

Hyper-local weather dashboard using The Weather company's API on IBM Cloud.

PRESENTED BY :- RUPAL RAJ

IBM Hack Challenge 2020

Application ID: SPS_CH_APL_20200006618

Project ID:SPS_PRO_1722

Team: ARTHUR

AGENDA

Connect your PWS to Weather Underground (WU) and view PWS data on WU

Learn about Node-RED (local and on IBM Cloud)

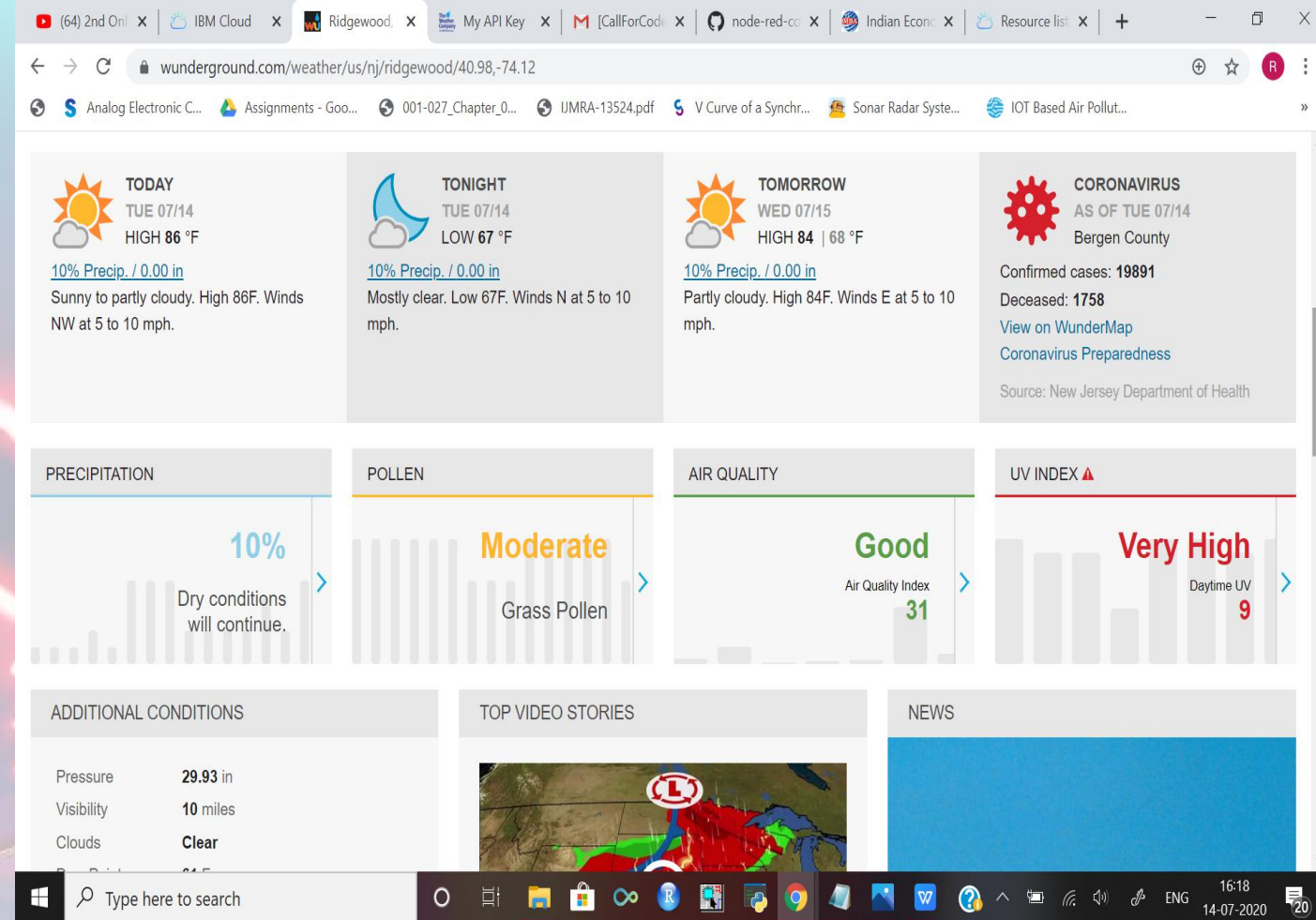
Explore the node-red-contrib-twc-weather Node-RED PWS node

Import / Deploy the Weather Dashboard example

Display PWS data in your Weather Dashboard

PWS network

- there are about 12k government provided wather stations.
- Weather Underground, a part of The Weather Company, an IBM Business, encourages members to register their PWS and send data to <http://www.wunderground.com>



make your own API

The screenshot shows a web browser window with multiple tabs open. The active tab is 'wunderground.com/member/api-keys'. The page header includes the Weather Underground logo and navigation links: Sensor Network, Maps & Radar, Severe Weather, News & Blogs, Mobile Apps, and More. A search bar and 'My Profile' link are also present. The main content area is titled 'Member Settings' and has four tabs: EMAIL & PASSWORD, HOME & FAVORITES, MY DEVICES, and API KEYS (which is selected). Under the 'API KEYS' tab, there is a section 'Your API Key' with a masked key field, an expiration date of 'Expires: Fri, 25 Dec 2020 13:42:13 GMT', and buttons for 'Copy to Clipboard', 'Regenerate Key', and 'Delete Key'. A 'Show Key' link is also visible. To the right, a box asks 'Ready to use your key?' with a 'View API Documentation' button. At the bottom, there is a checkbox for 'I agree to the Terms of Service'.

(64) 2nd Onl... x IBM Cloud x Member API x My API Key x [CallForCode x node-red-co x Indian Econc x Resource list x + -

wunderground.com/member/api-keys

Analog Electronic C... Assignments - Goo... 001-027_Chapter_0... IUMRA-13524.pdf V Curve of a Synchron... Sonar Radar Syste... IOT Based Air Pollut...

WEATHER UNDERGROUND | Sensor Network | Maps & Radar | Severe Weather | News & Blogs | Mobile Apps | More

Search Locations My Profile

★ Boston, MA 70 °F Partly Cloudy Recent Cities Ridgewood, NJ

Member Settings

EMAIL & PASSWORD HOME & FAVORITES MY DEVICES **API KEYS**

Your API Key

.....

Expires: Fri, 25 Dec 2020 13:42:13 GMT

[Show Key](#)

[Copy to Clipboard](#)

☐ I agree to the [Terms of Service](#)

[Regenerate Key](#)

[Delete Key](#)

Ready to use your key?

[View API Documentation](#)

Type here to search

16:26 14-07-2020 ENG

NODE RED on IBM CLOUD

The screenshot displays the Node-RED web interface on IBM Cloud. The browser address bar shows the URL: `node-red-vkglt.eu-gb.mybluemix.net/red/?#flow/51cb7473.adbcdc`. The interface includes a top navigation bar with a 'Deploy' button and a sidebar on the left for node filtering. The main workspace shows three flows: '5 Day Forecast', 'Recent PWS Observations', and 'TWC NowCast'. The 'PWS' flow is selected and highlighted in the right-hand sidebar. The sidebar also lists other flows like 'Flow 1', 'Flow 2', 'TWC Severe Weather Alerts', and 'PWS Dashboard'. The bottom of the screen shows a Windows taskbar with various application icons and a search bar.

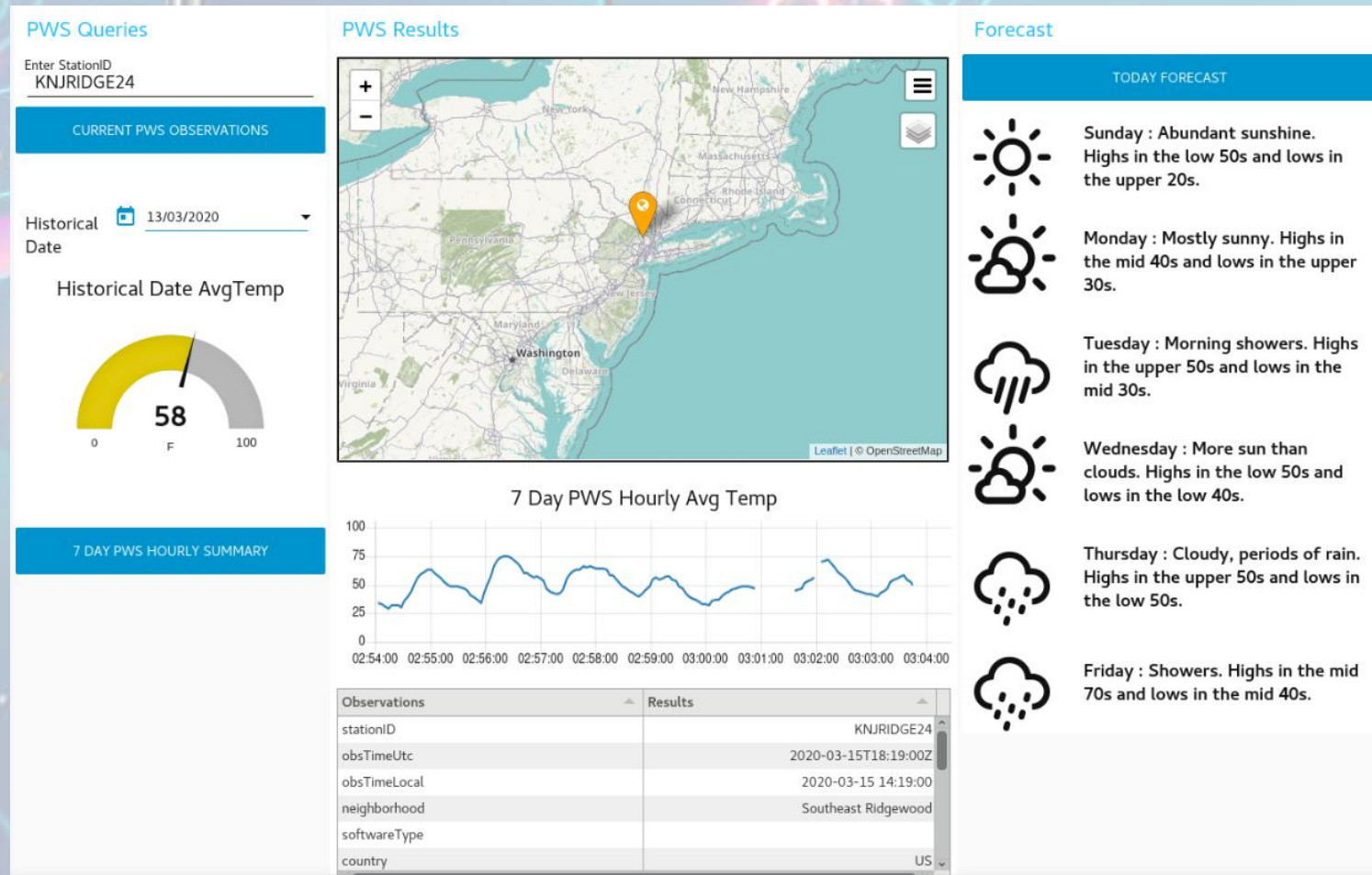
Node-RED interface showing a flow editor with three flows: '5 Day Forecast', 'Recent PWS Observations', and 'TWC NowCast'. The 'PWS' flow is selected and highlighted in the right-hand sidebar. The sidebar also lists other flows like 'Flow 1', 'Flow 2', 'TWC Severe Weather Alerts', and 'PWS Dashboard'. The bottom of the screen shows a Windows taskbar with various application icons and a search bar.

- This project gave you some basic working knowledge of the IBM Cloud Service and shows how to use it along with JavaScript and Node Red to build your own Hyper-Local Weather Dashboard .
- This project also tells about the integration process of PWS with the Watson services to access and create your weather dashboard.

Now that the Node-RED `node-red-contrib-twc-weather` nodes are able to query weather data

- It provides a browser-based editor that makes it easy to wire together flows using the wide range of nodes in the palette that can be deployed to its runtime in a single-click.
- `node-red-contrib-twc-weather`
- `node-red-dashboard`
- `node-red-node-ui-table`
- `node-red-contrib-web-worldmap`

Display PWS Data In Your Weather Dashboard



CONCLUSION

- This project gave you some basic working knowledge of the IBM Cloud Service and shows how to use it along with JavaScript and Node Red to build your own Hyper-Local Weather Dashboard . This project also tells about the integration process of PWS with the Watson services to access and create your weather dashboard.



THANK YOU

Name: RUPAL RAJ

College Name: KALINGA INSTITUTE OF INDUSTRIAL TECHNOLOGY.