LAB-2: TO PREPARE SYSTEM REQUIREMENTS SPECIFIACTION (SRS) DOCUMENT FOR A PROJECT

TITLE: SYSTEM REQUIREMENTS SPECIFIACTION (SRS) DOCUMENT FOR E-LEARNING MANAGEMENT SYSTEM

THEORY

1. Introduction

1.1 Purpose

This project focuses on developing an E-learning website which provides facility to institute and students in a manner that the learning, evaluation; assessment does not remain limited to the four wall of a classroom.

This website works finding new ways to make an institute a center of excellence in education by providing all the study material, exams available to students online. The students belonging to different places, unable to attend regular classes get access to educational courses across wide range of programs. It provides facility to students to attend their classes through internet and theycan communicate with faculty regarding academics.

1.2 Intended Audience

The target audience for online learning is anyone with internet access. Online courses can be taken by professionals, clients, and lifelong learners alike. The courses are often asynchronous, meaning learners can complete them at their own pace.

1.3 Intended Use

E-learning is an application which is extensively used in the educational sector nowadays. The e-learning application allows students to carry on their academic activities and to access the necessary information at any time from any place without any restriction

1.4 Scope

This will mainly be used by distance education programs offered by institutes, in order to enable students to get the academic facilities from any computer connected to the Internet. This websites designed in a way that it can be easily extended to provide more features and will be easily customizable so that it can work according to every potential user.

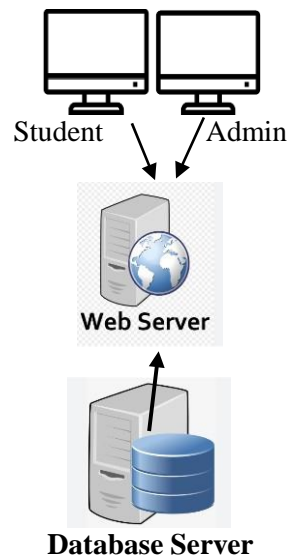## 2. Overall Description

2.1 System Architecture

Figure: System Architecture For e-Learning Management System

2.2 Assumptions and Dependencies

It is assumed that alumni data will be made available for the project in some phase of its completion. Until the test data will be used for providing the demo for the presentations. It is assumed that the user is familiar with an internet browser and also familiar with handling the keyboard and mouse. Since the application is a web- based application there is a need for the internet browser. It will be assumed that the users will possess decent internet connectivity.

3. System Features and Requirements

3.1 Functional Requirements

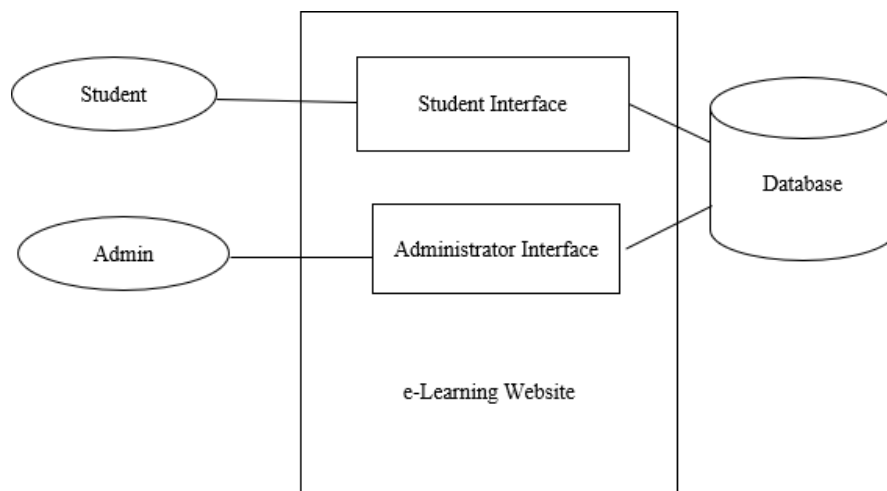The features of the e-learning and video lecturing website will be:
It will store all data in a single centralized database. The database will contain following information:

- ❖ Student details

- ❖ Students query and their solutions

- ❖ Courses Information

- ❖ Courses all videos

- The site will provide course study material to the students in electronic form.

- The site will be used by two different types of users: Students, and the administrators having different interface for each type of user.

- Each user will be provided with a username and password to access his/her account on the site.

- The admin can upload lectures on the site.

3.2 External Interface Requirements:

3.2 Interfaces

The system will provide 2 different interfaces to the users based on their roles i.e. student, and admin.

e-Learning Website

User Interface:
Since this is a Web based application so it should provide a very User friendly interface. It should be easy to navigate. A decent and pleasant appearance with ease of navigation should help to users.

Software Interface:
The application should support all major web browsers that will make it convenient for the user to access our system with ease. The back- end i.e. the database services will be used to a great extent and hence it will be quiet efficiently designed.

Hardware Interface:
The hardware requirement at the user end is really simple and the website can also run on the hardware that can run a basic simple browser, although the hardware should be good enoughduring peak times for the web servers.

Since, application is intended for the authenticated users only, so anonymous person should not be able to access and operate over the user data.

3.3 System Features

- **Account Features**

Obtaining User Accounts - All
When the students or faculties are enrolled in the institute, a request for new user will be provided to the administrator who will create new user account for them.

Creating User Accounts - Admin
Administrators will be allowed to create users. The creation will result in the user login and password to be emailed to the user at the mentioned users email account.
Deleting Users - Admin
  Administrators can remove users entirely from the system.

Logging In - All
The system will allow users to login with a password if they already possess a valid account on

system. The system will protect password and other user information and ensure that it willnot be viewable by others except the administrator.

Editing Account Information - All
Users can edit information themselves and change the password once logged in. Any change saved in the system will be confirmed via an email sent to the user's email account

- ### Course Creation, Modification and Deletion

Course Creation - Admin
Admin can set up new courses in the system and assigns the faculty for that.

Displaying Courses - All
The system will display list of courses offered. The system will display the details of a course to user, when he clicks on a specific course.

Modifying Course Details - Admin
Admin can modify details of the course or delete the course from the system.

- ### Lectures, Study Material and Exams

Uploading Lectures - Admin
The admin for the course can upload lectures for a given course.

Viewing Lectures - Student
Students can view the lectures associated with the course.

Uploading Study Material- Admin
The admin for the course can upload the study materials, syllabus and other reference materials.

Downloading Study Material- Student
The students can download the study material from the site according to their courses. Students are only allowed to access the study material of their course.

Sending Feedback- Student and Admin
This enables the students and admin to provide their feedback on the services offered to them and any new ideas.

Viewing Feedback- Admin
This enables the administrator to view the feedback received form students and faculties

3.4 Nonfunctional Requirements

Performance Requirements:
The application should be able to operate on all major web-browsers with all of its fundamental functions. It should not slow-down the system even at peak hours without affecting the quality of service of the system.

Security Requirements:

- ❖ The server on which the E-learning web application will have its own security to prevent unauthorized *write/delete* access.

- ❖ The system should provide a secure login to the users by using advanced secure login

algorithms and provide access only to the authorized users as security is the key requirement of this system.

- ❖ The user ID and the password should not be shared with anyone.

CONCLUSION

In this lab, the requirements of the software project (E-Learning Management System) were successfully identified.

Assignment

SRS document for online shopping system