

Online Application Title: e-Learning Platform for C-DAC Students

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SRS Document:

1. Introduction:

As the idea of online education is getting popular day by day and is growing dramatically.

So the opportunities for such kind of software has increase and will continue to increase in future.

The e-learning platform provide students a one destination for all their modules. So that they don't have to waste their time in search of content. E-learning is a structured form of learning. It provide a cost effective and efficient time management and resources for learning and research.

1.1 Purpose:

The purpose of this Requirements Elicitation documents is to provide a clear understanding what is actually Online Learning system and to identify the critical requirements essential for the projects successful completion. These requirements provide an abstract overview of the Online Learning system and provides a general overview of the entire project. This SRS describes the software requirements both functional and non-functional for the System (E-Learning System). This document is intended to be used by the members of the project team that will implement and verify the correct functioning of the system. All requirements specified here are unless stated otherwise. This document will be used in all phases of Software Process.

1.2 Scope

This document is intended for providing an abstract overview of Online Learning system and general overview of entire project. It will give the access to the Admins share their important data and to do all activities between student and Admins related to study safely. The scope of this document:

- Functional and Non-Functional requirements
- Stake Holders
- E-Learning System
- Admins/Sr.Students/Mentor
- Students

Definition:

SRS - Software Requirement Specification.

GUI-Graphical User Interface.

Stack Holder-The person who will participate in the system (Admin ,Student).

Functional Requirement:

This section provides requirement overview of the system.

Registration : The owner as well as user needs to be registered to the portal.

Login: The system will allow the Student and Admin to register and login.

Logout: After accessing the requirement or updating of information the user has to logout from the system.

Non-Functional Requirement:

- Secure access to user's confidential data.
- 24X7availability
- Better designing to get best performance.
- Various non – functional requirements are:
 - Security
 - Reusability
 - Maintainability
 - Reliability
 - Portability
 - Extensibility

List of Features:

- Student Management
- Module Details

ER Listing:

- **Admin :**

Admin ID

Name

Mobile Number

E-mail

Password

Question

Answer

- **Student :**

Student ID/Roll NO

Name

Mobile Number

DOB

E-mail

Password

Question

Answer

Logic :

- UI Logic:
 - Web Pages + HTML controls + Web Components (Angular)
 - Navigation: (UI Routing) HTML Links, Routing mechanism
 - Data Binding: DOM + {{}} ng Model
- Event Binding: action handler.
 - HTTP Request : POST -----Do-post
 - PUT:
 - DELETE:
- Client Side UI----- HTML, CSS, JavaScript, bootstrap
 - UI (Client side UI Framework)
 - React.....
- Web Logic: (Server side processing)
 - Server UI -----JSP, Servlet, (classical java web technology)
 - spring MVC (to take advantage of MVC design Pattern using readymade framework)
 - Model, View, Controller
 - Router
 - (SOA layer)
 - Spring Boot API
 - CRUD REST API
 - ORM Technique: Hibernate (ORM)
 - JPA
 - JDBC (database Connectivity)
 - State management
 - Client-side state management
 - cookies, query string, form collection, hidden variables local storage, session storage, Web SQL, Server side state management session, Cache, database
- Business Logic: Java console application will be used to test your business Logic

From User's Point of View:

- **Modules:**
 - Registration: Student , Admin Registration
 - Security: Authentication, Authorization (get email Id, create password, change password)
- **Data:**
 - Structured Data
 - I. RDBMS
 - II. fields
 - III. tables
 - IV. constraints
 - V. Not null, auto increment, PK, FK, Unique, check
- **Create .sql File:**
 - i. ddl.sql--->File will contain DDL commands for table creation
 - ii. dml.sql--->file will contain insert commands for filling dummy data totables which we have created