

To develop a comprehensive online learning management system (LMS) with the specified features. Each page will play a crucial role in delivering a robust and interactive educational experience, leveraging modern web technologies and internet protocols.

1. **Home page:** The initial landing page of LMS. It provides an overview of the platform, highlights featured courses, and includes navigation to other sections.
2. **User Registration page:** Allows new users to create an account by entering their email, password and additional details.
3. **User Login page:** Enables existing users to log in using their email and password. It integrates authentication mechanisms and ensures secure session management using HTTPS and other internet security practices.
4. **User profile page:** Provides users with a personalized dashboard where they can view and manage their personal information, enrolled courses, and progress.
5. **Course catalog page:** It utilizes dynamic content loading and AJAX requests to provide a seamless browsing experience.
6. **Course Details page:** Offers detailed information about a specific course, including title, description, instructor details and enrollment options.
7. **Course Enrollment page:** Facilitates the enrollment process for users, including payment transaction.

- 1. Enrolled Courses Page: Allows users to view and manage their enrolled courses. It provides access to course materials and enrollment management tools.
  - 2. Course Content Page: Delivers course materials such as videos, documents, and quizzes.
  - 3. Progress Tracking Page: Helps users monitor their progress in each course, including completed lessons and assessments.
  - 4. Feedback and Rating Page: Enables users to provide feedback and rate courses. It collects and processes user reviews using database integration.
  - 5. Discussion Forum Page: Provides a platform for discussion between students and instructors.
  - 6. Notification Page: Displays notifications for course updates, new messages and other important information.
  - 7. Certificate Page: Issues and displays certificates upon course completion.
  - 8. Admin Dashboard Page: Provides administrators with tools to manage courses, track user progress and generate reports.
- Frontend:** The frontend refers to the client-side part of the application that users interact with directly.
- 1. User Interface (UI) design
  - 2. HTML/CSS: For structuring & styling web pages

### 3. Frontend Frameworks/Libraries

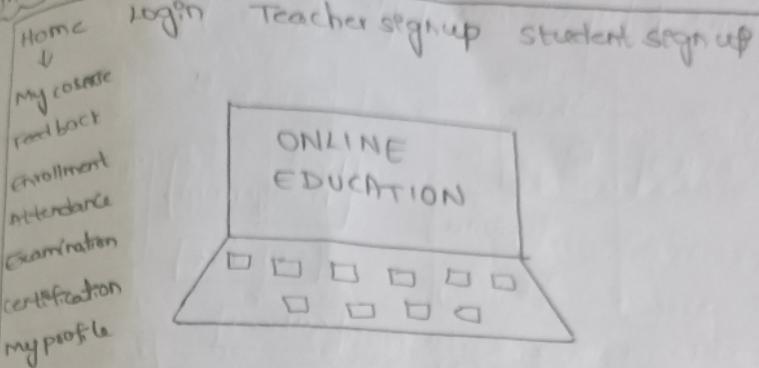
**Backend:** The backend refers to the server-side part of the application, responsible for data processing, storage and application logic.

1. Server-side Logic
2. Course Management
3. Database Management (SQL, MySQL, PostgreSQL or MongoDB)
4. Web Servers

5. Security Measures

- SSL/TLS
- Two-factor authentication
- Strong password policies
- Regular security audits
- Monitoring and logging
- Data encryption at rest and in transit
- Access control and authorization
- Input validation and sanitization
- Code reviews and static analysis
- Regular security updates and patches
- Multi-factor authentication
- Cloud security best practices
- Containerization and orchestration
- Network segmentation
- Firewall and intrusion detection systems
- Log management and monitoring
- Security testing and penetration testing
- Compliance and regulatory adherence
- Incident response and recovery planning
- Security training and awareness
- Security culture and leadership buy-in

Index page:



Registration Form page: If we click on login we can register if we don't have account or we can login if we have account.

ID	<input type="text"/>
Name	<input type="text"/>
e-mail	<input type="text"/>
Mobile Number	<input type="text"/>
Department	<input type="text"/>
Role	<input type="radio"/> Teacher <input type="radio"/> Student
Password	<input type="password"/> <span style="color:red">Valid.</span>

at least contain one special char, number and alphabets.

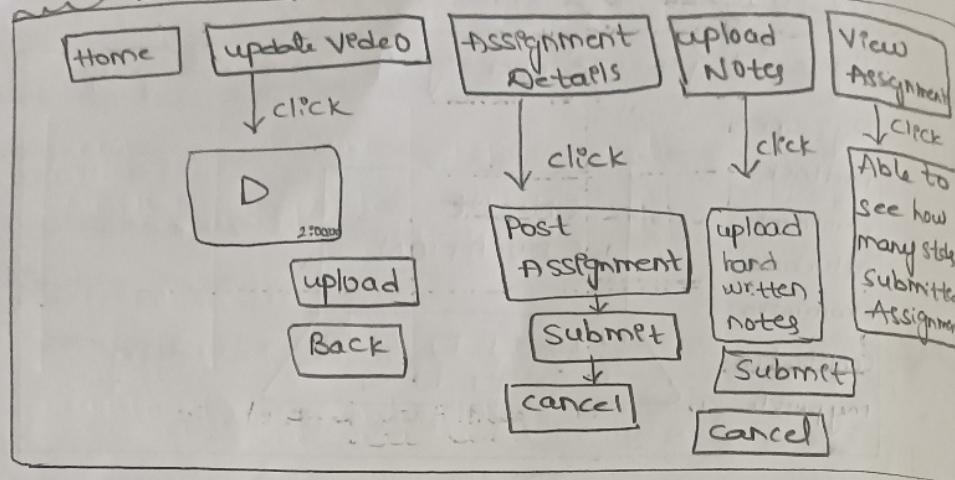
Login page:

User Type

Username

Password

Staff Home Page



Video upload page:

Subject Code	<input type="text"/>
Subject Name	<input type="text"/>
Video Name	<input type="text"/>
File	<input type="file"/> choose file No file chosen
<input type="button" value="Submit"/>	<input type="button" value="Back"/>

Assignment upload page:

Subject code	<input type="text"/>
Subject Name	<input type="text"/>
Date and Time	<input type="text"/>
Notes (only PDF)	<input type="file"/> choose No file chosen
<input type="button" value="upload"/>	<input type="button" value="Back"/>

Assignment

View page:

Home      Big Data Analytics

Internet of things  
Mobile security  
Python programming

Student Home page:

Home      Big Data Analytics → click  
IOT  
Mobile security  
Python programming

Big Data page:

Home      View Video Recording      View Assignment      View notes      upload Assignment

~~BIG DATA~~

Video of Big Data page:

Video Recording for Big Data Analytics

Code	Sub Name	Video Name	Date	Logout
CSA5169	BIG DATA	Chapter 1	27/8/2024 11:50pm	Play video 0.00/0.07 (0:)

▶

0.00/0.07 (0:)

Assignment

## Assignment Details of Big Data Page:

code	SubName	Topic	Date	Submit
CSNS169	Big Data	Hadoop	27/8/24	yes

Download Big Data Notes:

code	SubName	Date	Notes
CSNS169	Big Data	27/8/24	<u>View and Download</u>

Assignment upload page:

Subject code	<input type="text"/>
Subject Name	<input type="text"/>
Sub ID	<input type="text"/>
Student Name	<input type="text"/>
Upload File	<input type="text"/>
<input type="button" value="Submit"/>	<input type="button" value="cancel"/>

Assignment marks:

Subject code :

Subject Name:

Student Name:

Marks :

student Teacher Feedback or review page:

Teacher Name:

Teacher ID :

sub :

Rating : /10

Certification page:

CERTIFIED BY

Name:  with

Course:

On:

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WV

- The student and the teacher are having same port of entry
- No proper forms for the student to select the course → Environment option is available
- Did not validate about multiple course registration
- Did not validate whether its a live session or pre recorded session → If one of the video is uploaded & will be there that
- If there is any doubt for the student how can he clarify? → Notes will be provided
- Not mentioned about management notification
- Did not mention about customer support
- If the teacher need to correct any of the mistake how can they say this to student:
- How does the evaluator specify the student
- Did not specify about how much time does complete
- Do the managements have any deadline
- No course catalog
- Did not categorized

Rewritten

Reviewer-2

- \* Did not Mentioned Student education status in the registration form
- \* NO info about the where student lives in which state and city
- \* Did not Mentioned the grade book which allows students to view their score
- \* Did not Mentioned about the ANNOUNCEMENTS which allows instructor and administrator to post ANNOUNCEMENTS for courses or the entire platform.
- \* Didn't mentioned course demo option

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