Projects

MERN full stack project (1 week)

Project Title: "EduNexus — Mini LMS"

Tech Stack

MERN Stack (MongoDB, Express, React, Node.js)
Optional: Socket.io (for chat), Cloudinary (for file/video upload), and any CSS framework (Tailwind, Bootstrap, etc.)

Project Objective

Build a **mini Learning Management System (LMS)** where instructors can create and manage courses, upload video lectures and assignments, while students can enroll, access lectures, submit assignments, and chat. Admin can oversee the platform.

User Roles

Instructor

- Register/login
- Create, update, and delete courses
- Upload video lectures for their course
- Upload assignments for students
- View submitted assignments

Student

- Register/login
- View available courses

- Enroll in courses

- Watch uploaded lectures

- Submit assignments

- Participate in chat/discussion

Admin

- Manage (CRUD) users and courses

- View all uploaded content and submissions

- Remove inappropriate content/users

Core Features (MVP)

1. **Authentication & Authorization**

   - JWT-based login/signup

   - Role-based access (admin/instructor/student)

2. **Course Management**

   - Instructors can create, edit, delete courses

   - Students can view and enroll in available courses

3. **Video Lectures**

   - Upload and view lecture videos (via Cloudinary or local storage)

4. **Assignments**

   - Instructors upload assignments

   - Students upload submissions

5. **Chat System**

   - Real-time chat between students and instructors (Socket.io)

Bonus Feature (Optional)

- **Live Class Scheduling:**
  Instructors can create a live session with date/time, and students can join via a meeting link (Zoom/Google Meet/Twilio/Socket room).

Deliverables

- Make full fledged frontend using ReactJs. Proper routing should be done, ensuring optimisation wherever possible and proper state management practices.

- Working app deployed on **Render/Vercel** (frontend + backend)

- Source code on **GitHub** (public repo)

- README with:

  - Setup instructions

  - Demo credentials

  - Feature list

  - Screenshots (optional)