

Practical Task: Admin Panel for Employee Attendance Management (Node.js Backend)

Objective:

Develop a backend application using **Node.js** that allows an admin to manage employee attendance, employee records, and send email notifications on attendance status.

Features to Implement:

1. Admin Login

- Create a login functionality for the admin.
- Use hardcoded credentials:
 - **Email:** admin@test.com
 - **Password:** admin123
- Upon successful login, return a JWT token for session management.

2. Dashboard Summary

- Provide a summary with the following details:
 - **Total Employees**
 - **Present Today**
 - **Absent Today**
 - **Half Day Today**
- Data should be based on attendance records for the current date.

3. Employee Management

- **Create Employee:** Accept the following fields:
 - **Name**
 - **Mobile Number**
 - **Designation**
 - **Hobby** (as a checkbox selection)
 - **Profile Photo:**
 - Single file upload.
 - Image size limit: **500KB**.
 - Acceptable formats: JPEG, PNG.
 - **Documents:**
 - Multiple file uploads.
 - Acceptable formats: PDF, DOCX, etc.
- **Retrieve Employees:**
 - Support search and filter by name or designation.
 - Display employees in two separate tabs:
 - **Active Employees:** Employees with `status: active`.
 - **Inactive Employees:** Employees with `status: inactive`.
- **Update Employee:**
 - Update any field of an employee record.
 - Change employee status between active and inactive.

- **Delete Employee:**
 - Remove an employee record by ID.

4. Attendance Management

- **Mark Attendance:**
 - Allow the admin to mark attendance for multiple employees simultaneously using multi-select checkboxes.
 - Also support marking attendance for individual employees.
- **Retrieve Attendance for Date:**
 - Provide a list of all employees with their attendance status for a given date.
- **Retrieve Attendance History:**
 - Provide attendance records for an employee or for all employees across dates.

5. Email Notification on Attendance Marking

- Whenever attendance is marked, send an email to the respective employee.
- Email should include:
 - Employee name
 - Attendance status
 - Date
- Use an email service via **SMTP** to send the email. For example, you can use **Nodemailer** with SMTP configuration.

6. Data Storage

- Use **MongoDB**, **MySQL**, or **PostgreSQL** for persistent storage.
 - Tables/collections:
 - Employees
 - Attendance

Submission Guidelines:

- Provide a ZIP file containing:
 - The complete backend code.
 - A video walkthrough demonstrating the application's functionality.
- Ensure the backend runs properly on `npm start`.