Documentation of work done in FluxGen

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Duration of Internship: 2 months (23rd March - 23rd May)

Documentation:

The Web Application can be found here:

https://github.com/yashkumar0707/Fluxgen_final

Libraries used:

```json
"dependencies": {
  "@coreui/coreui": "^2.1.16",
  "@coreui/coreui-plugin-chartjs-custom-tooltips": "^1.3.1",
  "@coreui/icons": "0.3.0",
  "@coreui/react": "^2.5.7",
  "@material-ui/core": "^4.9.14",
  "@material-ui/icons": "^4.9.1",
  "bootstrap": "^4.4.1",
  "chart.js": "^2.9.3",
  "classnames": "^2.2.6",
  "core-js": "^3.6.5",
  "font-awesome": "^4.7.0",
  "fusioncharts": "^3.15.1-sr.1",
  "node-sass": "^4.13.1",
  "prop-types": "^15.7.2",
  "react": "^16.13.1",
  "react-app-polyfill": "^1.0.6",
  "react-chartjs-2": "^2.9.0",
  "react-datepicker": "^2.15.0",
  "react-dom": "^16.13.1",
  "react-fusioncharts": "^3.1.2",
  "react-router-config": "^5.1.1",
  "react-router-dom": "^5.1.2",
  "react-test-renderer": "^16.13.1",
  "reactstrap": "^8.4.1",
  "simple-line-icons": "^2.4.1"
},
```

All these libraries can be individually installed using
npm install "xyz" --save
SInce all of them have been saved in the package.json file you can simply
npm install and the packages/libraries will be installed.
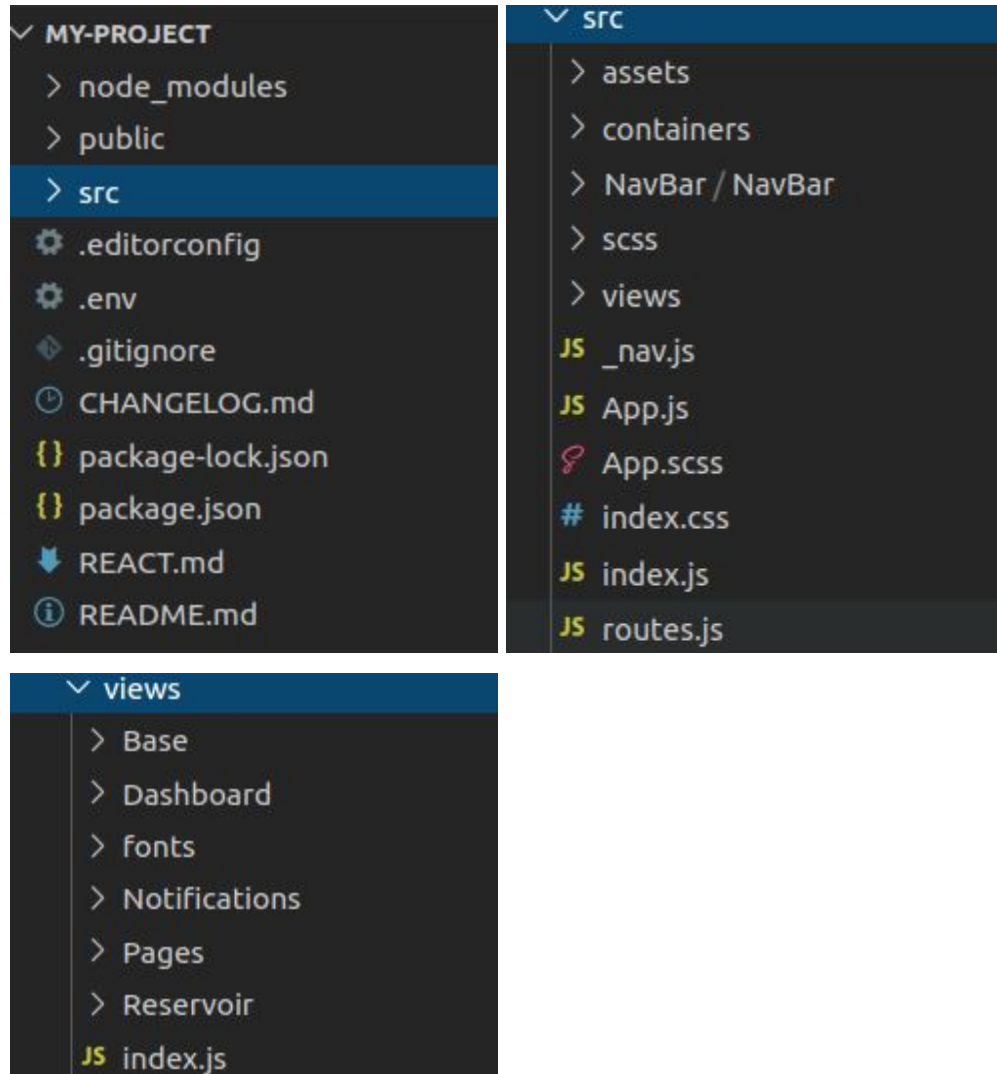
How to run the project :-
npm install
npm start

The web app by default runs on PORT 3000, which can be changed by the user.

Hierarchy of folders and files

Main folder is named My-Project

MY-PROJECT
- > node_modules
- > public
- > src
- .editorconfig
- .env
- .gitignore
- CHANGELOG.md
- {} package-lock.json
- {} package.json
- REACT.md
- README.md

src
- > assets
- > containers
- > NavBar / NavBar
- > scss
- > views
- JS _nav.js
- JS App.js
- App.scss
- # index.css
- JS index.js
- JS routes.js

views
- > Base
- > Dashboard
- > fonts
- > Notifications
- > Pages
- > Reservoir
- JS index.js

Functionalities

Reservoir Page:

URL:http://localhost:3000/#/reservoir

This page shows the total water level as well as the individual water levels of the various tanks.

The library Fusion charts has been used

The data is updated dynamically from the following api:

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

Total Water Level Indicator

Full
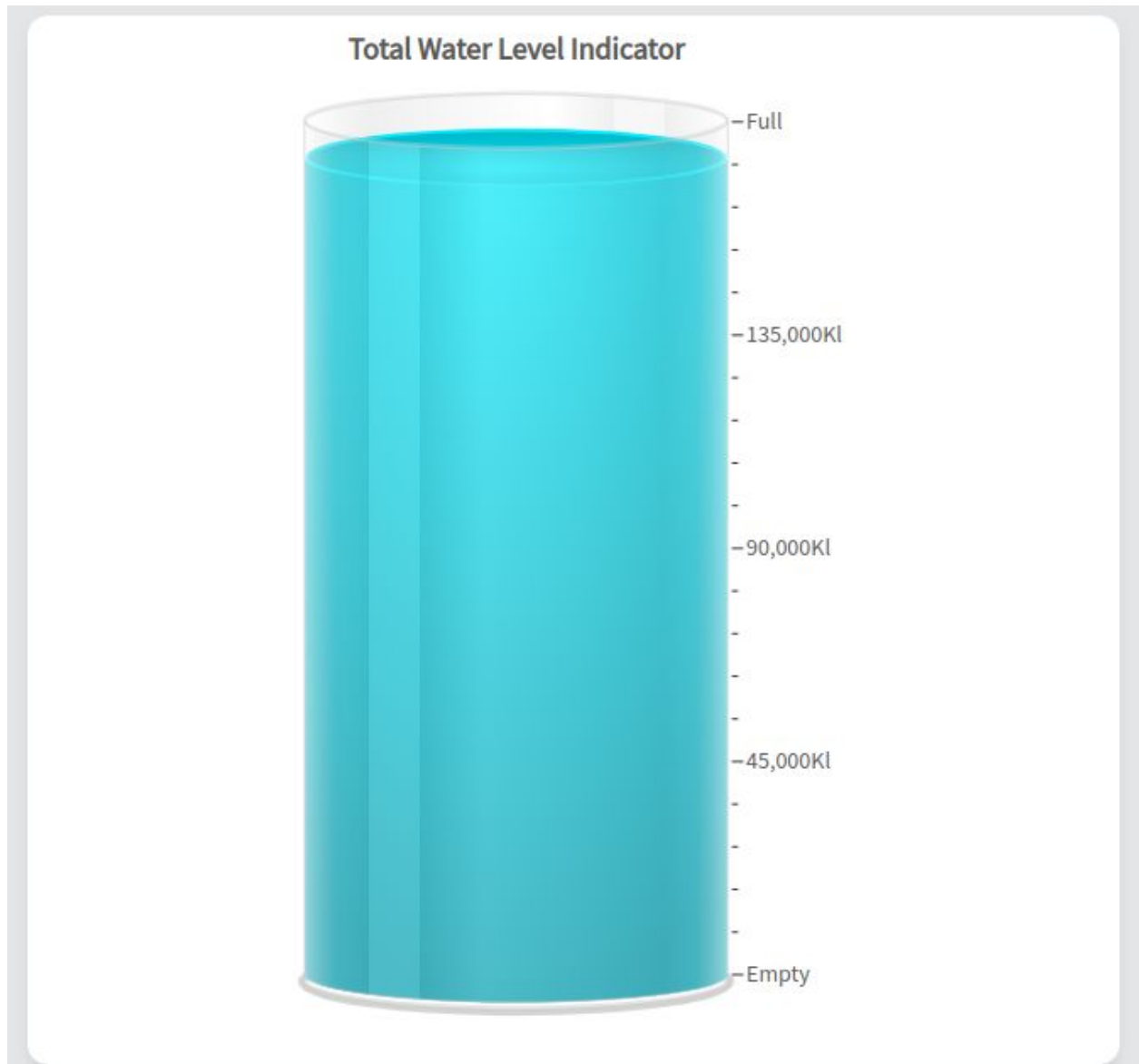
135,000Kl

90,000Kl

45,000Kl

Empty

Image of a single tank. The values are on the right. The tanks also have the option of hovering over it to find the current level of water present in it.'

The Dashboard for SUMP/OHT:

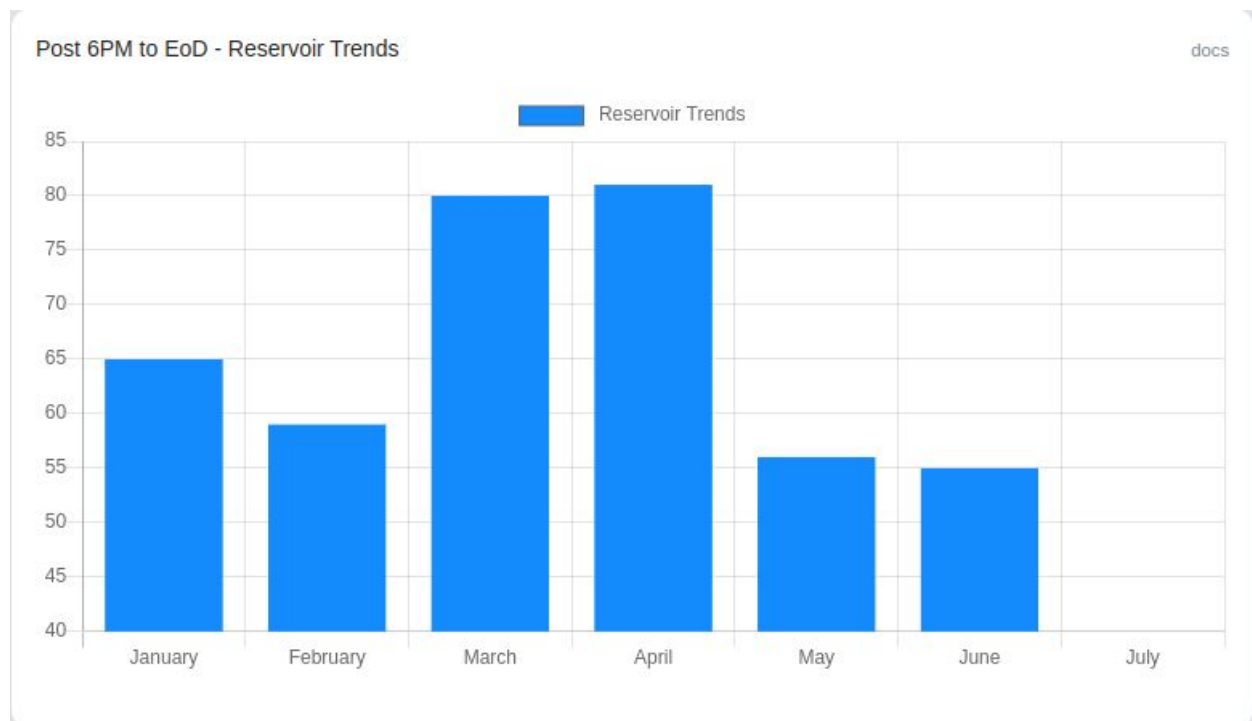**URL**:http://localhost:3000/#/dashboard

The contents of the page:

- Water level indicator
- Bar graph
- Line graph with threshold value
- Date picker

The water level indicator is the same as the one present in the reservoir

The bar graph denotes water consumed after 6pm or End of the day.

The libraries fusion charts and react-charts-js-2 have been used

The line graph displays data based on the date picked by the datepicker. The red dotted line denotes the threshold value.
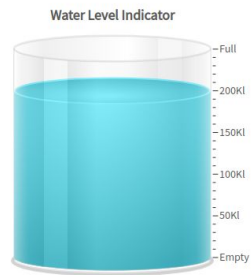

Water Level with Threshold Value
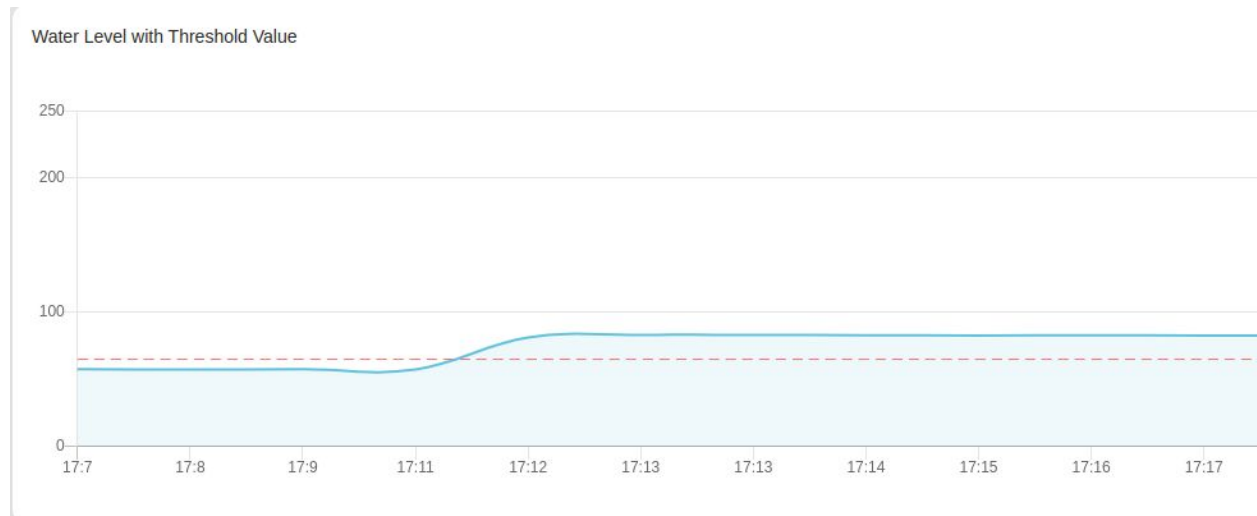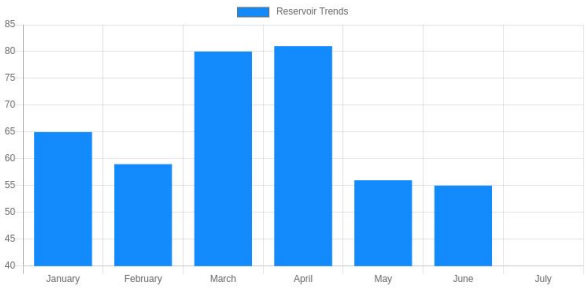

05/25/2020

		May 2020				▶
Su	Mo	Tu	We	Th	Fr	Sa
26	27	28	29	30	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Water Consumption in a Week and Live Water Level Update

Water Level Indicator

- Full
- 200Kl
- 150Kl
- 100Kl
- 50Kl
- Empty

Post 6PM to EoD - Reservoir Trends

Legend: Reservoir Trends

Month	Value
January	65
February	59
March	80
April	81
May	56
June	55
July	

Y-axis: 40, 45, 50, 55, 60, 65, 70, 75, 80, 85

Water Level with Threshold Value

Y-axis: 0, 100, 200, 250

X-axis: 17:7, 17:8, 17:9, 17:11, 17:12, 17:13, 17:13, 17:14, 17:15, 17:16, 17:17, 17:18, 17:19, 17:20, 17:21, 17:22, 17:23, 19:7
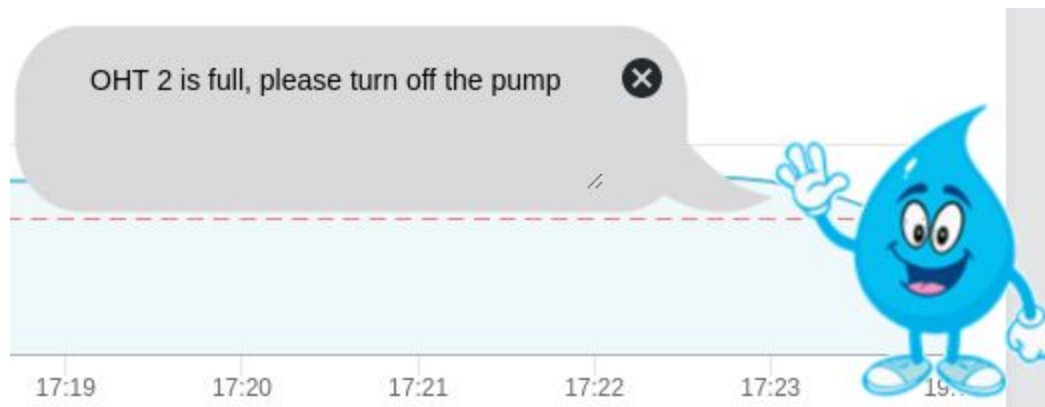
WatBoy:

Created watboy which displays notifications.

He is fixed to the bottom right of the page once we click on the bell icon in the navbar.

The code for watboy is found in the navbar.

Watboy redirects to the notifications page.

Notifications:

Displays the list of notifications.

Has a like or unlike feature for the notification along with a count which can help with data analytics later on.