📌 Backend Developer Task (Deadline: 2 Days)

Task Overview

Build a **Course Management API** using **Node.js, Express.js, and MongoDB**.
This API will allow **users** to register/login, browse courses, and purchase them.

Required Features

1. **User Authentication**

   - Implement **JWT-based authentication**.

   - Two roles: `user` and `admin`.

   - Only admin can add or delete courses.

2. **Course Management**

   - Admin can:

     - Create new course (title, description, price, instructor).

     - Delete any course.

   - Users can:

     - Get all courses.

     - Get a single course by ID.

3. **Purchase System**

   - A logged-in user can **purchase a course**.

   - Save purchase data with `userId`, `courseId`, `amount`, `date`.

   - A user can see their purchased courses.

4. **Validation & Error Handling**

- ○ Proper input validation (e.g., email format, required fields).

- ○ Centralized error handling middleware.

Technical Requirements

- Use **Node.js, Express.js, MongoDB (Mongoose)**.

- Must include a **.env file setup** guide (DB URL, JWT secret, etc.).

- Follow **MVC pattern**.

- Use **bcrypt** for password hashing.

Bonus (optional but plus point)

- Implement JSON Web Token

- Access Token, Refresh Token Implementation
- User Logout with remove token.

Documentation (Important 🚨)

- Create a **README.md** file with:

  - ○ Project overview.

  - ○ Installation guide (how to run locally).

  - ○ API endpoints with example requests/responses.

  - ○ Explanation of features.

Important Notes

- ❌ Do not blindly use **AI-generated code**.

- ✅ You may take **help from AI/Google/Docs**, but make sure you **understand the code** before using it.

- We will check **code quality, folder structure, comments, and explanations in README.md**.

Submission

- Submit a **GitHub repository link**.

- Make sure repo has:

    - `README.md`
    - Proper commit history.
    - Give the Postman Collection

    - Submit Assignment Details on: https://forms.gle/bo1gZFGXcfzicrGq9

⏰ Deadline: **48 Hours (2 Days)**