Tutor Link

MERN Stack Online Learning Platform

Project Documentation

Project Name	Tutor Link
Technology Stack	MongoDB, Express.js, React.js, Node.js (MERN)
Authentication	JWT-based authentication for Students and Tutors
User Roles	Student, Tutor
Core Modules	Authentication, Course Management, Enrollment Requests

Project Overview

Tutor Link is a full-stack web application developed using the MERN stack (MongoDB, Express.js, React.js, and Node.js) to connect students with tutors through a secure and user-friendly platform. The application simplifies the learning process by allowing tutors to create and manage courses while enabling students to browse, request enrollment, and access approved courses.

The platform supports separate authentication for students and tutors using JWT-based login. Tutors can add new courses with details such as course title, description, price, and demo video links. They can also manage student enrollment requests by approving or rejecting them through a dedicated dashboard.

Students can search available courses, watch demo videos, and send enrollment requests for the courses they are interested in. Once a tutor approves the request, the student can access the enrolled course from their dashboard. The application features a clean, responsive interface that provides a smooth experience across different devices.

The backend is built with Node.js and Express.js, exposing RESTful APIs for authentication, course management, and enrollment handling. MongoDB is used to store user accounts, course information, and enrollment requests, while Mongoose manages database interactions efficiently. The frontend, built with React.js and Bootstrap, offers dynamic page rendering and seamless communication with the backend APIs.

Key Features

- Secure student and tutor authentication using JWT.
- Separate dashboards for students and tutors.
- Tutors can create, update, and manage courses.
- Students can browse, search, and request course enrollment.
- Tutors can approve or reject student requests.
- Demo video support for each course.
- Responsive and modern user interface.
- RESTful API architecture with MongoDB integration.

Technologies Used

React.js	Node.js
Express.js	MongoDB
Mongoose	JavaScript
HTML5	CSS3
Bootstrap	JWT Authentication

Application Screens

1. Home Page

The landing page introduces TutorLink and highlights its core value proposition of bridging students and tutors. It includes quick-access options to find a tutor or become a tutor, along with a summary of the Student Dashboard, Tutor Dashboard, and communication features.

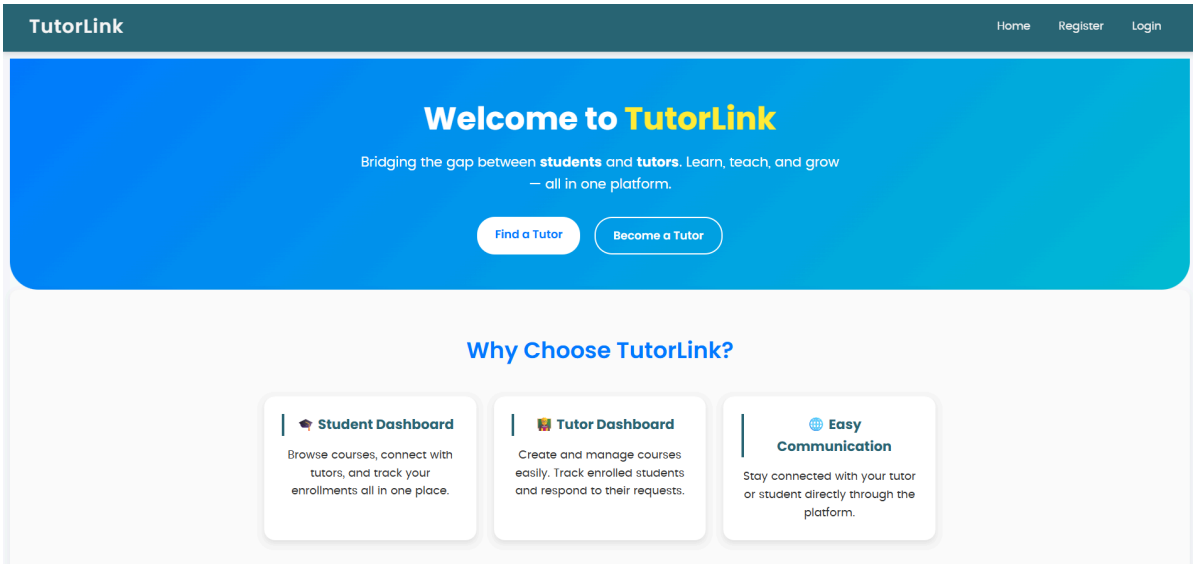

Figure 1: Home Page

2. Login Page

Users log in using their registered email and password, selecting their role (Student or Tutor) from a dropdown. The page also includes site footer details such as contact information and quick links.

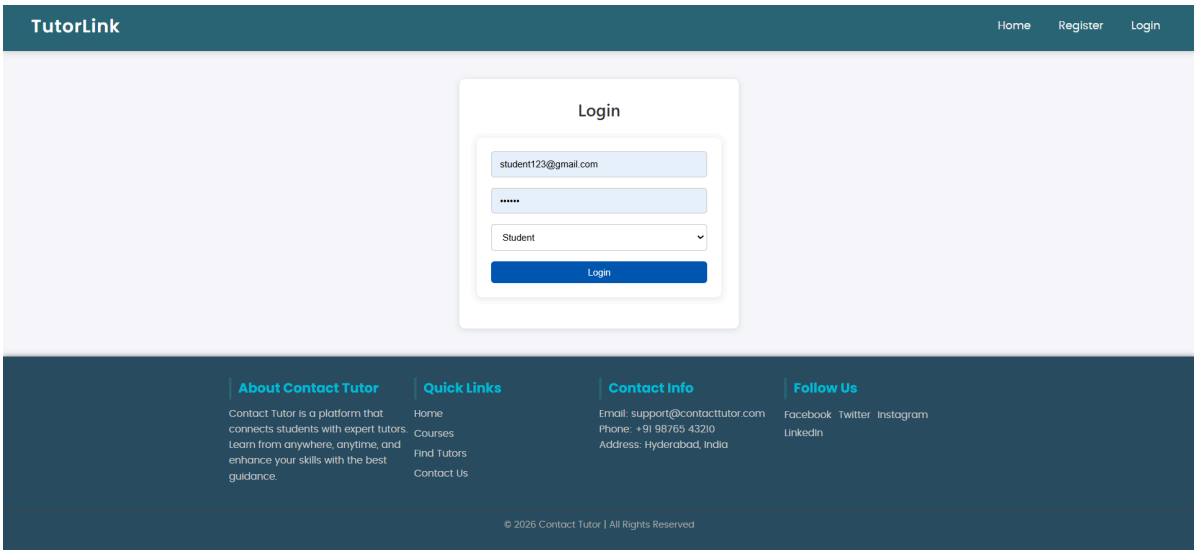

Figure 2: Login Page

3. Student Dashboard

Students can browse all available courses, search by name, watch demo videos, and send enrollment requests. The dashboard also provides a dedicated view for approved courses.

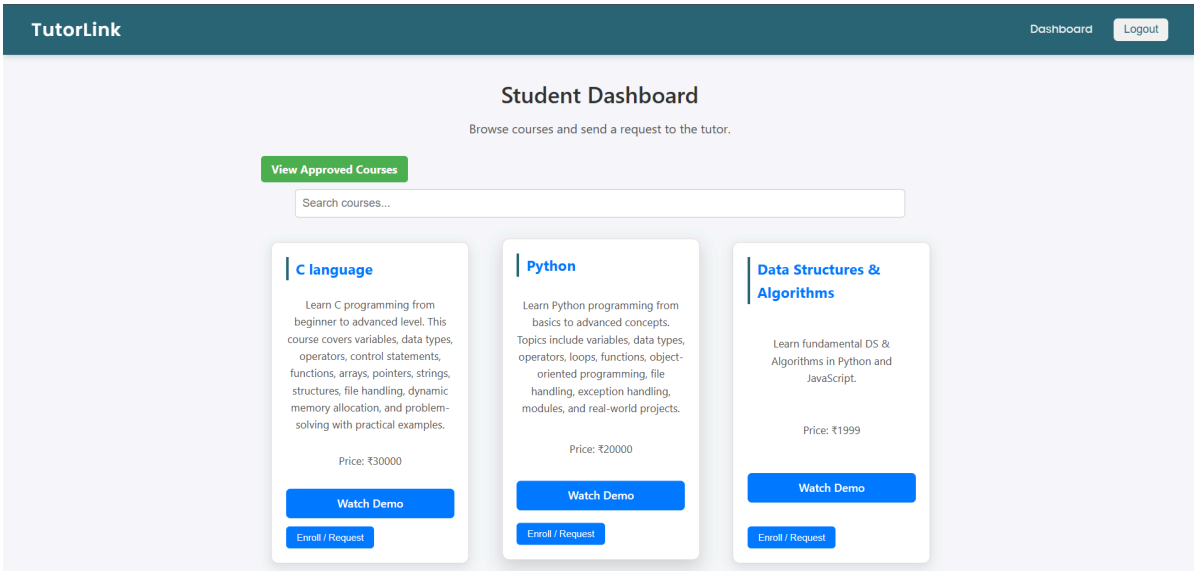

Figure 3: Student Dashboard

4. Tutor Dashboard - Add Course

Tutors can add new courses by providing a course name, description, price, and a YouTube demo video link. Submitted courses become visible to students for browsing and enrollment.

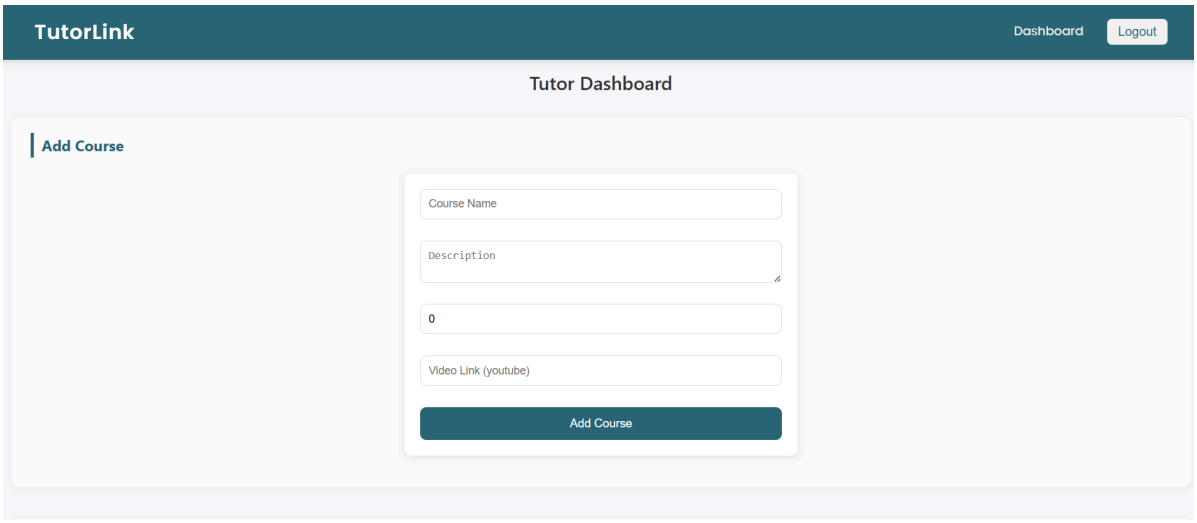

Figure 4: Tutor Dashboard - Add Course

5. Tutor Dashboard - My Courses & Student Requests

Tutors can view all the courses they manage under 'My Courses' and review incoming enrollment requests under 'Student Requests'. Each request displays the student's details, the requested course, and an accompanying message, with options to approve or reject the request.

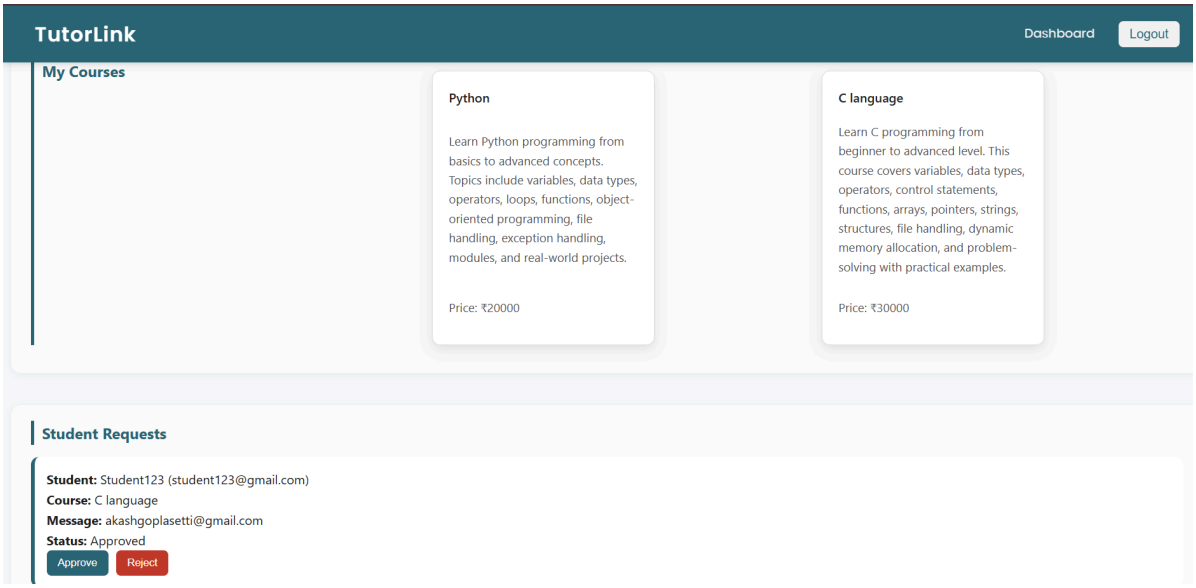

Figure 5: Tutor Dashboard - My Courses & Student Requests

Conclusion

Tutor Link demonstrates practical knowledge of full-stack web development, authentication, REST API development, database management, and responsive frontend design. The project highlights the ability to build scalable web applications that solve real-world educational challenges.