

FUEL AN IDEA WITH THE TECHNOLOGY AND BUILD A FIRE

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Minimal LMS System - Recruitment Task

Overview

Develop a Learning Management System (LMS) with two main panels:

- **Admin Dashboard** (for course content management)
- **User Panel** (for course consumption and progress tracking)

The system should be built using **TypeScript**, **NextJS**, **ExpressJS**, and **MongoDB**. The back end should follow the MVC architectural pattern, and the UI must be fully responsive and polished.

Technical Stack

- **Frontend:** Next.js (TypeScript) with responsive UI (Tailwind CSS recommended).
 - **Backend:** Express.js with MVC architecture.
 - **Database:** MongoDB (Mongoose for ODM).
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Admin Dashboard Features (*Authentication Required*)

1. Course Management

- **Course Upload:**
 - Fields: Thumbnail (image), Title, Price, Description.
 - Display courses in a grid of cards with thumbnails, titles, prices, and descriptions.
- **Course CRUD:**
 - Edit/Delete existing courses.
 - Dynamic routing: Clicking a course card navigates to its **Module & Lecture Management** page.

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2. Module & Lecture Management

- **Module Creation:**
 - Add modules with **Title** and **Module Number** (auto-increment).
 - **Lecture Creation:**
 - Add lectures under modules with:
 - Title
 - Video upload/URL (You can use embedded YouTube video links for simplicity)
 - Multiple PDF notes (upload)
 - **CRUD Operations:** Edit/Delete modules and lectures.
 - **Lecture List View:**
 - Display all lectures in a table with filters by **Course** and **Module**.
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User Panel Features

1. Course Details Page

- **Dynamic Content:**
 - Display course details (thumbnail, title, price, description) from admin uploads.
 - Use static data for additional sections (e.g., reviews, instructor info)

2. Lecture Page

- **Structure:**
 - Numbered modules with expandable lecture lists.
 - Search bar to filter lessons by title.
- **Content Delivery:**
 - **Locked Lectures:** Users unlock lectures sequentially (next button unlocks subsequent lectures).
 - **Video Player:** Stream uploaded videos. (You can use embedded YouTube video links for simplicity)
 - **PDF Notes:** Download/view multiple PDFs per lecture.

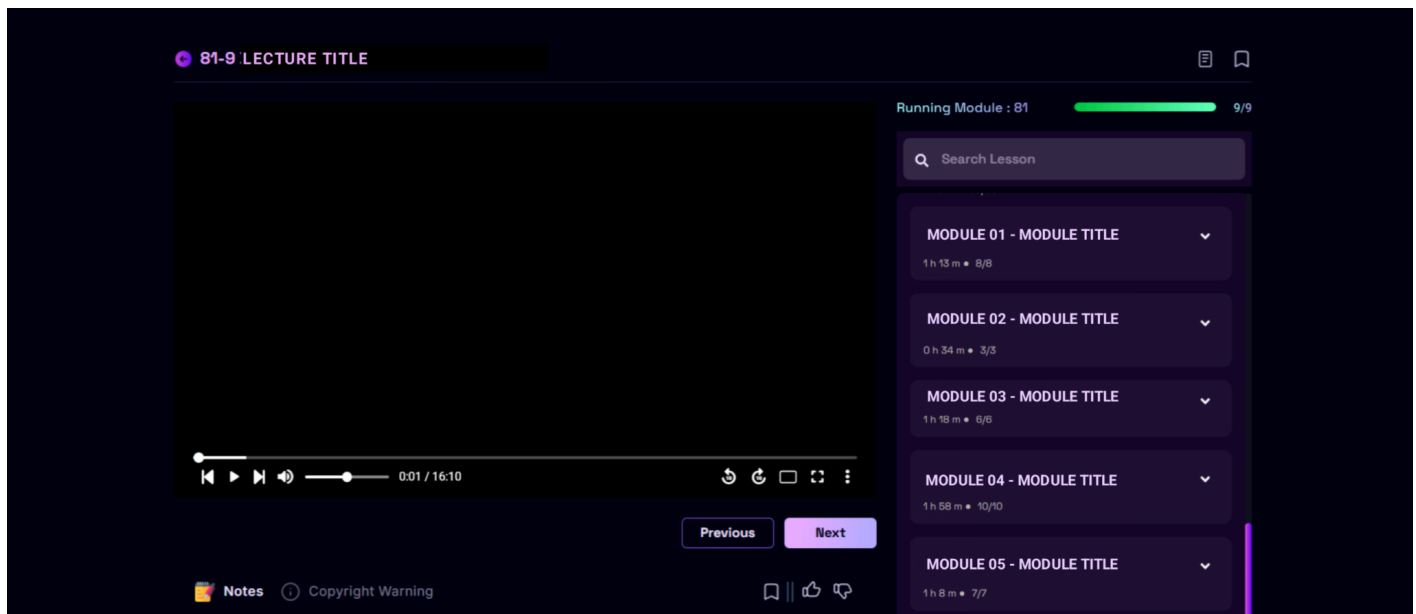
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- **Progress Tracking:**
 - Visual indicator (progress bar/checkmarks) showing completed lectures.



Reference for better understanding

Mandatory Requirements

1. **Responsive UI:**
 - Ensure all screen compatibility. Use modern design principles.
2. **Backend Architecture:**
 - Follow the MVC pattern with separate routes, controllers, models, and services.
3. **Dynamic Content:**
 - All user-facing content (courses, modules, lectures) must reflect admin uploads.

Submission Guidelines

1. **Code Repository:** Host on GitHub/GitLab.
2. **Live Demo:** Deploy the app (e.g., Vercel + Render) and include a live link and Test credentials

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3. Evaluation Criteria:

- Functionality
- Code quality & architecture
- UI/UX polish
- Responsiveness

After completing your task, please submit it within 6(Six) days using the following link:

<https://forms.gle/sNXnMkN6WgMkeyny9>

DATAPOLLEX LIMITED

COMPANY NUMBER 16148903

UK OFFICE 124-128 City Road, London, United Kingdom, EC1V 2NX

BD OFFICE Sweet Home Red Rose, Building No: 572, Road: 01, Lane: 03, Block C, South Khulshi 4000 Chittagong, Bangladesh



WWW.DATAPOLLEX.COM

 +44 7723 779854 ,  +880 1963431045