GENERIC ASSET - TECHNICAL DESIGN DOCUMENT

LOGIN SCREEN

ADMIN & LEVEL1 (USERS)LOGIN

* Enter USERNAME & PASSWORD to get signed in.API Login will check for matches from the user table .
* If successful, then api returns the data of the respective user in JSON and page routed to home/dashboard
* API return No user exists for unauthorized user.
* Note:

1. Admin login will have the features of ADMIN PANEL,CONFIG PANEL & PROFILE ACCESS PAGE.
2. LEVEL1 users are able to view the widgets.No access for any edit or removal given.

MENU

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DASHBOARD

* Once Dashboard loaded, User is able to blank the Content Panel (middle area) & right panel with Widget Creation.
* Content Panel is used to locate, drag & drop widgets from the “Available Widgets ” list area.
* To create a widget, click Create Widget button, which is on the top right panel, will open a popup window to fill details such as
* Widget Type

1. Maps,
2. Charts
3. Cards

* Data Source

1. Dropdown shows list of Configured Assets.

* Track by-Status,count
* Click the SAVE button to save data.

Dragged Widgets-Content Area

* Allows admin to resize , drag the widget by clicking the edges of the widget bottom & right edges.(Resize & Hand symbol will enable)
* Each widget has filter,edit & remove option
* Widget area can be expanded by clicking the expand button present on the bottom right panel area.

ADMIN PANEL

1. USERS
2. CLIENTS

USERS

* User is able to add/edit & remove client/user details
* Select company list as dropdown shown- based on selection will show the available users.
* Getting User List by passing respective company or client id in API will respond the result which contains FIRST NAME,LAST NAME,LOGIN NAME,ROLE & WIDGETS RIGHTS
* If WIDGETS\_RIGHTS is checked then ,User is able to create/edit & delete widget.If unchecked ,then no creation or edit access.
* Click Add New button to create new user , select respective company to create user.
* Mandatory inputs are mentioned with \* symbol
* Click the SAVE button to save data.

CLIENTS

* List shows all the created company details such as COMPANY NAME,address, status whether this client is active or not & Created date with edit & delete option.
* Click Add New button client details such as company name, address lines ,status (radio option),Application name & logo.
* Mandatory inputs are mentioned with \* symbol
* Click the SAVE button to save data.

CONFIGURATION PANEL

1. PROTOCOL
2. SENSORS
3. ASSETS
4. ASSET CONFIGURATION

PROTOCOL

1. Click the ADD NEW button to open a window for adding protocol details such Protocol types (MQTT,HTTP,HTTPS) as dropdown, IP address & PORT number.
2. Click the SAVE button to save data.
3. Mandatory inputs are mentioned with \* symbol.
4. Saved list will display on the list page.

SENSORS

1. Click ADD NEW button to open window for adding new Sensor details such as Sensor name as user input
2. Click the SAVE button to save data.

ASSETS

1. Click the ADD NEW button to open window for adding new Asset details such as Asset name ,asset type are

‘Security’,’Activity Trackers’,’Industrial Security and Safety’,’Augmented Reality’,’Motion Detection’(hardcoded) - list maintained in frontend only, Component input as optional.

1. Click the SAVE button to save data.
2. Saved list will display on the list page.

ASSET CONFIGURATION

1. Click the ADD NEW button to open window for adding new Asset config details such as
2. Config, Device & Parameter details.Each shown in tab form.
3. Config Details Tab:
   1. Select client as dropdown list (api call),config name, asset (api call) as dropdown list ,industrial type(hardcoded) dropdown list as hardcoded,industrial data source(hardcoded), sensor dropdown list(api call),sensor data type(hardcoded),protocol(api call), Set Static coordinates as radio button(yes/no).
4. Device Details Tab:
   1. Select Name as dropdown list IMEI,MAC address & Device ID (hardcoded),Address,Location,Latitude & Longitude.
   2. If Static coordinates set as radio yes then, we need to fill lat & lng.
   3. Set Status as radio button(yes/no) for device active or not.
   4. Click Add icon to add more device details.
5. Parameter Details Tab:
   1. Parameter key name,ZONE & Unit(optional input), Set Status as radio button(yes/no).
   2. Click Add icon to add more device details.
6. Click the SAVE button to save data.
7. Saved list will display on the list page.Get All asset config API to list out the saved configs.Each row is expandable to show its device list.
8. Each device can be edited & updated.
9. Parameters are also added more and updated to the respective asset config.

ALERT CONFIG

* Select Asset config dropdown & list out alert list shows.
* Multiple alerts can be created for the selected asset config.
* Click Add new button to open window for adding alert.
* Enter Threshold Min,Max or Absolute value can be filled.
* For Variation , color can be assigned to the alert.
* Admin can edit or remove it.

MY PROFILE MENU

* Admin is able to see the application profile page .
* Edit the details & update option.
* Allows you to change the application logo.(logo images are stored under images folder in backed).
* Image formats are jpg,jpeg & png.

For your reference , API names & descriptions are maintained in separate CSV files.

Steps to Initiate the Application:

1. Open XAMPP server & start Apache & MySQL
2. If new setup,then install XAMPP ,this package includes Apache server & Mysql

Go to browser enter <http://localhost/phpmyadmin>, create Database name as asset-mgt

Import the sql asset-mgt.sql file .

1. Open the Project root folder,for example

* D:\raj\iot\angularProjects\assetMgt> cd .\BackEnd\
* D:\raj\iot\angularProjects\assetMgt\BackEnd> npm start

This will run our backend node js and will listen to the port.

* D:\raj\iot\angularProjects\assetMgt> cd .\FrontEnd\
* D:\raj\iot\angularProjects\assetMgt\FrontEnd> ng serve

Or make available to all local host users then run

Go to browser for Front end rendering <http://localhost:4200/login>

* D:\raj\iot\angularProjects\assetMgt\FrontEnd> npm run mserve
* Open browser as http://10.1.1.139:4200/