Walchand College of Engineering, Sangli





Department of Information Technology



Title of the project

Comprehensive Ed-Tech Web Platform

Mini-Project-1: 7VSIT245



Walchand College of Engineering, Sangli

(An Government Aided Institute)





Department of Information Technology

Second Year Information Technology Academic year 2024-25		Semester: IV
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Problem Statement



Develope a Ed-Tech platform using the MERN stack to enhance personalized learning experiences, especially for slow learners.

Problem Domain



- Many students and educators struggle to find a unified and interactive platform for creating and consuming educational resources. Traditional learning methods often fail to cater to students with learning difficulties, leading to gaps in understanding.
- To bridge this gap, we are developing an Ed-Tech platform using the MERN stack, integrating interactive quizzes, structured roadmaps, and accessibility-focused content to enhance personalized learning experiences, especially for slow learners.

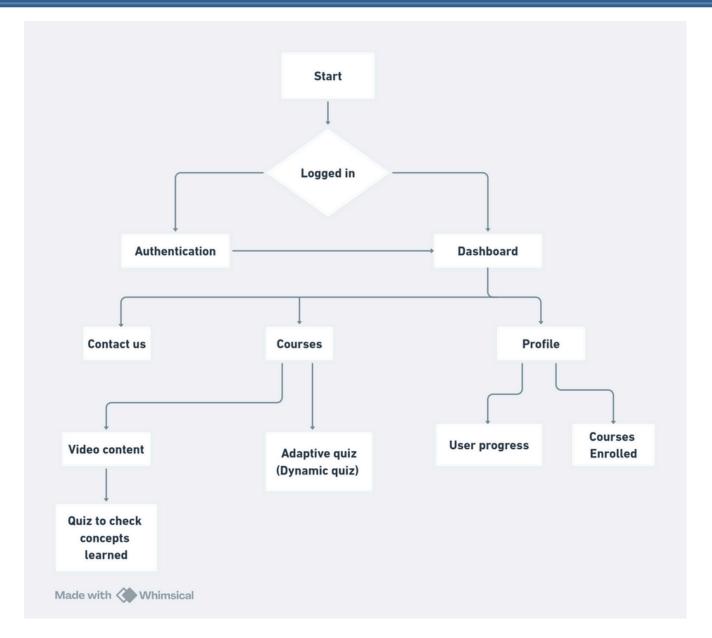
Objectives



- To develop a MERN stack-based Ed-Tech platform for students and educators.
- To integrate interactive quizzes with topic-wise & difficulty-based tracking.
- To suggest learning roadmaps based on quiz performance.
- To enhance accessibility for slow learners using interactive content.

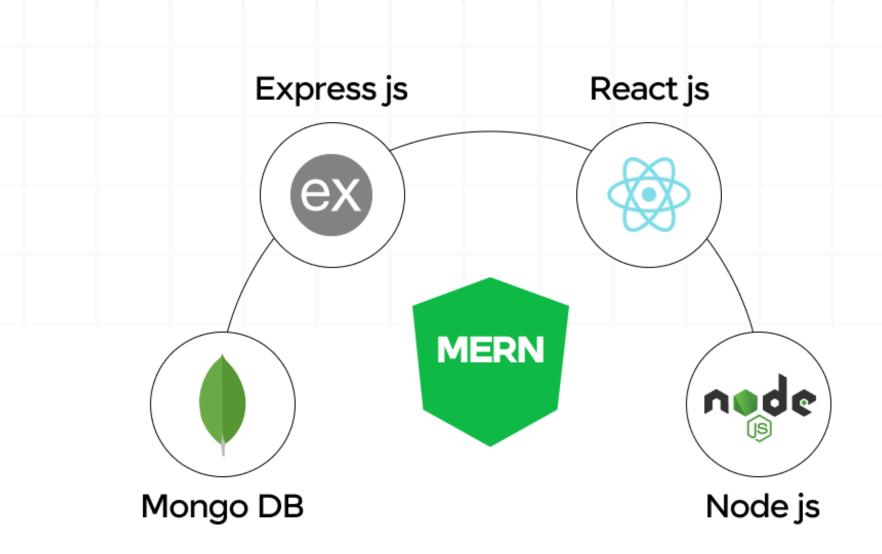
Flow Chart





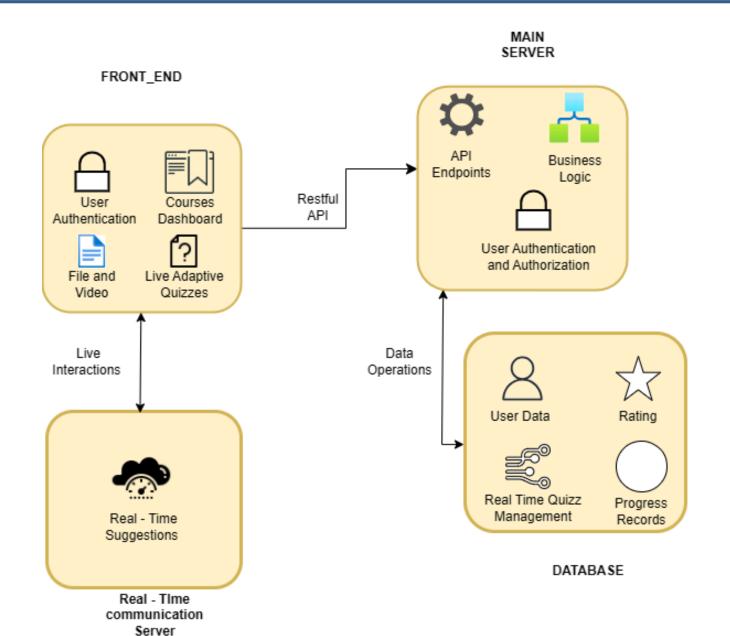
Technology Stack





Architecture





Future Scope



1. Dashboard

Provides an overview of the platform's courses, instructors, and students.

2. Insights

Displays detailed metrics, including the number of registered users, courses, and revenue.

3. Instructor Management

Enables the admin to manage instructors, including their account details, courses and ratings.

4. Discussion Community

Enables topic-based discussion forums for collaborative learning.

Provides moderation tools for admins to ensure a healthy discussion environment

A live discussion or chat feature allowing students to interact with instructors as well as other students in real-time.

References



- MongoDB Documentation MongoDB Inc <u>https://www.mongodb.com/docs/</u>
- React.js Documentation Meta https://reactjs.org/docs/
- Node.js Documentation OpenJS Foundation <u>https://nodejs.org/en/docs/</u>
- Express.js Documentation Express.js Official https://expressjs.com/en/starter/installing.html
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Thank You!