

# Software Requirement Specification for Campus Maintenance

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<b>Project ID</b>	18
<b>Problem Statement</b>	Campus Maintenance

## Tech Stack:

- **Frontend:** React.js for building the user interface.
- **Backend:** Node.js with Express.js for server-side logic and API development.
- **Database:** MongoDB for storing essential staff work details.
- **Authentication:** Firebase Google Authentication

## Problem Statement:

In the current scenario, managing essential workers manually can be challenging and time-consuming. To address this issue, we propose the development of a web application that allows supervisors to upload the status of essential workers for each day and location. This digital solution will streamline the management process, making it easier to track worker activities and save valuable time. Supervisors can conveniently mark tasks as completed once the work is finished, ensuring efficient and accurate record-keeping.

The scope of this project includes the development of a web-based application accessible to authorized personnel. The application will allow users to view essential staff work schedules, including task details, staff assignments, work duration, status updates, and remarks.

## **Workflow:**

### **Functional Requirements**

#### **Dashboard:**

- Upon accessing the website, users are directed to the dashboard.
- The dashboard displays essential staff work details, including date, session, task ID, nature of work, location, number of essential staff assigned, name of staff attending, duration of work, status, and remarks.

#### **Sign In:**

- Only administrators can sign in to the system.
- Authentication is required for accessing admin functionalities.

#### **Upload Data:**

- Admins can upload essential staff work details.
- Fields to upload include date, session, task ID, nature of work, location, number of essential staff assigned, name of staff attending, duration of work, status, and remarks.

#### **View and Update Work Status:**

- Admins can view and update the status of assigned tasks.
- Tasks can be marked as complete, and remarks can be added or edited.

#### **Statistics:**

- Users (both admins and non-admins) can view statistics on completed tasks.
- Statistics include the number of tasks completed, ongoing tasks, and pending tasks.

## Non-Functional Requirements

### Constraints:

- The system should be developed using the MERN (MongoDB, Express.js, React.js, Node.js) stack.
- Compatibility with modern web browsers (e.g., Chrome, Firefox, Safari) should be ensured.

### Glossary:

- Admin: User with administrative privileges to manage the system.
- Essential Staff: Staff members designated to perform critical tasks on campus.
- Task ID: Unique identifier for each assigned task.
- Nature of Work: Description of the type of work assigned to essential staff.
- Session: Time (e.g., morning, afternoon) during which the work is scheduled.
- Status: Status of the assigned task (e.g., pending, ongoing, completed).

## Flow Chart

