# e-Learning

**1.Introduction :**

e-Learning is an online platform where the users can get the opportunity to increase their knowledge over any course in online. This helps them to save their time and effort both.

**1.1 Purpose**

* To provide web based application for online course design and student’s registrations and self- paced learning
* Content administration
* Virtual Learning

**1.2 Intended Audience**

This document is mainly designed for the developers , users and the admin panel of the system. It is also for the project manager and the team which is working for marketing and the sales. This document is meant to demonstrate the features for the developers and also serve as a guide for the marketing and the sales team.

**1.3 Intended Uses**

* Developers and the project manager team should read it and get brief idea for developing and marketing.
* Users and the admin panel can get the idea about the hardware and the software functionalities of the application. They should read it and get the ideas before using the application.

**1.4 Product Scope**

The product will be designed for both students and the admin panel. It will be helpful product in a very effective way that the students can learn different courses over the online. It will reduce time and the tiresome workload for both students and the admin. This increases an efficiency for making students a good result and good feedback for their study materials.

**1.5 Risk definitions:**

We are making an online learning platform where students can buy different course they like. So, the only risk possibility could be right payment system. Get the right course and get the payment confirmation on time could be the only risk here.

**2.Overall Description**

**2.1 User Classes and Characteristic:**

There will be 2 types user in our website. Our primary customer would be the students who will buy, watch and review the course. Our secondary user will be the teachers who will have to appoint first. Then has to upload his course content. Check the review and time to time he can update his course material.

**2.2 Users Need:**

In this website students can choose different types of courses. He can check the particular course’s price and reviews. If he like the course then he can buy it and have the course lifetime. He can download the course video to watch it offline. He can post his review on the course and can give rating. On the other hand, the teachers can upload his content time by time.

**2.3 Operating Environment:**

At first the student/user shall visit the homepage of the website. He can see some featured course from the home page. If he clicks the course button then he can see every course in that website has. If he wants to buy some course then he has to register in that website. Create a new profile and login with that. After login he can buy a course. In payment system we have include credit card and online banking method. In payment status he can see his payment history. In feedback option he can give his review the course he has bought. We tried to make a simple operating environment for the students.

**2.4 Constraints:**   
**Administrative costs and setup time** : Learning how to implement an LMS system may take a considerable amount of time. Converting all of your instructors to e-learning will require a transitional period  
**Requires IT and programming knowledge** : Unfortunately, a massive drawback to having a learning management system is that your organization will need coding and IT skills to customize the platform to suit your training needs  
**May lack features** : Many learning management systems use a "freemium" model in which only a limited amount of features are available to you.

**2.5 Assumptions:**

1. Professional Training
2. Live Class Sesson
3. Online support system

**3. Requirements**

**3.1 Functional Requirements**

Registration:

If the user is not register than first user must be registered.

**Login:**

If the user is registered then he will be logged in by entering user name and password.

Check Courses

The user must view the courses available on the server.

**New Uploaded Course:**

The User must receive a Notification if there is any new course according to their interest.

**Lectures:**

Teacher will be able to upload the Lecture on the System where students will be able to learn

from it.

**Notifications:**

The System Should send the notification to the both main actors if there is any change that

teacher made or if student require any help.

**Search Courses:**

The Student Should be able to search the course on the Software he must have access to see

every course on the system.

**Manage Courses:**

The Teacher Must Edit the Courses he should update, Delete, Add the videos to his various

courses.

**Top Rated Courses:**

The System Should show the top-rated course of all time in the system.

**Interest Category:**

The System should show the courses to the use according to his area of interest.

**Submit Ratings:**

The Student must be able to rate the according to his experience. And should provide the

feedback in detail.

**Logout:**

The user must log out from the system when he wants to.  
  
  
**3.2 Non Functional Requirements:**

**Security:**

The system needs to log client’s information of registration such as IP address and time for security

purpose.

Password should encrypt and store in the database.

**Maintainability:**

The system developing using Struts, all action is detailed in struts-config.xml and web.xml that

easy to modify and make update.

**Portability:**

The web application is coding in J2EE and Struts, therefore, it should be transferable between

different OS and Java container

**Usability:**

The system shall allow the users to access the system from the Internet using HTML or its

derivative technologies. The system uses a web browser as an interface. Since all users are

familiar with the general usage of browsers, no specific training is required.

The system is user friendly and self-explanatory.

**Reliability:**

The system has to be very reliable due to the importance of data and the damages incorrect or

incomplete data can do.

**Availability:**

The system is available 100% for the user and is used 24 hours a day and 365 days a year.

The system shall be operational 24 hours a day and 7 days a week.

Mean Time between Failures (MTBF)

The system will be developed in such a way that it may fail once in a year.

Mean Time to Repair (MTTR)

Even if the system fails, the system will be recovered back up within an hour or less.