technology effectively in learning like as we say in modern age.

#### **Future Enhancement**

Following are the future enhancements of this project:

- Cloud based E-learning System to provide scalability and cost-efficiency
- Forgot password and email recovery
- Javascript validation with proper message at every page
- Faculty profile page enhancement
- Faculty image on every page of faculty modules and tables
- Password strength, captcha on registration page
- Back button not work through Javascript
- Adding subjects for faculty and subject drop down everywhere
- Editing subjects for faculty and delete old and add new subjects
- Delete flag in faculty profile
- Add search for student tutorials and videos

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