# Factory Maintenance and Task Management Website Requirements

# 1. Project Overview

## 1.1 Website Purpose

A specialized website for managing tasks and maintenance in factories and industrial facilities, allowing users to organize and track maintenance work and manage resources.

#### 1.2 Target Audience

- Factory managers
- Maintenance supervisors
- Technicians
- Maintenance requesters
- System monitors

#### 1.3 Key Features

- Work order management
- Preventive maintenance scheduling
- Analytics and statistics
- Maintenance request management
- Management of locations, equipment, stores, and employees

## 2. Website Structure

## 2.1 Public Pages (Available without login)

- Homepage: Displays an overview of the service and its features
- "About Us" page: Information about the company
- "Contact Us" page: A form for communicating with the website administration
- Registration and login page

## 2.2 Dashboard (After login)

- Work Order
- Preventive Maintenance
- Analytics
- Requests
- Locations
- Machines

- Store
- Employees
- User Profile
- Company Profile
- Notifications

#### 2.3 Super Admin Dashboard

- Managing messages from the contact page
- General statistics
- Managing registered companies
- Managing Frequently Asked Questions (FAQ)
- Managing subscriptions and payments

# 3. User Types and Permissions

#### 3.1 Admin

- Create and manage all users
- Manage all company data
- Full access to all pages and functions
- Manage work orders and tasks
- Manage work orders and tasks
- Access to store data
- Manage preventive maintenance

## 3.2 Supervisor

- Manage work orders and tasks
- Access to store data
- Manage preventive maintenance

#### 3.3 Technician

- Execute and update task status
- Access to store data
- View machine details

## 3.4 Requester

• Submit maintenance requests

#### 3.5 Viewer

• View data only without modification

## 3.6 Super Admin

- Manage the website in general
- Monitor all subscribed companies

# 4. Page Details and Functions

## **4.1 Registration Page**

#### **Required Fields:**

- First name
- Last name
- Email
- Phone number
- Password
- Company name

#### **Functions:**

- Email verification
- Creating an admin account for the company
- Activating a 7-day free trial period

#### 4.2 Login Page

#### **Required Fields:**

- Email
- Password

#### **Functions:**

- User authentication
- Redirection to dashboard
- Forgotten password recovery

## 4.3 User Profile Page

## **Displayed Information:**

- First and last name
- Job role
- Email
- Phone number

- Profile picture
- Company name
- Work status (On shift / End shift / On call)

#### **Editable Functions:**

- Change profile picture
- Edit phone number
- Change password

## **4.4 Company Profile Page**

#### **Displayed Information:**

- Company name
- Company email
- Phone number
- Address
- Website
- Company image

**Note:** Only users with admin permissions can edit this information.

## 4.5 Work Order Page

#### **Display Options:**

- Calendar
- Columns
- Table

#### **Functions for Creating a New Work Order: Required Fields:**

- Work order title
- Description
- Category
- Priority (high, medium, low, none)
- Images
- Equipment to be maintained
- Equipment location
- Due date
- Start date
- Assign to primary person
- Assign to secondary person

#### **Task Statuses:**

- Open
- In progress
- On hold
- Completed

## **4.6 Preventive Maintenance Page**

#### **Functions:**

- Add equipment
- Set preventive maintenance schedule
- View maintenance schedule

## 4.7 Analytics Page

#### **Displayed Information:**

- Open tasks
- Maintenance requests
- Various statistics and reports

## 4.8 Requests Page

#### **Admin Functions:**

- View maintenance requests from other users
- Approve or reject requests

#### **Other Users' Functions:**

- Submit a maintenance request containing:
  - o Title
  - Description
  - o Priority
  - Images
  - o Files

## **4.9 Locations Page**

#### **Functions (for admin only):**

- Add locations for the company
- Record data such as:
  - o Name
  - Address
  - o Image

#### o Notes

## **4.10 Machines Page**

#### **Recorded Information:**

- Name
- Description
- Model
- Manufacturer
- Serial number
- Category
- Location
- Image
- Description
- File
- Notes

**Note:** Available to supervisor/technician/requester for viewing only.

## 4.11 Store Page

## Functions (for admin and supervisor/technician):

- Add spare parts or tools
- Record data such as:
  - o Part name
  - o Part number
  - Category
  - o Description
  - o Image
  - o Location
  - Quantity
  - o Notes
  - o File

#### **4.12** Employees Page

#### **Functions (for admin only):**

- Add/delete employees
- Assign roles
- Manage employee information

# 5. Website Usage Cycle

- 1. User enters the website and browses the public pages (home/about us/contact us)
- 2. Registers for a 7-day free trial
- 3. Logs in to the maintenance dashboard with an admin role
- 4. Navigates between pages and adds users, spare parts, work orders, etc.
- 5. After 7 days, the user must pay:
  - o \$20 for one month
  - o or \$216 for a full year

# 6. Technologies Used

#### 6.1 Backend

- Node.js
- Express
- MVC
- Nodemon
- PostgreSQL
- PG Admin
- Sequelize CLI
- Env
- JWT

#### **6.2 Frontend**

- React Vite JS
- Tailwind CSS
- Axios
- Redux
- Email JS

## 7. Color Scheme

- #FF5E14
- #5F656F
- #F5F5F5
- #02245B

# 8. Additional Requirements

## 8.1 Notification System

- Notifications for new tasks
- Notifications for approved/rejected requests
- Preventive maintenance reminder notifications

• Notifications before subscription expiration

# 8.2 Payment and Subscription System

- Mechanism to convert from trial account to paid account
- Payment processingSubscription renewals
- Payment reminder notifications