

Develop a REST API to **calculate employee salaries** based on **basic salary, allowances, tax slabs, deductions, PF contributions, and attendance**. Additionally, **HR should be able to calculate the total salary payout** for all employees within a selected month.

Note: Half day salary calculation for employees working less than 8 hours per day.

1. Tech Stack:

- **Node.js (TypeScript)**
- **Express.js**
- **Prisma ORM / TypeORM / Sequelize**
- **PostgreSQL / MySQL**
- **JWT Authentication (HTTP-only cookies)**
- **Redis for caching (optional)**

Features & API Endpoints

A. Authentication APIs

1: auth/login for all users. (type: post) (role: all users)

2: /auth/logout for all users (type post) (role: all users)

B. Employee Management APIs

2: /employees (type: post) (role: HR/Admin)

3: /employees/:id (type: get) (role: HR/Admin (Self-view for Employee))

C: Attendance Api

4: /attendance/mark (type: post) (role: Employee)

D: Salary Calculation APIs

5: /salary/calculate (type: post) (role: HR/Admin)

6: /salary/:employeeid?month=YYYY-MM (type: get) (role: HR/Admin (Self-view for Employee))

E. Payroll Distribution APIs

7: /payroll/distribute (type: post) (role: HR/Admin)

8: /payroll/history?month=YYYY-MM (type: get) (role: HR/Admin)

Salary Calculation Logic

- 1: Gross Salary = Basic Salary + HRA + Allowances**
- 2: Tax Deduction = Based on tax slabs (create your own slab)**
- 3: PF Deduction = 12% of Basic Salary**
- 4: Daily Wage = Gross Salary / Working Days**
- 5: Full Day Salary = Daily Wage**
- 6: Half Day Salary (if working hours < 8 hours) = Daily Wage / 2**
- 7: Total Salary = (Full Days × Full Day Salary) + (Half Days × Half Day Salary)**
- 8: Net Salary = Total Salary - Tax - PF - Other Deductions**

