

# **Dilum BMK Engineers (PVT) Ltd Tools**

## **Management System – User Manual**

### **1. Introduction**

The Tools Management System is designed to streamline the process of managing Inventory of tools, and projects activities of the organization. This system provides userfriendly interfaces for Inventory Management. It ensures efficient management of all tools assigned to the projects and it helps to maintain accurate records.

### **2. Getting Started**

#### System requirements

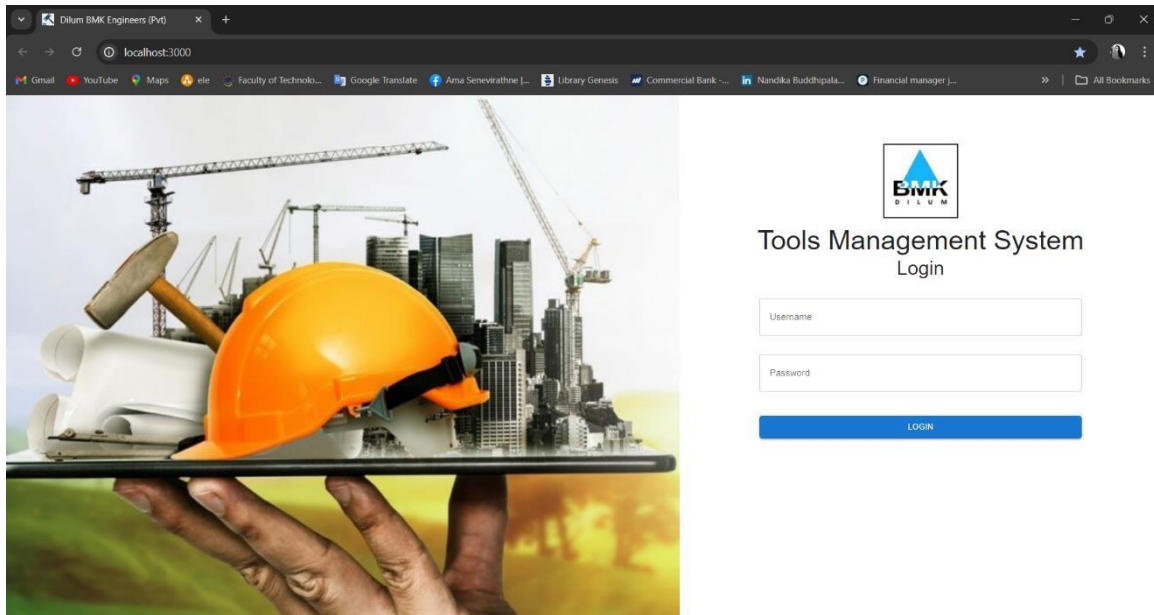
Ensure you have the following:

- A device with internet access.
- A modern web browser (e.g., Google Chrome)
- Your valid username and valid password.

### 3. Logging In

Open your web browser and go to application using URL  
You will see the login screen:

1. Enter your Valid Username and Valid Password.
2. Click on the Login button.



*Figure 1- Login page of the Web application*

3. Navigate to the dashboard according to role base.

## 4. User Roles and Dashboards

After logging in, you will be directed to your dashboard based on your role. Each role has specific features and access levels.

### 4.1 Admin

Dashboard Overview: Full access to system settings and user management.

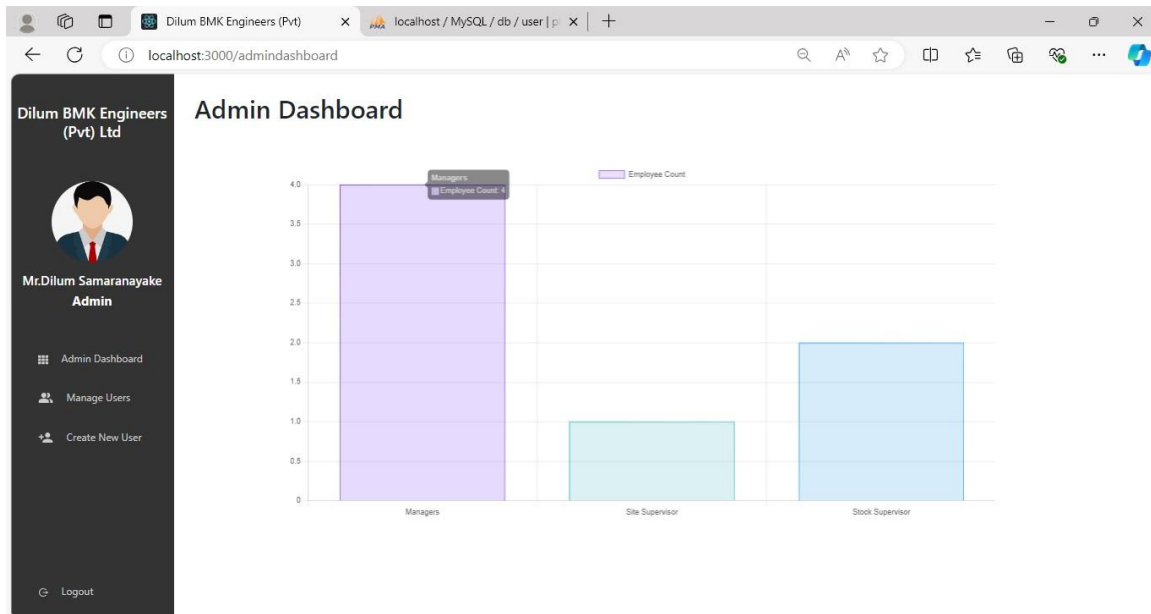


Figure 2 - Admin Dashboard

### Features:

#### 4.1.1 Add New Users

1. Click the **Create New User** Section
2. Display the **Create New User Form**.
3. Fill all fields on the Form.
4. Click **Submit** button.

The screenshot shows a web browser window with the URL `localhost:3000/admindashboard`. The page title is "Create New User". On the left, there is a dark sidebar with the company name "Dilum BMK Engineers (Pvt) Ltd" and a user profile for "Mr. Dilum Samaranayake Admin". The sidebar menu includes "Admin Dashboard", "Manage Users", "Create New User", and "Logout". The main content area contains a form for creating a new user. At the top of the form is a circular placeholder for a profile picture with an "Add Photo" button. Below this are several input fields: "User Role" (a dropdown menu), "First Name", "Last Name", "Email", "NIC Number", "Phone Number", "Password", and "Confirm Password". At the bottom right of the form are two buttons: a red "RESET" button and a green "SUBMIT" button. The browser's address bar shows the local host and the database connection details. The Windows taskbar at the bottom displays the search bar, various application icons, and the system clock showing 10:10 PM on 7/10/2024.

*Figure 3 - Add New User Form*

#### 4.1.2 Manage Users

1. Click the **Manage Users** Section
2. Can view User Details
3. Click **Edit** button and can update user details.
4. Click **Delete** button and can delete user details

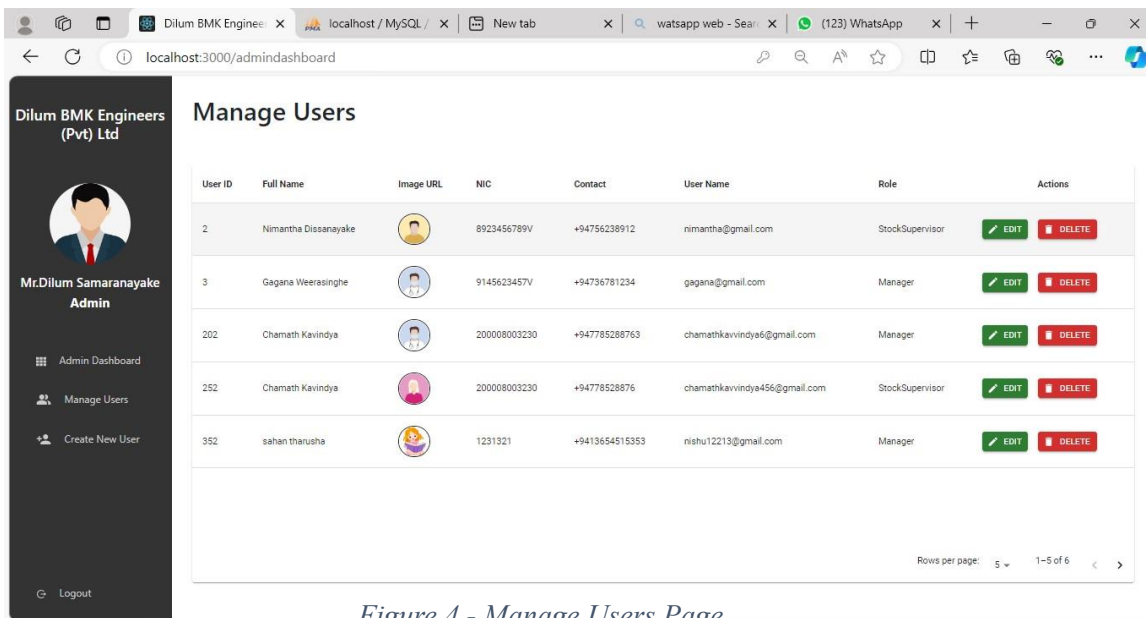


Figure 4 - Manage Users Page

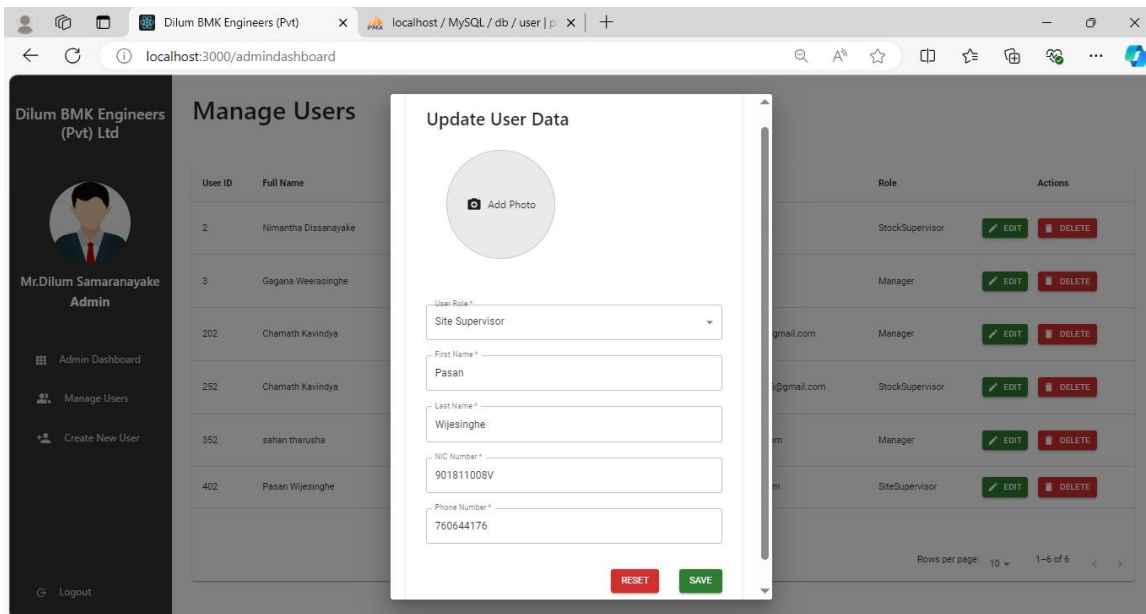


Figure 5 - Update User Form

## 4.2 Manager

Dashboard Overview: Shows tools inventory information.

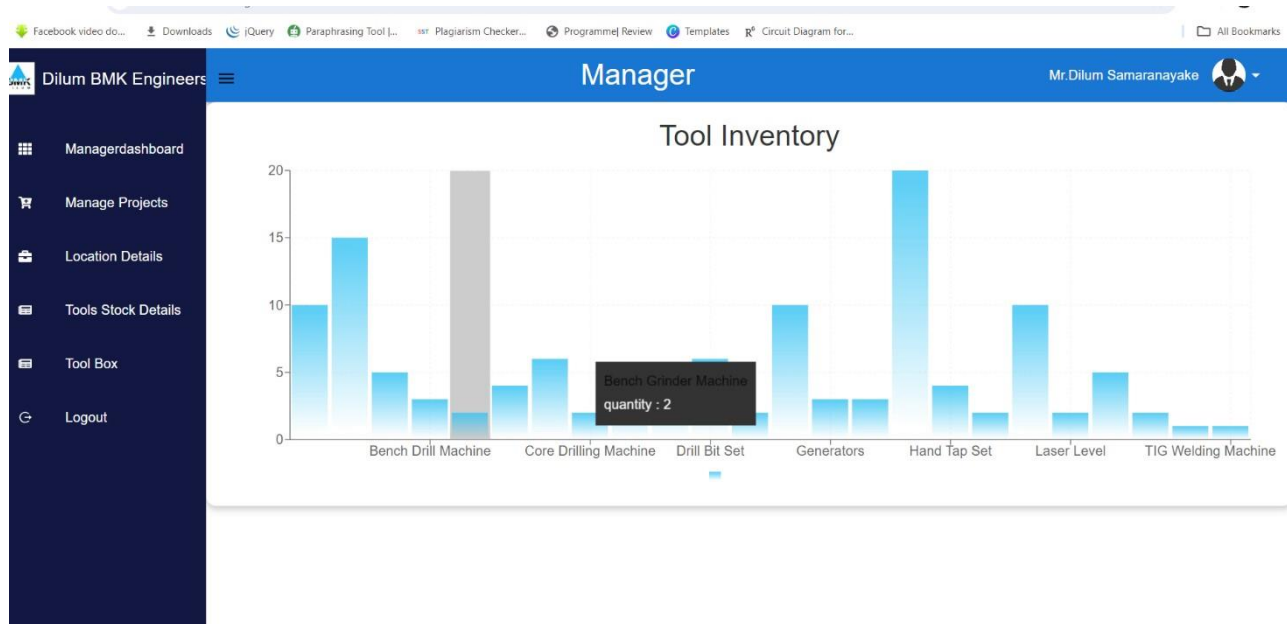


Figure 6 - Manager Dashboard

### Features:

#### 4.2.1 Add New Project Details

1. Click the **Manage Projects** Section
2. Click the **Add Projects** button and Display **Add New Project Form**.
- 3.. Fill all fields on the Form.
4. Click **Submit** button.

**Manager**

Mr. Dilum Samaranayake

**Add New Project**

Project Id

Project Name

Description

Start Date  
mm/dd/yyyy

End Date  
mm/dd/yyyy

Site Supervisor ID

Site Supervisor Name

*Figure 7 - Manager Add New Project Details Form*

#### 4.2.2 Manage Project Details

1. Click the **Manage Projects** Section
2. Can view Project Details
3. Click **Edit** button and can update project details.
4. Click **Delete** button and can delete project details

**Manager**

Mr. Dilum Samaranayake

**Edit Project Details**

Project Id  
P001

Project Name  
Crane installation

Description  
Dilum Bmk internal service

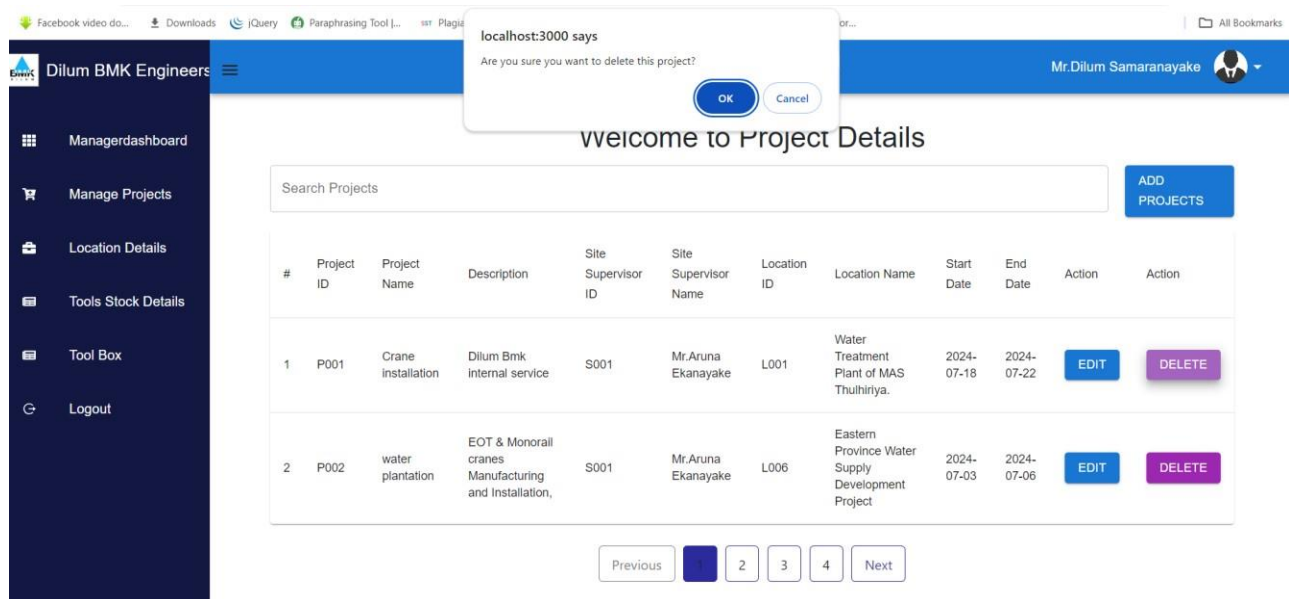
Start Date  
07/18/2024

End Date  
07/22/2024

Site Supervisor ID  
S001

Site Supervisor Name  
Mr. Aruna Ekanavake

*Figure 8 - - Manager Update Projects Details Form*

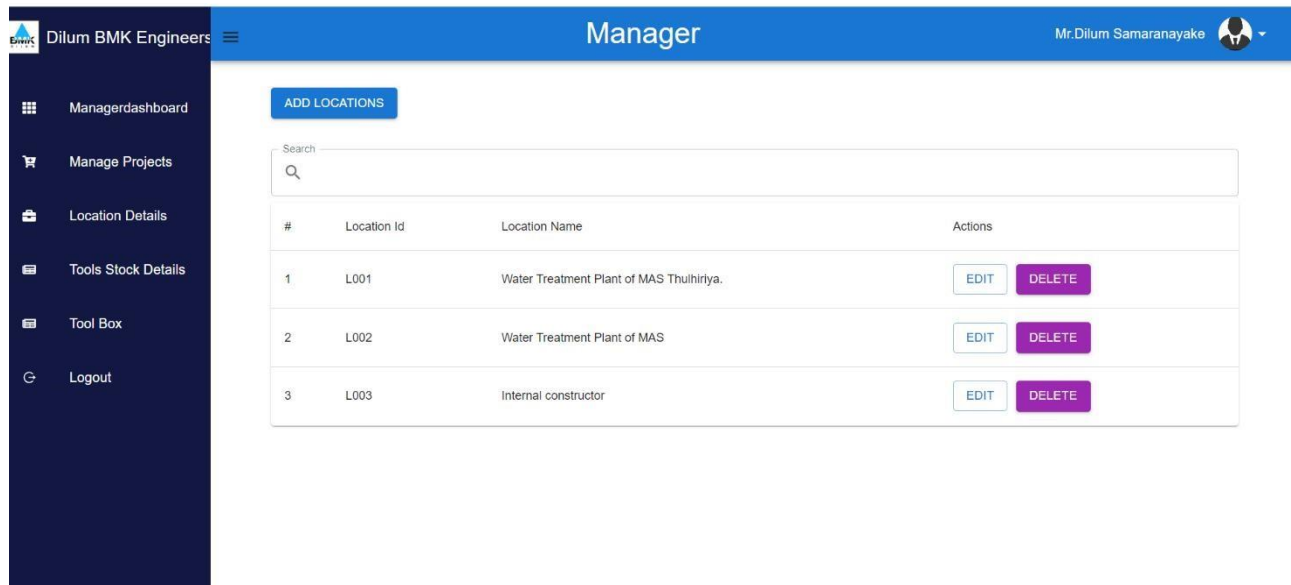


*Figure 9 - Manager Delete Project Details*

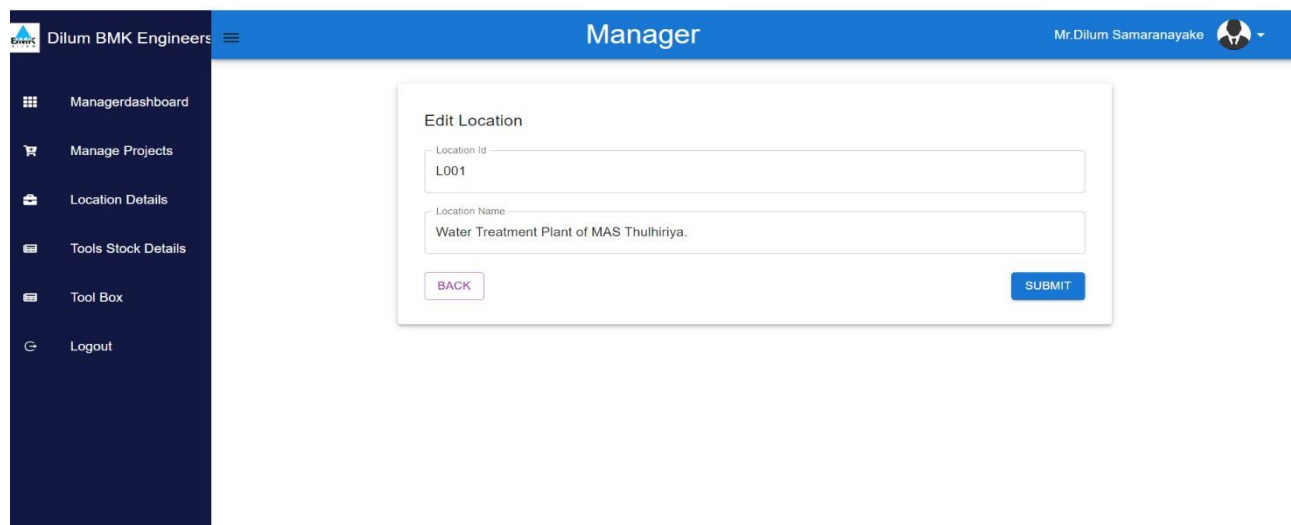
#### 4.2.3 Manage Location Details

1. Click the **Location Details** Section
2. can View Location Details
3. Click **ADD LOCATIONS** button and display **Add Location Form**
4. Click **EDIT** button and open the **Location details Update Form**
5. Click the **DELETE** button and can delete location details.





*Figure 10 - Location Details Page*



*Figure 11 - Manager Edit Location Form*

#### 4.2.4 View Tools Details

1. Click the **Tools Stock Details** Section
2. Can View Tools Details page

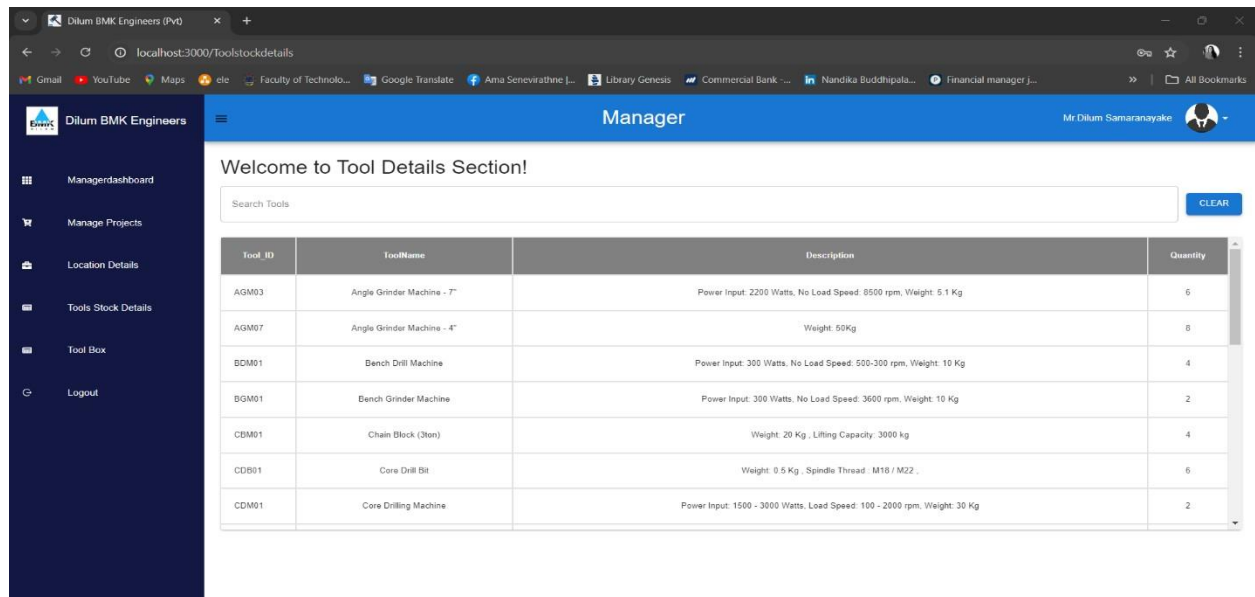


Figure 12 - Manager View Tools Details Page

## 4.2.5 View Toolbox Details

1. Click the **Toolbox** Section
2. Can view Toolbox details

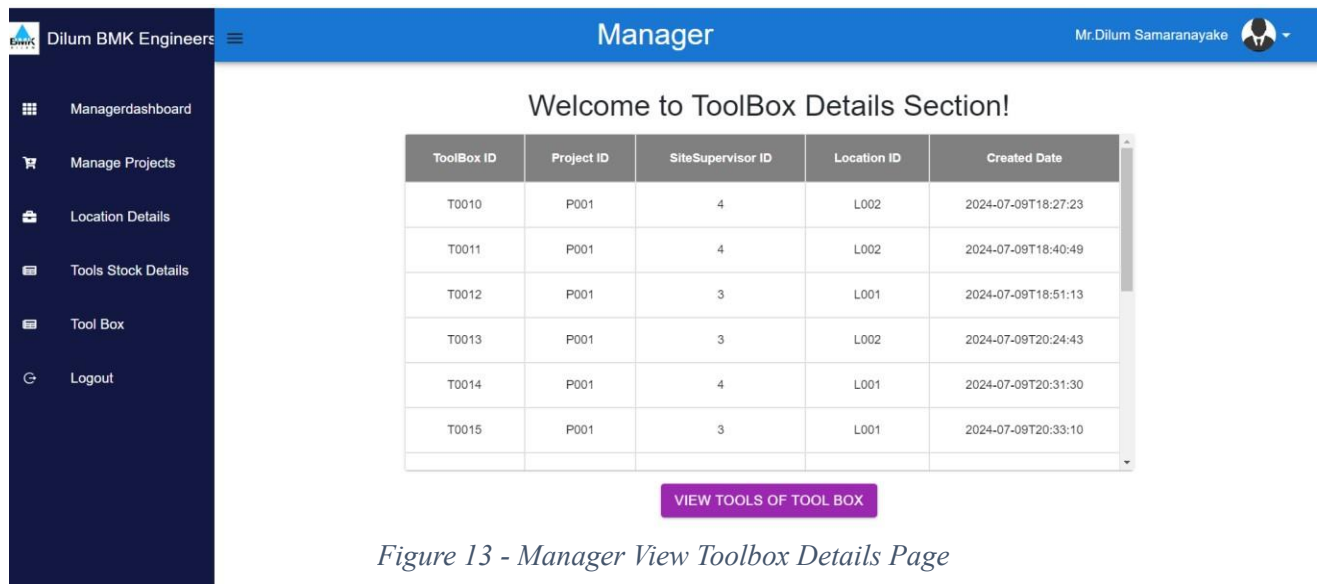


Figure 13 - Manager View Toolbox Details Page

## 4.3 Stock Supervisor

Dashboard Overview: Shows tools inventory information.

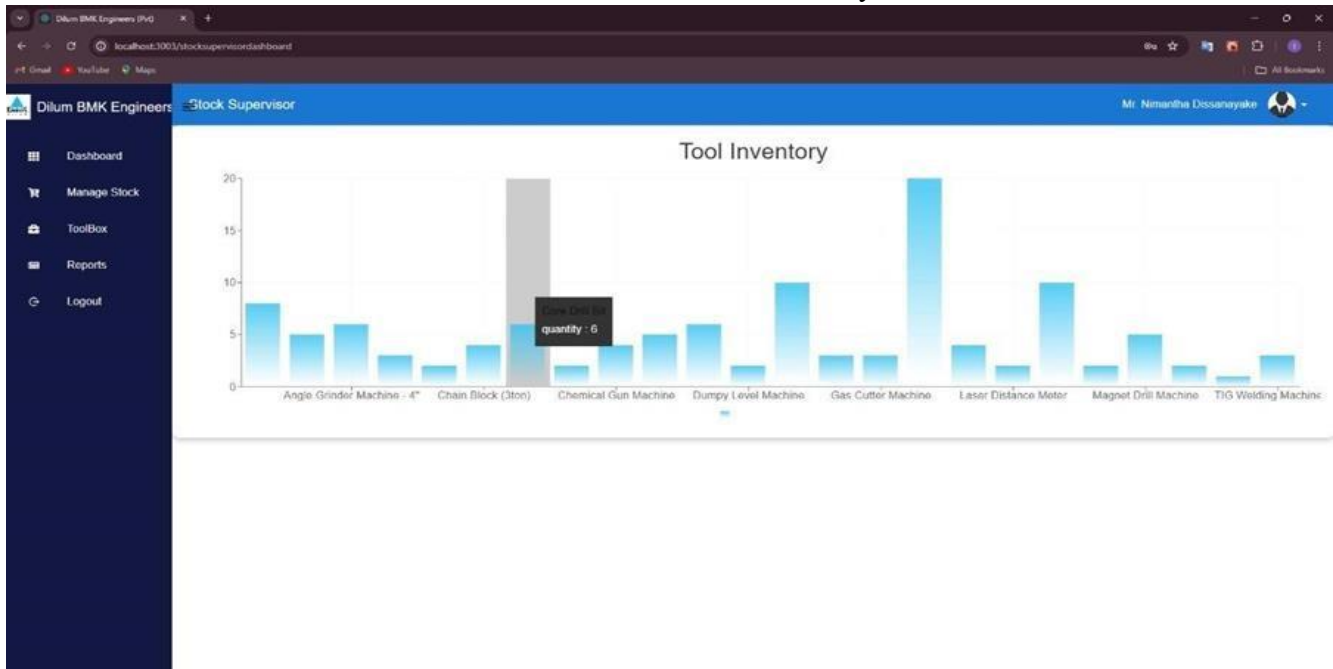


Figure 14 - Stock Supervisor Dashboard

### 4.3.1 Manage Stock

1. Click **Manage Stock** Section.
2. Can view Tool details
3. Click **ADD TOOL** button and display **Add New Tool Form**.
4. Click **UPDATE** button and display **Update Tool Details Form** and after changing details click **UPDATE** button
5. Click **DELETE** button and display message box. After Clicking **OK** the tool details will delete.

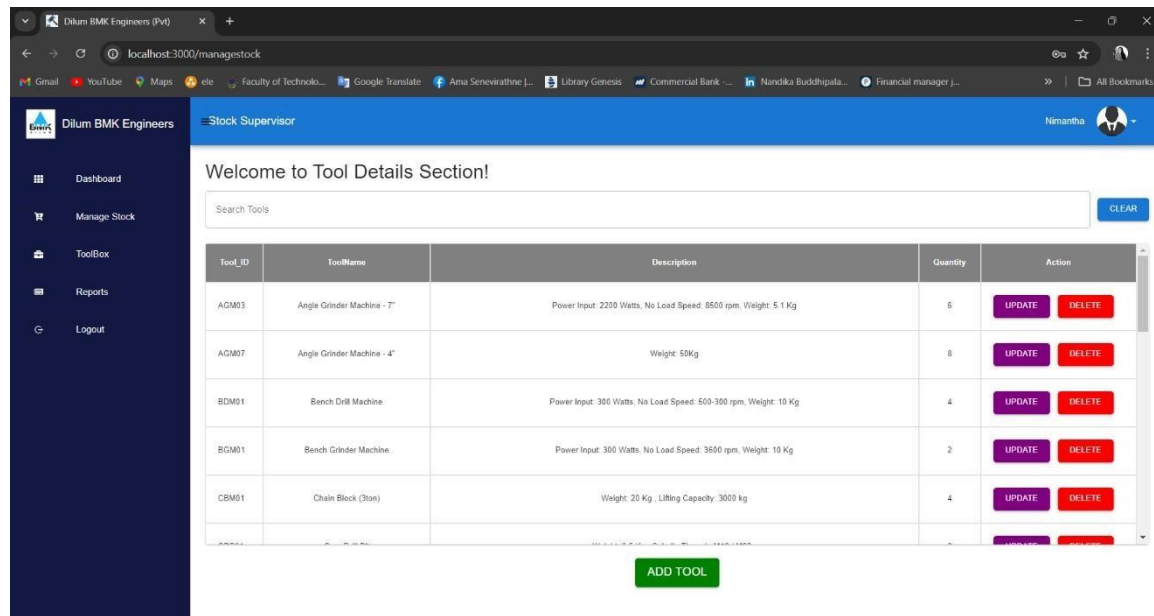


Figure 15 - Stock Supervisor View Tool Inventory

New Tool Details Form

Tool ID

Tool Name

Description

Quantity

SUBMIT CANCEL

Figure 16 - Stock Supervisor New Tool Details Form

**Update Tool Details**

Tool ID: AGM03

Tool Name: Angle Grinder Machine - 7"

Description: Power Input: 2200 Watts, No Load Speed: 8500 rpm, Weight: 5.1 Kg

Quantity: 6

**UPDATE** **CANCEL**

Figure 17 - Stock Supervisor Update Tool Details Form

**localhost:3000 says**  
Are you sure you want to delete this tool?

**OK** **Cancel**

**Welcome to Tool Details**

Search Tools **CLEAR**

| Tool_ID | ToolName                   | Description   | Quantity | Action                      |
|---------|----------------------------|---|----------|-----------------------------|
| AGM03   | Angle Grinder Machine - 7" | Power Input: 2200 Watts, No Load Speed: 8500 rpm, Weight: 5.1 Kg  | 6        | <b>UPDATE</b> <b>DELETE</b> |
| AGM07   | Angle Grinder Machine - 4" | Weight: 55Kg  | 8        | <b>UPDATE</b> <b>DELETE</b> |
| BDM01   | Bench Drill Machine        | Power Input: 300 Watts, No Load Speed: 500-300 rpm, Weight: 10 Kg | 4        | <b>UPDATE</b> <b>DELETE</b> |
| BGM01   | Bench Grinder Machine      | Power Input: 300 Watts, No Load Speed: 3600 rpm, Weight: 10 Kg    | 2        | <b>UPDATE</b> <b>DELETE</b> |
| CBM01   | Chain Block (3ton)         | Weight: 20 Kg, Lifting Capacity: 3000 kg                          | 4        | <b>UPDATE</b> <b>DELETE</b> |

**ADD TOOL**

Figure 18 - Delete Tool Details & confirm message

### 4.3.3 Manage Toolbox

1. Click **TOOLBOX** section and Navigate to Toolbox Details Page
2. Click **CREATE TOOLBOX** button and Open the **New Toolbox Details Form**.
3. can Add new toolbox details and can select more tools to the toolbox clicking **SELECT TOOLS** button and navigate to **select tools page** and click **SUBMIT** button to create new toolbox.
4. Click **UPDATE** button will open **Update Toolbox Form**
5. Click **DELETE** button to delete the toolbox details from the inventory.
6. Click **TRACK TOOLBOX** button and navigate the page name Track toolbox and want to select the toolbox Id and display selected tools and location of the toolbox.

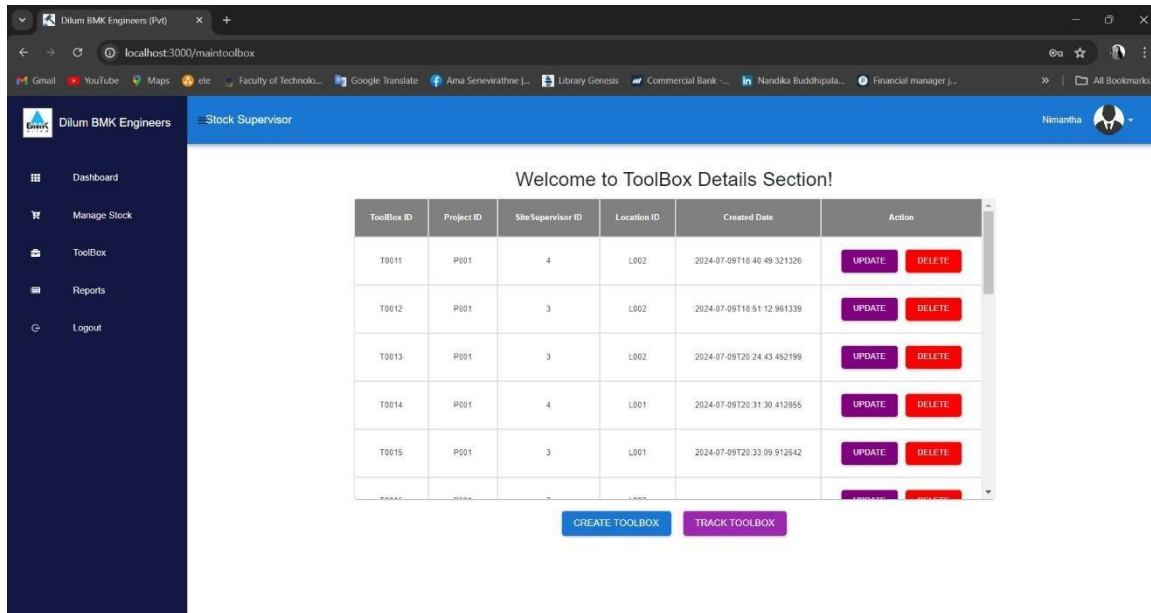


Figure 18 - Stock Supervisor Toolbox Details Page

After Clicking **CREATE TOOLBOX** button,

#### Create New Toolbox

1. Enter relevant toolbox tool details and Click **SELECT TOOLS** button to select tools to toolbox.
2. Click **SUBMIT** after adding all the toolbox details.
3. If you want to cancel details, you can Click **CANCEL** button.

Figure 19 - *Stock Supervisor Create New Toolbox Details Form*

After Clicking **SELECT TOOLS** button it shows,

### Adding Selected tools to toolbox

- 1.Can select tools one by one using ADD TOOL button.
- 2.Click ADD TOOL button and adding it to Cart.
- 3.Click Cart and Can see Selected tools. If you want to any tool from selected tools, you can remove tool using REMOVE button.

Figure 20 - *Stock Supervisor Selected Tools Section*

After Clicking **UPDATE** button,

### Update Toolbox Details Form

- 1.Update toolbox details
2. Click **UPDATE** button.
3. If you want to cancel it, you can click **CANCEL**.

The screenshot shows a web browser window with the URL 'localhost:3000/editToolbox/T0011'. The page title is 'Dilum BMK Engineers' and the user is logged in as 'Nimantha'. The left sidebar contains links for Dashboard, Manage Stock, Toolbox, Reports, and Logout. The main content area displays the 'Update Toolbox Details Form' with the following fields:

- Toolbox ID: T0011
- Project ID: P001
- Site Supervisor ID: 4
- Location ID: L002

At the bottom of the form are two buttons: a green 'UPDATE' button and a red 'CANCEL' button.

Figure 21 - *Stock Supervisor Update Toolbox Details Form*

After Clicking Track Toolbox button,

### Track Toolbox

1. Using Toolbox Id Search the toolbox location and other details by clicking **SEARCH** button.
2. Can see table of details.

The screenshot shows a web browser window with the URL 'localhost:3000/Tracktoolbox'. The page title is 'Dilum BMK Engineers' and the user is logged in as 'Nimantha'. The left sidebar contains links for Dashboard, Manage Stock, Toolbox, Reports, and Logout. The main content area displays the 'Track Toolbox' section with the following elements:

- A 'Select Toolbox ID' dropdown menu with 'T0030' selected.
- A blue 'SEARCH' button.
- A 'Toolbox Details' table with the following data:

| ID    | Location | Project | Site Supervisor | Selected Tools  |
|-------|----------|---------|-----------------|---|
| T0030 | L001     | P001    | 3               | AGM03, AGM03, AGM03, AGM03, AGM03, AGM03, AGM07, AGM07, AGM07, AGM07, AGM07 |

Figure 22 - *Stock Supervisor Update Toolbox Details Form*



#### 4.3.4 View Report Details

1. Click **Reports** in sidebar section and it shows the details of reports.
2. Click the **Download** button and can view required tools reports.

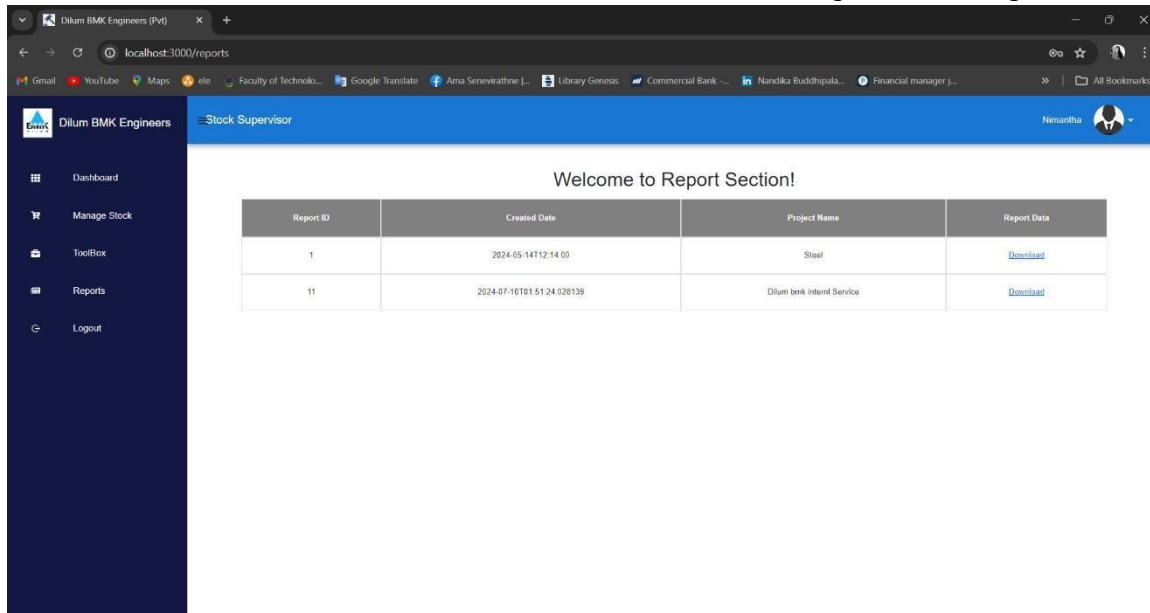


Figure 22- Stock Supervisor Report Details Page

## 4.4 Site Supervisor

### Dashboard Overview: Shows Inventory and Tool Locations

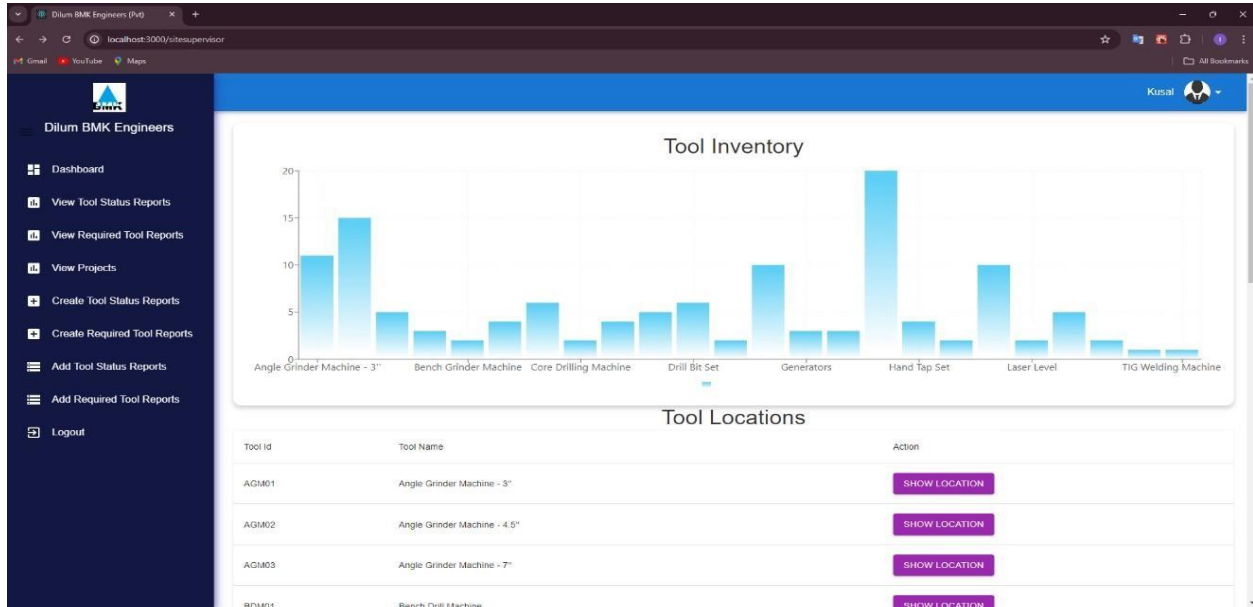


Figure 23- Site Supervisor Dashboard

### 4.4.1 View Tool Status Reports

1. Display Tool Status Report details relevant to different projects and can view Report using VIEW icon.
2. Can Delete report data using DELETE icon.

The screenshot shows the 'View Tool Status Reports' page. It features a search bar at the top and a table of reports. The table has columns for Report Id, Created At, Project Name, Report Data, and Actions.

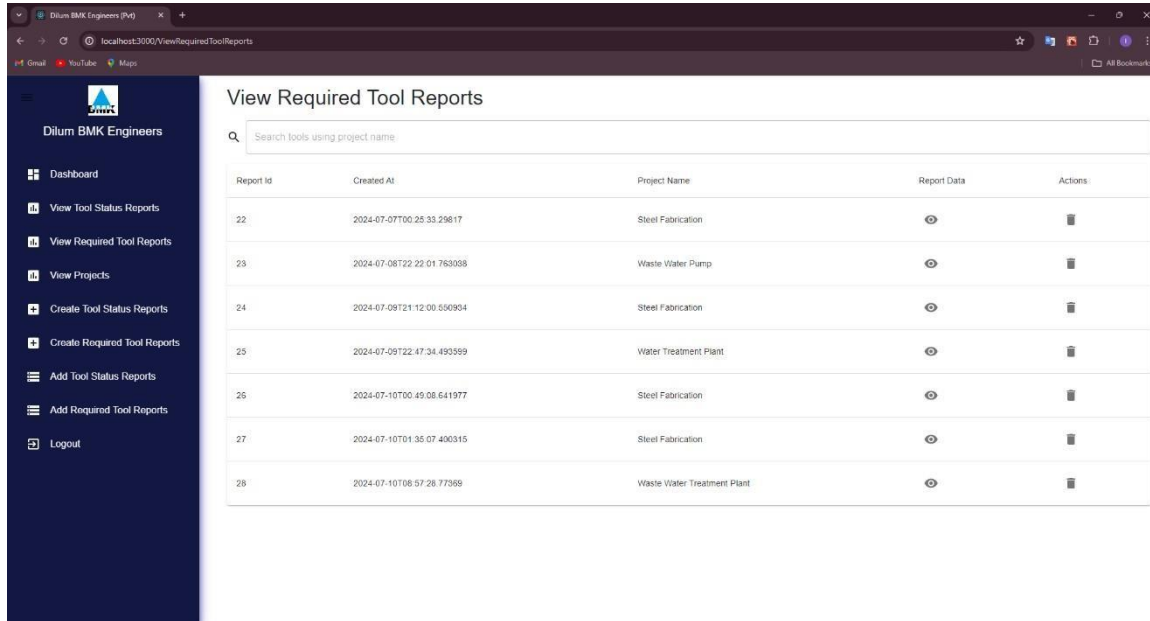
| Report Id | Created At                 | Project Name          | Report Data | Actions |
|-----------|----------------------------|-----------------------|-------------|---------|
| 3         | 2024-07-07T00:22:59.590716 | Water Treatment Plant |             |         |
| 4         | 2024-07-08T21:36:00.206927 | Steel Fabrication     |             |         |
| 5         | 2024-07-08T22:13:59.709286 | Steel Fabrication     |             |         |
| 6         | 2024-07-08T22:20:17.001911 | Steel Fabrication     |             |         |
| 7         | 2024-07-08T23:25:47.416735 | Waste Water Pump      |             |         |
| 8         | 2024-07-09T21:07:23.347795 | Steel Fabrication     |             |         |
| 9         | 2024-07-09T22:47:18.96049  | Water Treatment Plant |             |         |
| 10        | 2024-07-10T01:34:47.895673 | Waste Water Pump      |             |         |
| 11        | 2024-07-10T09:15:20.819349 | Steel Fabrication     |             |         |
| 12        | 2024-07-10T13:01:55.769987 | Water Supply project  |             |         |

Figure 24- Site Supervisor View Tool status Reports page

#### 4.4.2 View Required Tool Reports

1. Display Required Tool Report details relevant to different projects and can view Report using VIEW icon.

2. Can Delete report data using **DELETE** icon.

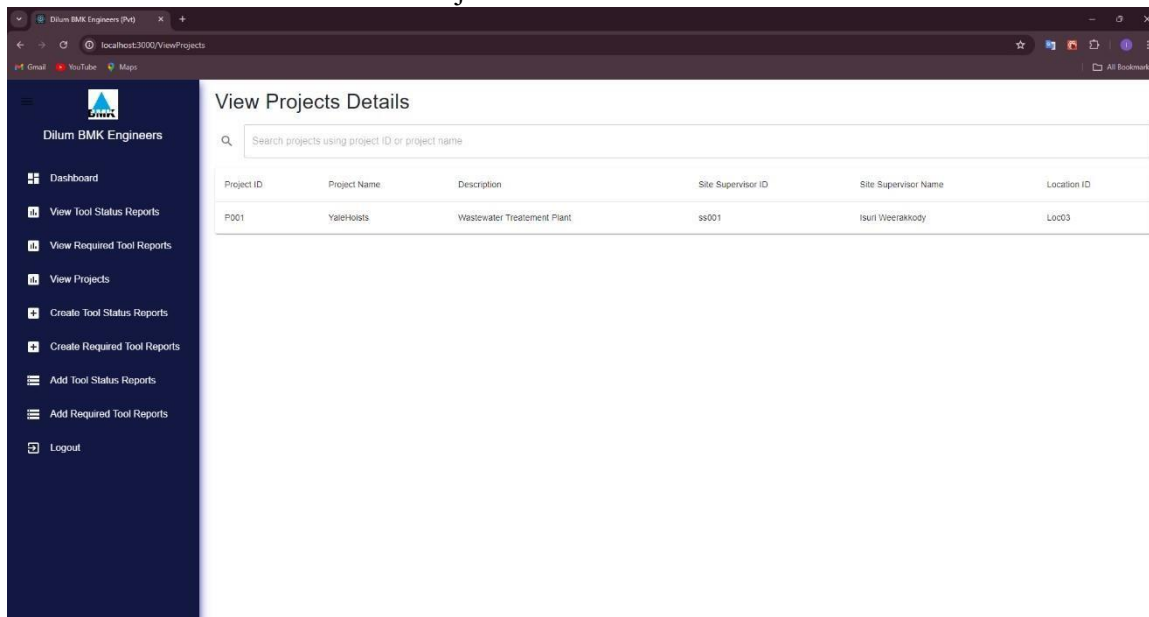


| Report Id | Created At                 | Project Name                | Report Data | Actions |
|-----------|----------------------------|-----------------------------|-------------|---------|
| 22        | 2024-07-07T00:25:33.29617  | Steel Fabrication           |             |         |
| 23        | 2024-07-08T22:22:01.763088 | Waste Water Pump            |             |         |
| 24        | 2024-07-09T21:12:00.550904 | Steel Fabrication           |             |         |
| 25        | 2024-07-09T22:47:34.493589 | Water Treatment Plant       |             |         |
| 26        | 2024-07-10T00:49:08.641977 | Steel Fabrication           |             |         |
| 27        | 2024-07-10T01:35:07.400315 | Steel Fabrication           |             |         |
| 28        | 2024-07-10T08:57:28.773589 | Waste Water Treatment Plant |             |         |

Figure 25- Site Supervisor View Required Tool Reports page

#### 4.4.3 View Project Details

1. Can view Project Details.



| Project ID | Project Name | Description                | Site Supervisor ID | Site Supervisor Name | Location ID |
|------------|--------------|----------------------------|--------------------|----------------------|-------------|
| P001       | Yatehoids    | Wastewater Treatment Plant | 99001              | Isuri Veerakkody     | Loc03       |

*Figure 26- Site Supervisor View Project Details page*

#### 4.4.4 Generate Tool Status Reports

1. Select toolbox by Tool List
2. Update tool status
3. Click **Generate Report** button.
4. After shows Report details, Created at and report **view** button. If you want to view report, you can click it and view.

| Tool Box id | Tools                         | Project Id | Site Supervisor id |
|-------------|-------------------------------|------------|--------------------|
| T8001       | AGM01 AGM03 BGM01 DBS01 DLM01 | P001       | SS01               |

**Tool Box Details**

Tool Box Id:

Tools:

Project Id:

Site Supervisor Id:

Tool Status:

*Figure 27- Site Supervisor Create Tool Status Report page*

#### 4.4.5 Generate required Report Details

1. Select required tools
2. Click **Generate Required Report** button
3. Creating a report and **View Report** button you can see the report.

**Required Tool Reports**

Search tools using tool id or tool name

| Tool Id | Tool Name                    | Description                    | Quantity | Allocate Tool | Available Tool | Select                   |
|---------|------------------------------|--------------------------------|----------|---------------|----------------|--------------------------|
| AGM01   | Angle Grinder Machine - 3"   | Maruti Suzuki Dzire VDI - 2007 | 11       | 0             | 0              | <input type="checkbox"/> |
| AGM02   | Angle Grinder Machine - 4.5" |                                | 15       | 0             | 0              | <input type="checkbox"/> |
| AGM03   | Angle Grinder Machine - 7"   |                                | 5        | 0             | 0              | <input type="checkbox"/> |
| BDM01   | Bench Drill Machine          |                                | 3        | 0             | 0              | <input type="checkbox"/> |
| BGM01   | Bench Grinder Machine        |                                | 2        | 0             | 0              | <input type="checkbox"/> |
| CBM01   | Chain Block (3ton)           |                                | 4        | 0             | 0              | <input type="checkbox"/> |
| CDB01   | Core Drill Bit               |                                | 6        | 0             | 0              | <input type="checkbox"/> |
| CDM01   | Core Drilling Machine        |                                | 2        | 0             | 0              | <input type="checkbox"/> |
| CGM01   | Chemical Gun Machine         |                                | 4        | 0             | 0              | <input type="checkbox"/> |

Figure 28- Site Supervisor view Required Tool Report page

#### 4.4.6 Add Required Report Details

1. Enter Project Name and Choose report file
2. Click the **SUBMIT** button.
3. Shows and message box and if it confirms add report details.
4. By Clicking view Tool Status Reports you can see the newly added reports.

The screenshot shows a web browser window with the URL `localhost:3000/AddToolStatus`. The application is titled 'Dilum BMK Engineers'. The main content area displays the 'Add Tool Status Reports' form. The form has a 'Project Name' input field, a 'Choose File' button (with a file icon and 'No file chosen' text), a blue 'SUBMIT' button, and a 'VIEW TOOL STATUS REPORTS' button. The left sidebar contains a menu with the following items: Dashboard, View Tool Status Reports, View Required Tool Reports, View Projects, Create Tool Status Reports, Create Required Tool Reports, Add Tool Status Reports, Add Required Tool Reports, and Logout.

Figure 29- Site Supervisor Add Tool Status Report Form page

#### 4.4.7 Add Required Report Details

1. Enter Project Name and Choose report file
2. Click the **SUBMIT** button.
3. Shows and message box and if it confirms add report details.
4. By Clicking View Required Tool Reports you can see the newly added reports.

The screenshot shows a web browser window with the URL `localhost:3000/AddReportDetails`. The application is titled 'Dilum BMK Engineers'. The main content area displays the 'Add Required Report Details' form. The form has a 'Report ID' input field (with a note 'Generated Report ID will be displayed here.'), a 'Project Name' input field, a 'Choose File' button (with a file icon and 'No file chosen' text), a blue 'SUBMIT' button, and a 'VIEW REQUIRED TOOL REPORTS' button. The left sidebar contains a menu with the following items: Dashboard, View Tool Status Reports, View Required Tool Reports, View Projects, Create Tool Status Reports, Create Required Tool Reports, Add Tool Status Reports, Add Required Tool Reports, and Logout.

Figure 30- Site Supervisor Add Tool Status Report Form page

## **5. Troubleshooting**

- Dashboard Access: Verify your role with the admin if you cannot access certain features.
- Technical Issues: Clear your browser cache or try using a different browser.