**Smart Attendance and Access Management System (SAAMS)**

**DashBoard-View Component Documentation**

Revision History:

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| --- | --- | --- | --- |
| **Version** | **Date** | **Prepared / Edited By** | **Changes** |
| 0.1 | 22/03/2025 | Vasanth | Initial Draft |

**Introduction**

**Purpose:** This document describes the **Dashboard View Component**, which serves as the main interface for the application. It provides navigation, user authentication (logout), and dynamic content rendering based on selected menu options.

**Scope:**

* Covers **UI elements**, **functionalities**, and **state management** of the dashboard.
* Does not cover backend authentication or API integration.

**Overview :**

The **Dashboard View Component** serves as the central navigation hub of the application. It provides a sidebar menu for accessing different sections, a top app bar displaying the user’s name and logout option, and a dynamic content area that updates based on the selected menu item.

The sidebar menu is structured into **User Management**, **Access Management**, and **Report Management** sections, each containing relevant navigation options. Clicking on a menu item triggers a content switch, rendering the corresponding view.

The app bar includes a **menu toggle button** for expanding or collapsing the sidebar and a **logout button** for user authentication control. The component ensures a seamless user experience with a **dark-themed UI**, smooth transitions, and state management.

**UI Elements and Functionalities**

**1. App Bar (Top Navigation)**

* Displays a **welcome message** with the username.
* Includes a **menu toggle button** for opening/closing the sidebar.
* Contains a **logout button** that triggers the handleLogout function.

**2. Sidebar Navigation (Drawer)**

* Contains three sections:
  + **User Management:** Home, Company, Designation, Department, Role, Shift, User
  + **Access Management:** Area, Channel, Reader
  + **Report Management:** User Report, Reader Report, Attendance Report
* Clicking on an item updates the main content area.
* Uses **MUI’s Drawer component** for a smooth UX.

**3. Main Content Area**

* Displays the corresponding view based on menu selection.
* Uses the switchView function to dynamically render components like HomeView, UserView, etc.

**Use Cases**

**1. Viewing a Section**

**Description:** Users can navigate through different sections using the sidebar.

**Preconditions:**

* The application is running.
* The user is logged in.

**Steps:**

1. Click on a menu item in the sidebar.
2. The content area updates to show the corresponding component.

**Postconditions:**

* The selected module is displayed in the main content area.

**Exceptions:**

* If an invalid section is selected, it defaults to HomeView.

**2. Logging Out**

**Description:**

Users can log out of the application by clicking the logout button.

**Preconditions:**

* The user is logged in.

**Steps:**

1. Click the **Logout** button in the top-right corner.
2. The handleLogout function is triggered.
3. The user is redirected to the login page.

**Postconditions:**

* The user is logged out successfully.

**Exceptions:**

* If logout fails, an error message is displayed.

**3. Collapsing/Expanding Sidebar**

**Description:**

Users can collapse or expand the sidebar for better screen space utilization.

**Preconditions:**

* The application is running.

**Steps:**

1. Click the **menu icon** in the app bar.
2. The sidebar visibility toggles between collapsed and expanded.

**Postconditions:**

* The sidebar state is updated.

**Exceptions:**

* None.

**Conclusion:**

The **Dashboard View Component** provides an intuitive interface for navigating different modules within SAAMS. It ensures smooth user experience with a **dark-themed UI**, **dynamic content switching**, and **state management**.