

E-Learning Platform – A Web-Based Learning Management System with Video Tutorials and Quizzes

The **E-Learning Platform** is an advanced web application designed to facilitate online education through interactive learning experiences. The system allows students to access **video tutorials, quizzes, assignments, and discussion forums**, providing a comprehensive digital classroom environment.

Key features of the platform include **user authentication, course management, progress tracking, and certificate generation**. Students can enroll in courses, watch pre-recorded or live video lectures, complete quizzes, and receive instant feedback. The system supports **multiple content formats**, including **PDFs, PowerPoint slides, and interactive coding exercises**.

The backend will be developed using **Django/Flask with PostgreSQL**, while the frontend will utilize **React.js/Vue.js** for a seamless user experience. The platform will integrate **video conferencing tools like Zoom/WebRTC** for live sessions.

To enhance engagement, the system will include **gamification features such as badges and leaderboards**. Security measures such as **role-based access control, encrypted user data storage, and CAPTCHA authentication** will be implemented.

This project aims to **revolutionize digital learning**, offering an engaging and accessible platform for students worldwide.