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# **Software Specification**

# **Requirements**

**for**

# **E-LEARN**

**E Learning software**

**Version 1.0 approved**

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## Revision History

Name	Date	Reason For Changes	Version
Rajesh Khanna	18/01/18	Draft	Version-1.0

# 1. Introduction

Information and skills play an import roll in development of an individual. In this fast growing world, lots of new technologies and skills raise to the surface, there is always a need to update ourselves with these new skills to succeed .There are many who are willing to teach these new skills and many more ready to learn. In this era of internet the world has become so small and a person from one side of the world. With the help of this technology sharing of knowledge has become easier than ever before. PC and android mobile platforms servers as the major tools for learning and sharing knowledge.

## 1.1 Purpose

*Purpose of "E-Learn" is to bring the learners and teachers under one platform, to share skills and knowledge. This software provides courses in video lecture format , text files , Slide share and audio lectures. It also enables the learners to provide feedback on the courses and lectures.*

## 1.2 Intended Audience and Reading Suggestions

The intended audience for this document is project developers and stack holders. This documents describes the overall description of functional requirements, non-functional requirement

## 1.3 Product Scope

*This is a java based E-learning software that runs on Linux based Computer platforms. Enabling the users to access lectures on varied courses through their PC.*

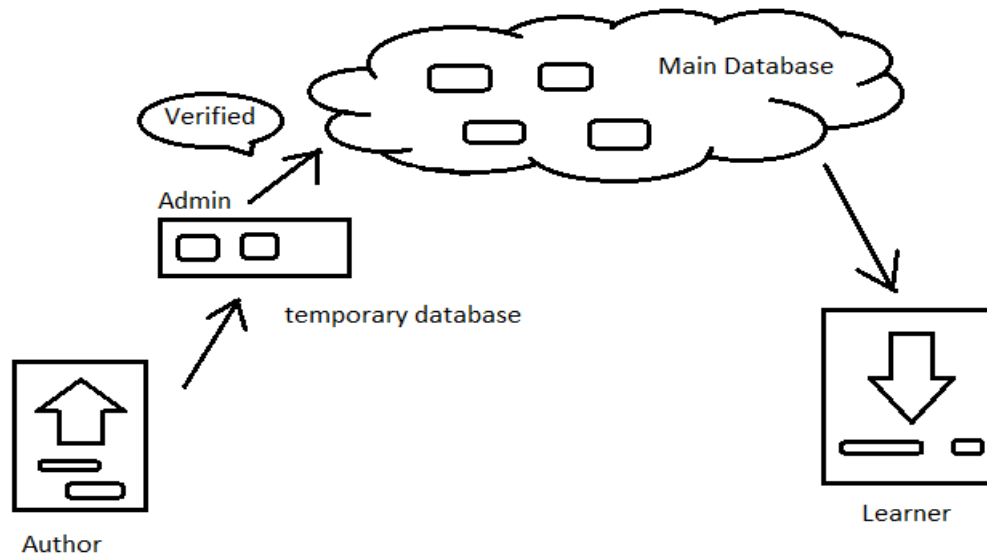
*Applications of software*

- 1) Low cost and easy to learn and saves time for the user.*
- 2) People with skill can earn by sharing them with other.*

## 2. Overall Description

### 2.1 Product

Perspective



### 2.2 Product Functions

The over view of Functions of “E-Learn” software are:

- 1) *Registration and Login:*  
 Every user will have his or her own account. An account can be of three types. Learners, Teachers, Admins.
  1. A Profile contains these details  
 Name, Sex, Email id, phone number, Label (Admin or not), Educational details, Profile picture.
  2. User-Name and Password.
- 2) *Course browser.* It gives the relevant results for the key word search
- 3) *Course uploading platform.* To upload lecture file.
- 4) *Review platform.* Verifies the video content and uploads it to main server after verification and rejects it.
- 5) *Feedback and review for lectures.*
- 6) *Subscription to courses.*

### 2.3 Operating Environment

“E-Learn” software works on Linux based Ubuntu Computers. The application is developed using JAVA.

### 2.4 Design and Implementation Constraints

Any form of individual Lecture video, text file, audio or slides shouldn't have a size more than 5GB.

*This software is available in USA English Language no other languages are supported by this software.*

## **2.5 User Documentation**

Detailed description to use the software as user manual will be provided with the software.

## **2.6 Assumptions and Dependencies**

*Assumes the user entries correct spellings as the software doesn't provide auto correction or word approximations.*

# **3. External Interface Requirements**

## **3.1 User Interfaces**

- *First interface the user encounters is the login page.*
  - ◆ *Containing options for login or registration and forgot password.*
- *Login is followed by search engine, which is common for all three kinds of users.*
- *Authors have an additional button to upload lecture content.*
- *On opening a course after searching from search engine.*
- *Next interface shows all the subjects available in that course. On selecting one subject it has all lecture content available and an option to provide feedback for each lecture.*
- *All the interfaces have help button and notifications button available on top of the screen.*
- *Admins have an additional interface the Verify page in which the Admins review the content and verify it.*
- *And an activity log button on top only for Admins which provides the activity of all the users of the software.*

## **3.2 Hardware Interfaces**

*A 64Bit or 32Bit System and 4 GB ram and above is required to install and run the software. Access to internet is required.*

### 3.3 Software Interfaces

The application is developed using JAVA JDK and UML and Database.

### 3.4 Communications Interfaces

*Internet access is required for this software to load text and video files. The software uses email-id to get notified by mail any uploads done by their subscription.*

## 4. System Features

### 4.1 System Feature 1

The basic Functional Requirements for “E-Learn” are:

*Every user has a user account with login credentials. Provided during registration.*

**REQ-1: Login page** has two inputs **username** and **password**. Option to retrieve forgot password and for new registration.

*Accessible: Every User*

**REQ-2: Registration page** takes all the above mentioned 2.1,(1) details of the user and classifies the users into three categories **learners, Teachers, Admins**.

- *Learners have Read-only access to the files provided by the software.*
- *Teachers are allowed to upload content to the temporary database.*
- *Admins are people who verify and the content in the lectures and upload it to main server if the content is valid.*

*Accessible: Every User*

**REQ-3: Search Engine**, helps the user to search for the courses or authors.

- *Search for courses gives all the courses with the name available in the data base.*
- *Search for subject gives all the lectures having that subject tag.*
- *Search for author name gives all the courses provided by that authors with that name .*

*Accessible: Every User*

**REQ-4: Subscription**, any learner can subscribe to an author’s account. So that whenever a content is uploaded the user will be notified.

*Accessible: Every User*

**REQ-5: Content upload** lets the Author to upload content by Authors.

*Accessible: Authors*

REQ-6: **Classify** uploaded content. The Author specifies that the content belongs to a specific subject which is verified by the Admin.

REQ-6: **Comment and feedback** of the learners in the form of likes and comments to the course content should be provided.

*Accessible: Every User*

REQ-7: **Verify** page lets the Admin to verify the content uploaded by the Author and make it available or reject it to public.

*Accessible: Admin*

REQ-8: **Activity log** stores the details of the user logins to their accounts along with their time of login.

*Accessible: Admin*

## **5. Other Nonfunctional Requirements**

### **5.1 Performance Requirements**

*Performance of this video lectures and downloading depends on the internet connection provided to the system.*

### **5.2 Software Quality Attributes**

*Software Structure is easy to use and intuitive GUI system.*

*This Software is available for 24 hours 7days a week.*

*User personal information is secure and can be seen only by the user.*

## **6. Other Requirements**

*Can be accessed remotely from anywhere with Internet connection and software installed.*