Documentation of Work Done in FluxGen

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Documentation

The webapp has used a template with github link:
https://github.com/coreui/coreui-free-react-admin-template

Libraries used:
- base-64 (for encoding and decoding password field in the Login API)
- chartjs-plugin-datalabels (Customisable Chart.js plugin)
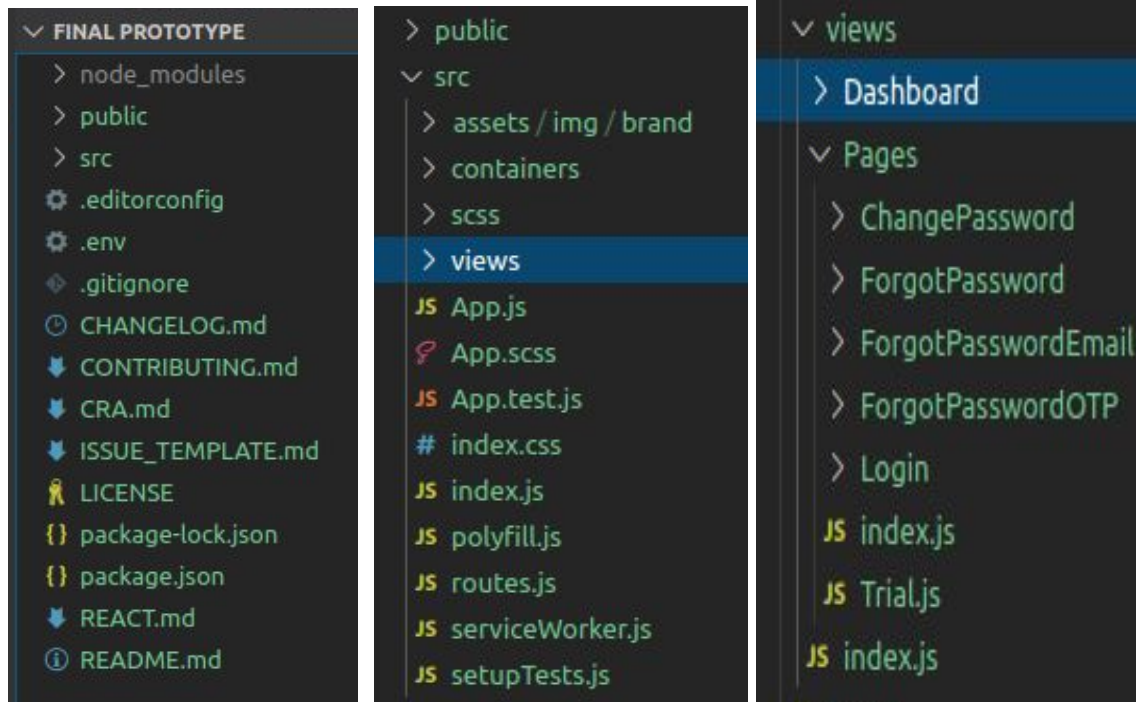- React-icons (for popular icons)

Instructions to run the webapp:

On terminal:
```
$ npm install base-64
$ npm install chartjs-plugin-datalabels --save
$ npm install react-icons --save
$ npm install
$ npm start
```

The web app runs on PORT 3000

Hierarchy of folders and files
Main folder is named Final Prototype

Starting page of webapp: http://localhost:3000/#/login

Note: 'Folder' in below documentation contains all the files which are called for each feature internally.

polyfill.js, serviceWorker.js and setupTests.js are used to set up the structure of the webapp.

Login functionalities

URL: http://localhost:3000/#/login
Folder: src/views/Pages/Login

The given login page contains an API which checks login credentials.
API: http://54.244.196.27/aquagen/v1/auth/login
Appropriate error messages are displayed in case of incorrect credentials or input fields not being filled.
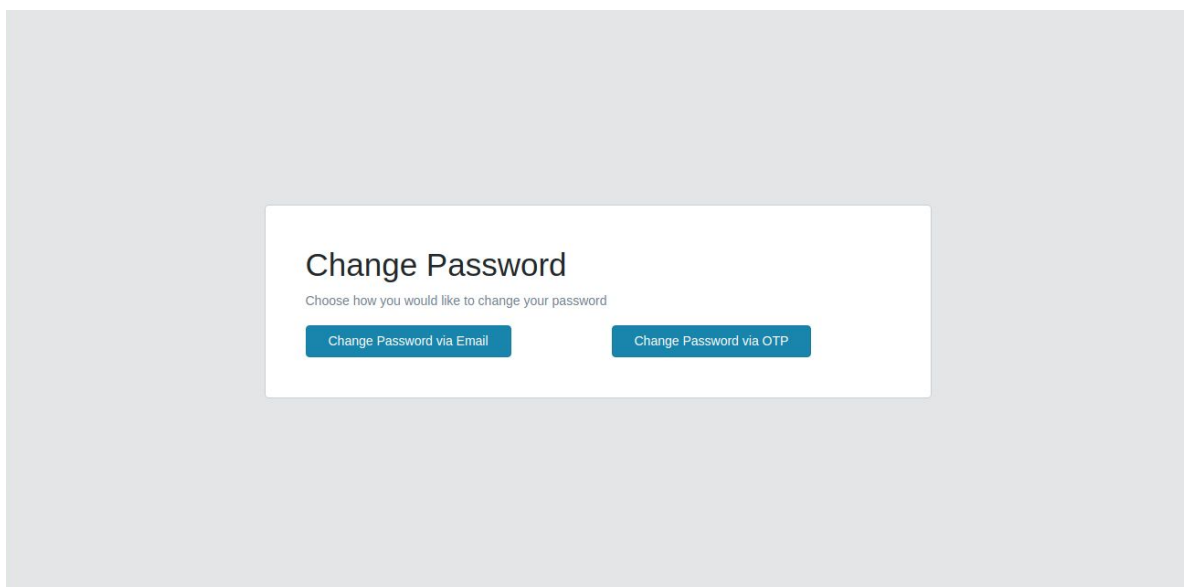
Forgot Password

URL: http://localhost:3000/#/forgotpassword
Folder: src/views/Pages/ForgotPassword

On clicking on forgot password, the user is redirected to a page where two options present themselves. 'Change Password via Email' or 'Change Password via OTP'.

Change Password via Email
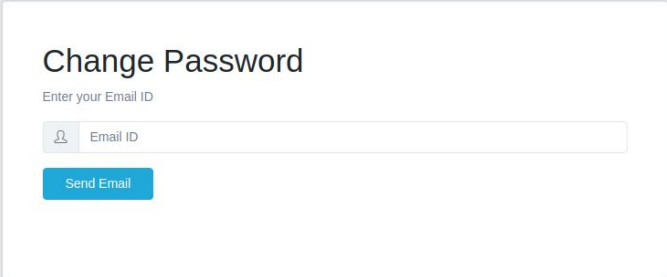
URL: http://localhost:3000/#/forgotpasswordemail
Folder: src/views/Pages/ForgotPasswordEmail

The 'Change Password via Email' button redirects to this page. Here the user is expected to enter their email ID. An API is used to send the email.
API: http://54.244.196.27/aquagen/v1/auth/forgot
Appropriate error messages are displayed in case the email field is not being filled.
Appropriate confirmation message is displayed if email is entered successfully and the email is sent.

Update Password

URL: http://localhost:3000/#/changepassword/:token
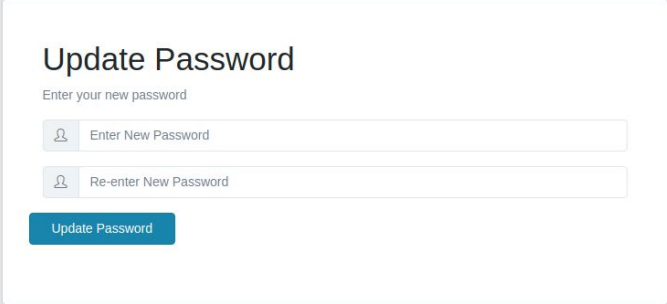Folder: src/views/Pages/ChangePassword

The user receives an email containing a link which redirects the to this page.
':token' contains the token used and changes accordingly. An API is used to update the password.
API: http://54.244.196.27/aquagen/v1/auth/reset
Appropriate error messages are displayed in case the input fields are not filled or both passwords entered do not match.

On clicking on 'Update Password' and all input fields entered correctly, the user is redirected to the Login page. The user also receives a confirmation email stating that the password has been updated successfully.

Change Password via OTP

URL: http://localhost:3000/#/forgotpasswordotp
Folder: src/views/Pages/ForgotPasswordOTP

The 'Change Password via OTP' button redirects to this page. Here the user is expected to enter their mobile number and the OTP they receive on their SMS. This page is a dummy page and no API is implemented.
Appropriate error messages are displayed in case the Mobile number or the OTP fields are not entered correctly.
Appropriate confirmation message is displayed when a mobile number is entered.
On entering the correct OTP, the user is redirected to the update password page.
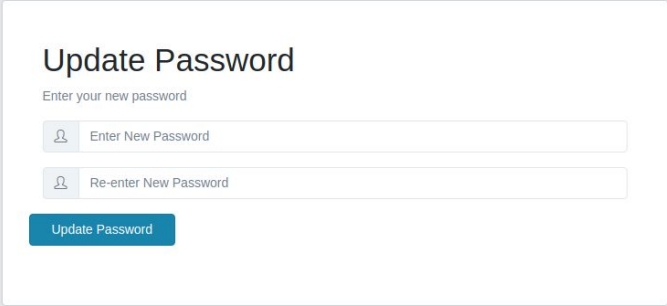
Update Password

URL: http://localhost:3000/#/trial
File: src/views/Pages/Trial.js

This page is a dummy page and no API is implemented. The user is prompted to enter their new password.
Appropriate error messages are displayed in case the input fields are not filled or both passwords entered do not match
On clicking on 'Update Password' and all input fields entered correctly, the user is redirected to the Login page.

Once Logged In

URL: http://localhost:3000/#/dashboard
Folder: src/views/Dashboard

The dashboard to obtain information for the bar graph and balance chart.
API:
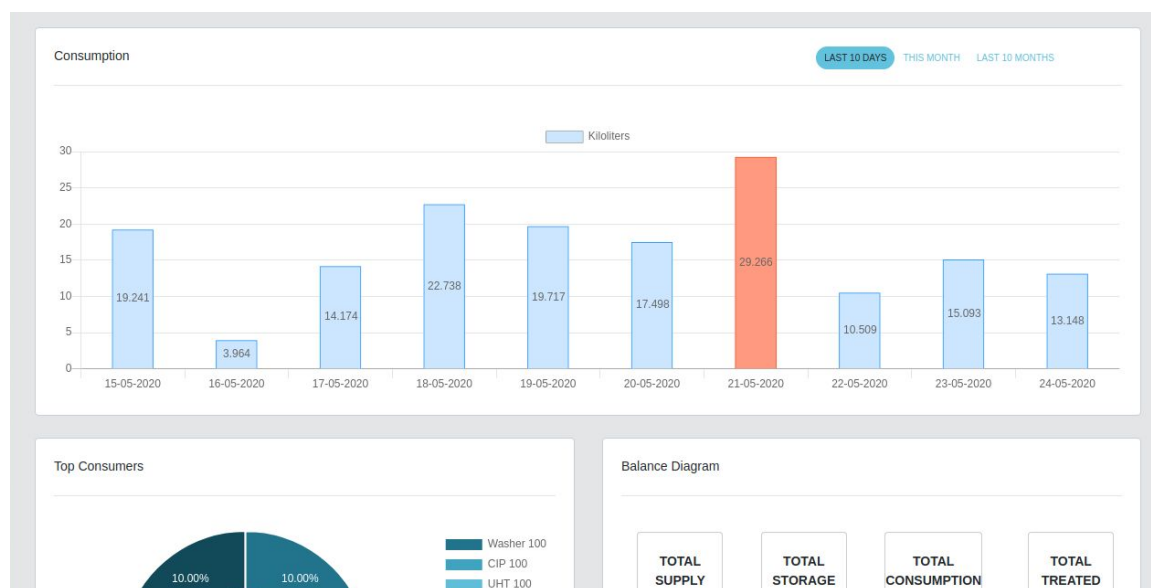https://api.fluxgen.in/aquagen/v1/industries/DEMO1/consumption/graph?duration=thismonth&category=Internal Source

https://api.fluxgen.in/aquagen/v1/industries/DEMO1/consumption/latest?category=Storage

The bar graph contains 3 options. 'LAST 10 DAYS', 'THIS MONTH', 'LAST 10 MONTHS'
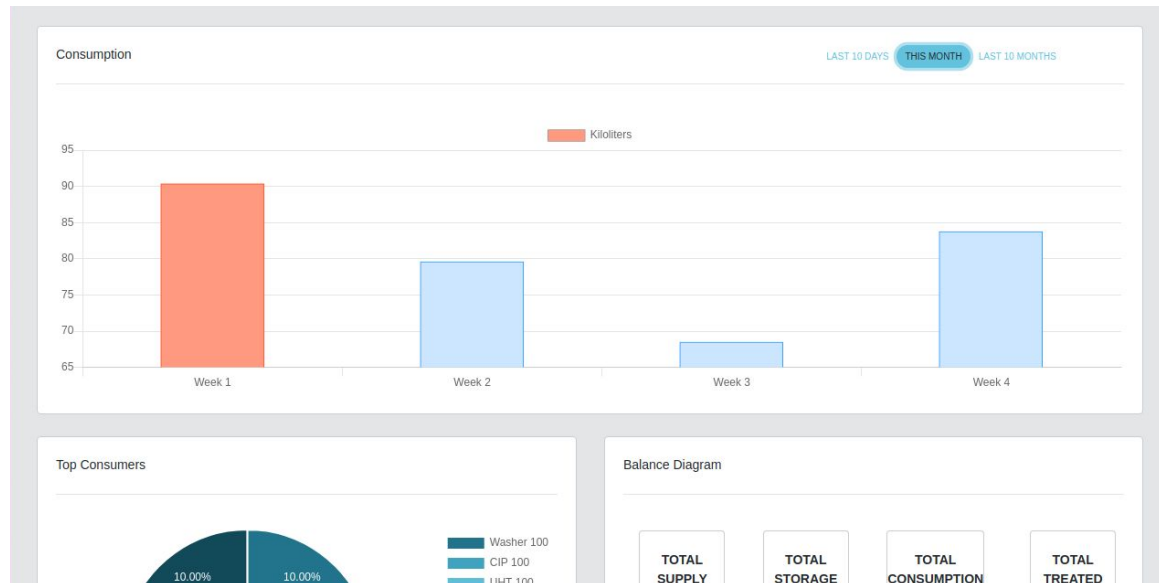
Values for 'LAST 10 DAYS' are obtained from the API, rest is dummy data. The bar having the highest consumption is coloured in red.

The doughnut chart updates itself on clicking of any bar on the nar chart. Data in the doughnut chart is dummy data.
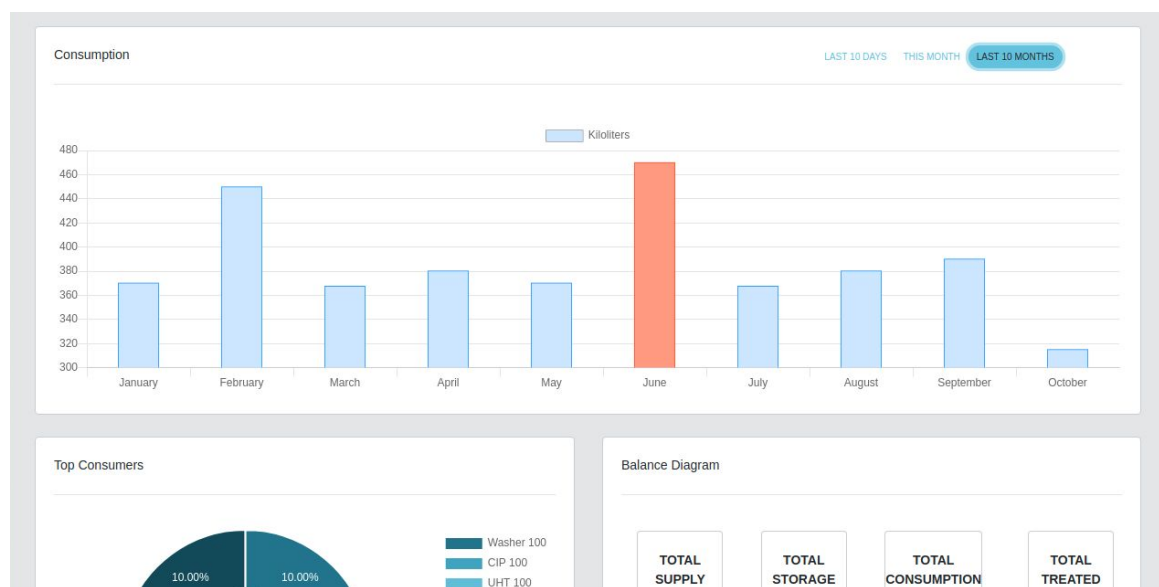
The balance diagram displays data from an API except for 'TOTAL TREATED'.
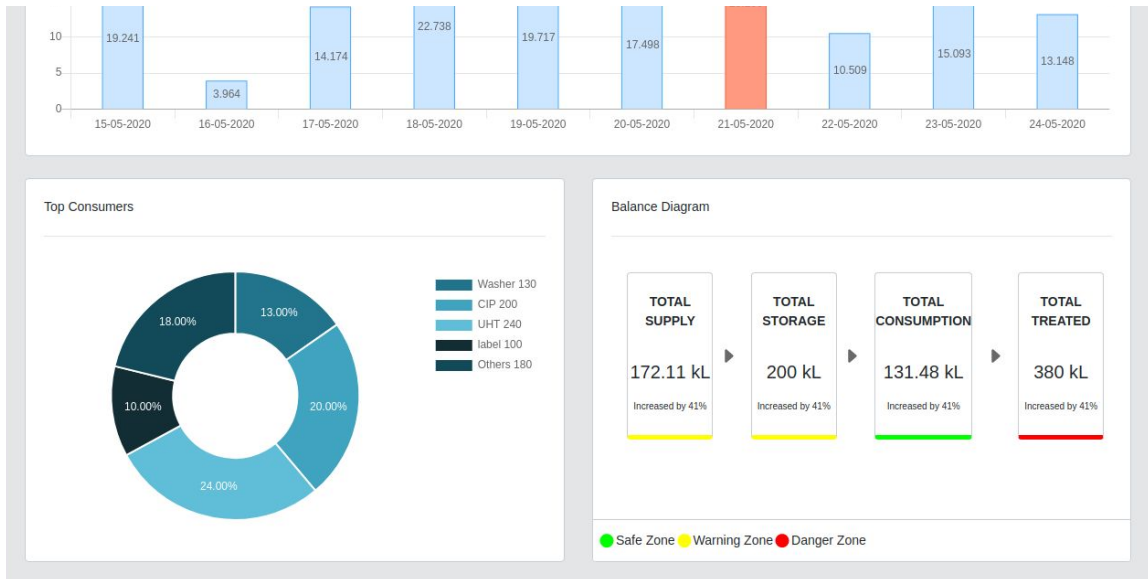

Bar graph displaying data for 'LAST 10 DAYS'

Bar graph displaying data for 'THIS MONTH'

Bar graph displaying data for 'LAST 10 MONTHS'

Bar Chart (top)

Date	Value
15-05-2020	19.241
16-05-2020	3.964
17-05-2020	14.174
18-05-2020	22.738
19-05-2020	19.717
20-05-2020	17.498
21-05-2020	
22-05-2020	10.509
23-05-2020	15.093
24-05-2020	13.148

Top Consumers

- Washer 130 — 13.00%
- CIP 200 — 20.00%
- UHT 240 — 24.00%
- label 100 — 10.00%
- Others 180 — 18.00%

Balance Diagram

TOTAL SUPPLY	TOTAL STORAGE	TOTAL CONSUMPTION	TOTAL TREATED
172.11 kL	200 kL	131.48 kL	380 kL
Increased by 41%	Increased by 41%	Increased by 41%	Increased by 41%

● Safe Zone ● Warning Zone ● Danger Zone

Doughnut Chart and Balance Chart