# Staff Performance Monitoring System

**Project Overview**

The Staff Performance Monitoring System is a web-based platform designed to track, manage, and assess employee performance efficiently. It enables organizations to monitor employees' tasks, contributions, locations, and progress in real time, ensuring accountability and productivity.

**Objectives**

1. Improve task management by tracking employee tasks and their contributions.
2. Enhance productivity through real-time task monitoring.
3. Ensure accountability by tracking employee location while performing tasks.
4. Enable secure authentication with role-based access control.
5. Provide data-driven insights through a dashboard with performance analytics.

**System Features**

1. **User Authentication & Roles**
2. Secure Login & Registration with JWT authentication.
3. Role-Based Access Control (RBAC):
   1. Employees: View, update, and manage assigned tasks.
   2. Admins/Managers: Assign tasks, monitor progress, track employee location, and generate reports.
4. **Employee Task Monitoring**

Employees can log their tasks, update status, and receive feedback.  
Task details include:

1. Employee Name
2. Company Served
3. Task Date (timestamp)
4. Task Description
5. Contribution of Task (impact on project/organization)
6. Related Project/Assignment
7. Task Status:
   1. Pending
   2. In Progress
   3. Completed
   4. Delayed
8. Comments & Feedback
9. **Location Tracking**
10. Tracks the real-time location of employees while performing tasks.
11. Verifies whether employees are at the designated work location.
12. Ensures compliance with remote or fieldwork assignments.
13. **Dashboard & Performance Analytics**
14. Task Progress Visualization: Charts & reports on completed, pending, and delayed tasks.
15. Employee Performance Metrics: Contribution analysis, efficiency ratings, and work trends.
16. Location Insights: Verify employee movements while on assigned tasks.
17. Filtering & Sorting: View data based on date range, employee, company, and task status.

**System Actors & Their Roles**

**1. Admin**

The Admin has full control over the system with the following permissions:

1. Manage all users in the system
2. Delete users
3. Download reports
4. Create supervisors
5. Create departments
6. Define company names

**2. System Users**

1. Supervisor
2. Employee
3. Admin

**3. User Registration & Login**

Users can register with:

1. Username
2. Password
3. Company Name (Defined by Admin)
4. Department (Defined by Admin)

**Users log in by providing:**

1. Username
2. Password

**4. Supervisor Responsibilities**

1. Receive reports from employees.
2. Review employee reports and provide comments.
3. Organize and manage task reports efficiently.

**Technology Stack**

**Frontend**

1. React.js with TypeScript (for a scalable, high-performance UI)
2. Tailwind CSS (for modern UI design)
3. Redux Toolkit (for state management)
4. React Query / Axios (for API requests)

**Backend**

1. Node.js with Express.js (for handling API requests)

**Database**

1. PostgreSQL (for structured and relational data storage)

Additional Features & Integrations

1. Google Maps API / OpenStreetMap (for employee location tracking)
2. Cron Jobs (for automated status updates and reminders)
3. Email & Notification System (to alert employees about task updates)