# **Employee Management & Tracking System (HRMS)**

## - Project Documentation

### **Technologies Used**

Category Tech Stack

**Frontend** Next.js, or Bootstrap

**Backend** Node.js, Next.js API Routes / Express.js

Database MongoDB (Mongoose ODM)

**Authentication** JWT with secure HTTP-only cookies

**Notifications** Nodemailer (Email), Web Push (Optional)

Location Tracking Manual Form Entry, Optional: GPS (React Native/PWA)

**Reporting & Charts** Recharts / Chart.js

#### Main Modules and Feature Breakdown

#### 1. Employee Module

- Add, View, Edit employee records
- Auto-generated unique employee ID
- Employee types: Permanent / Prohibition
- Assign department & manager
- Secure login credentials

## 2. Team Management

- Assign teams under managers
- View team list per manager or department
- Admin can reorganize teams

### 3. Leave Management

- Leave categories: Sick, Casual, Earned, etc.
- Leave balance tracking
- Admin can customize leave rules
- Shift and workday settings (Mon–Sat, etc.)
- Auto check-in for holiday/Sunday workers

# 4. Attendance System

- Manual and automatic check-in system
- Track: Present, Absent, Leave, WFH, WFO, Week-Off
- Reports:
  - Daily
  - Weekly
  - Monthly
  - Yearly
  - o Filters by employee, branch, department, designation

# 5. Distance Tracking (Remote Employees)

- Manual form-based distance entry:
  - Start/End location
  - o Distance (KM)
  - Sites visited
- (Optional Advanced): Real-time GPS via React Native or PWA
- Route logging & visit logs

## 6. Branch Management

- Admin can add/edit branch locations
- · Used for filtering and reporting
- Branch-level access (optional)

#### 7. Notifications

- Leave requests and approvals
- Internal announcements or notices
- Email notifications
- Push notifications (optional)

## 8. Reports

- Happiness Index (form-based employee survey)
- Filters:
  - o Employee
  - o Branch
  - o Department
  - Date range
- Exports:
  - Excel
  - o PDF
- Visual summary using charts/graphs

# 9. Payroll System

- Manage base salary, bonuses, deductions
- Monthly salary reports
- Generate payslips (PDF/Excel)
- (Optional) Bank integration for salary payout

#### 10. Expenses

- Employees can submit travel/expense claims
- Manager/Admin can approve
- Expense reports by:
  - o Employee
  - o Branch, Department

# **Project Timeline (Estimated: 3–4 Months)**

Week	Module(s)	Goals
Week 1–2	Project Setup, Auth System	Set up Next.js, MongoDB, JWT auth, Admin/Manager/Employee roles
Week 3–4	Employee Module	CRUD for Employees, Unique IDs, Login credentials, Employee Type
Week 5	Manager & Team Management	Assign managers to employees, and View teams
Week 6–7	Leave Management	Leave types, balance logic, admin rules, holiday auto-check-in
Week 8–9	Attendance System	Daily check-in/out, present/absent/leave tracking, reporting by filters
Week 10	Distance Tracking (Manual)	Distance entry form, KM calculation, site count, reports
Week 11	Branch Management	Add/edit branches, filter views/reports by branch
Week 12	Notifications	Email notifications for leave/announcements
Week 13	Reports Module	Attendance, leaves, remote vs office workers, exports
Week 14–15	Payroll + Expenses	Basic payroll, generate salary reports/slips, and expense claim approval
Week 16	UI Polishing + Deployment	Mobile responsiveness, dashboards, host on Vercel, test all flows