

# **Software Requirement Specification(SRS)**

## **For**

### **Electronic-Learning(E-Learning)**

**Title** : E-Learning

**Group Members** : Salunke Dhanshri\_1189  
Prachi Chandrakar\_1180

**List of actors** : Teacher ,Student ,Admin

#### **Introduction:**

E-learning is an education via the Internet, network, or standalone computer, mobile. E-learning is basically the network- enabled convey of skills and knowledge. E-learning refers to using electronic applications and processes to learn. E-learning includes all forms of electronically supported learning and teaching. This often involves out-of-classroom educational experiences via technology. E-learning is the computer and network-enabled transfer of skills and knowledge.

#### **Purpose Of Project :**

Online teaching is a communication platform between student and teacher. Here students can attend the online classes from anywhere by the select teacher. This online teaching system there are three users teacher, student and admin. Admin is a owner of a whole system. Teacher and student both are registered user of our site. They have username and password for login in to website.

Registered teachers login to system and can choose the class, subject, topic , time and date and link to the class(link can be generate from zoom, webex, google meet etc.)

Register student can choose class, subject, topic and then they will get list of the information having class, subject, topic , time and date and link to the class. Here student can choose the appropriate time and date and then can attend the class.

## **Scope Of Projects :**

### **1. Teacher:**

Teacher can select class, subject, topic, time and date of his online lecture. He can provide his online class link.

### **2. Student:**

Student can attend online class from anywhere. He can give rating to teacher about his online class.

### **3. Admin:**

Admin will be able to remove the teachers or students data in the case of any feedback reported.

## **Definitions:**

E-learning → Electronic-Learning

SRS → Software Requirement Specification

GUI → Graphical User Interface

Portal → Personalized Website

UML → Software Engineering Notation for visualising System in the form of diagrams

SSL → Secure Socket Layer used for providing restricted access to application.

RDBMS → Relational Database Management System.

## **Overview:**

This System provides an easy solution for online study. Here Teacher can conduct online class and student can attend the class from anywhere also student will be able to choose time and topic etc.

**Additional Information:**

The system work on internet server, so it will be operated by two end user one will teacher and other will be student. This system will provide an online platform for extra study apart from school .

**General Description:**

The Online shopping application helps to manage the items in the shoppers' carts and also helps customers to purchase.

The online shopping system will use the internet as the sole method for selling goods to its consumers.

**Functional Requirement:**

This section provides requirement overview of the system. Various functional modules that can be implemented by the system will be-

Description:

If user wants to take benefit of this site so ,It is mandatory to be registered. They can register as Student or Teacher.

User can Login to the system entering valid user id and password.

If User Logs in as a student he can choose class, subject, topic about online class.

If User Logs in as a teacher he can fill class, subject, topic, time, date and link of his online class.

If Admin Logs in he will manage the data. And also review the feedbacks.

Logout after the lecture is over .

The term client/server refers primarily to an architecture or logical division of responsibilities, the client is the application (also known as the front-end), and the server is the RDBMS (also known as the back-end).

A client/server system is a distributed system in which, Some sites are client sites and others are server sites. All the data resides at the server site All applications execute at the client sites.

**Technical Issues:**

This system will work on client-Server architecture. It will require an internet server.

The system should support some commonly used browser such as Chrome etc.

Interface Requirement Various interfaces for the product could be

1.Login Page,

2.Registration form

**Hardware Interface:**

The System must run over the internet,

All the hardware shall require to connect to internet will be hardware interface for the system.

e.g. modem, WAN, LAN Specialized Server Infrastructure Hardware.

The system should use distributed servers i. e cloud for managing large amount of data so as to make it appear as single unit for end-user.

The system should have proper clusters for backup.

**Software Interface:**

The system is on server so it requires the any scripting language like JSP or Angular or ASP, ETC.

The system should be able to exchange data using XML, JASON or any advance technology.

The system require Database also for the store the any transaction of the system like MySql or oracle, or SQL server etc.

System also require DNS (Domain Name space) for the naming on the internet

At the end-user need web browser for interact with the system.

**Performance Requirement:**

There is no performance requirement in this system, because the server request and response to client is totally based on internet connection of end user.

**Design Constrains:**

This system should be developed using Standard Web Page Development Tool , which conforms GUI standards such like HTML, XML, JSON,etc.The system should support various RDMS and Cloud Technologies.

**Non-Functional Requirements****1.Security:****SSL**

The System use SSL (Secure Socket Layer) in all transactions that include any confidential customer information.

The system must automatically log out all customers after a period of inactivity.

The system should not leave any cookies on the customer's computer containing users's password.

The system's back-end servers shall only be accessible to authenticated administrators.

Sensitive data will be encrypted before being sent over insecure connections like internet.

The proper firewalls should be developed to avoid intrusions from the internal or external sources.

**2.Reliability:**

The system provides storage of all databases on redundant computers with automatic switchover.

The main pillar of reliability of the system is the backup of the database which is continuously maintained and update to reflect the most recent changes.

**3: Availability:**

The system should be available at all times.meaning the user can access it using web browser, only restricted by the down time of the server on which the system runs.

In case of a hardware failure or database corruption, a replacement page will be shown.  
uptime : It mean 24 \* 7 availability

100%-----

99.9%

99.999%

99.9999%

#### **4: Maintainability:**

A commercial database is used for maintaining the database and application server takes care of the site. The maintainability can be done efficiently.

#### **5.Portability:**

The application is HTML and scripting language based (Javascript). So the end user part is fully portable and any system using

Any web browser should be able to use the features of the system,including any hardware platform that is available or will be available in the future.

An end-user is used this system on an OS either it is Windows or Linux.

The System shall run on PC, Laptops and PDA etc.

The technology should be transferable to different environments easily.

#### **6.Accessibility:**

Only registered users should be allowed to process the orders after authentications.

Only GUI access of the system should be permitted to end users.

#### **7.Policies:**

The Host will allowed to remove data of Teacher is any continuous bad feedback is received from the student.

**8.Efficiency:**

The system should provide good throughput and response to multiple users without burdening the system by using appropriate number of servers.

**9.Safety:**

Software should not harm ethical and environmental conditions of the end users machine.

**10.Modulariy:**

The system should have user friendly interface.

It should be easily updated , modified and reused.

**Preliminary Schedule:**

1. Register
2. Login
  - If Login as Teacher
    - Schedule a class
    - Update class
    - Delete class
  - If Login as Student
    - Search a class
    - Click on class link to attend the session
3. Logout
4. Give Feedback
5. Create new Account
6. Customer Support