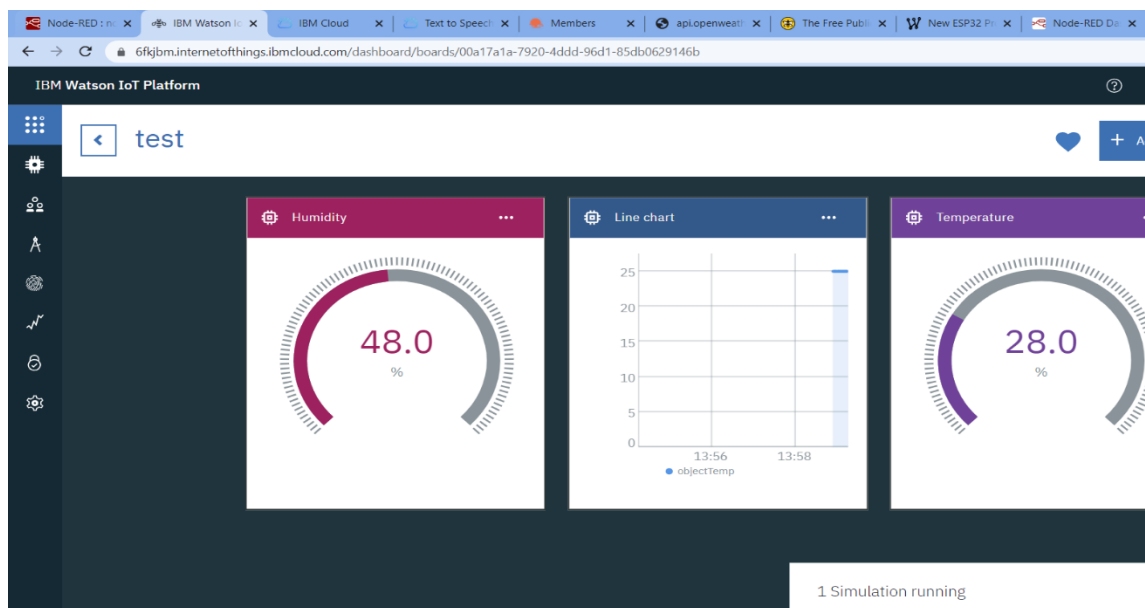


CREATE AND CONFIGURE IBM CLOUD SERVICE

To deploy the IOT platform we need the following constraints to implement the web-Based services to the project

CREATE IBM WATSON IOT PLATFORM AND DEVICE

It is the most curcial part of the platform where we deploy a device in IOT WATSON which is a service provider render by IBM cloud and it is most important that we need to take note on device credential during the creation of device in IOT WATSON platform because only with the help of these credential we can able to connect our services to the desired platform



CARD CREATION

The screenshot shows the IBM Watson IoT Platform dashboard. The top navigation bar includes 'Browse', 'Action', 'Device Types', and 'Interfaces'. The main content area displays a table of devices. The device 'qwerty123' is selected, showing its details in a sidebar. The details include Device ID, Device Type, Date Added, Added By, and Connection Status. The Connection Status is 'Disconnected' with additional information: Last Connected: Nov 8, 2022 1:02 PM, Client Address: 49.37.195.171, SecureToken, Duration: 12 minutes, and Data Transferred: 35.3 KB. A status indicator at the bottom right shows '1 Simulation running'.

Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
qwerty123	Disconnected	iotdevice1	Device	Nov 7, 2022 4:39 PM	

Device ID	Device Information
qwerty123	Device ID: qwerty123
qwerty123	Device Type: iotdevice1
qwerty123	Date Added: Nov 7, 2022 4:39 PM
qwerty123	Added By: 714019205002@smartinternz.com
qwerty123	Connection Status: Disconnected
qwerty123	Last Connected: Nov 8, 2022 1:02 PM
qwerty123	Client Address: 49.37.195.171
qwerty123	SecureToken
qwerty123	Duration: 12 minutes
qwerty123	Data Transferred: 35.3 KB

The screenshot shows the IBM Watson IoT Platform dashboard with the 'Recent Events' tab selected. The main content area displays a table of recent events. The events are listed with columns for Event, Value, Format, and Last Received. The events show a stream of data coming and going from the device. A status indicator at the bottom right shows '1 Simulation running'.

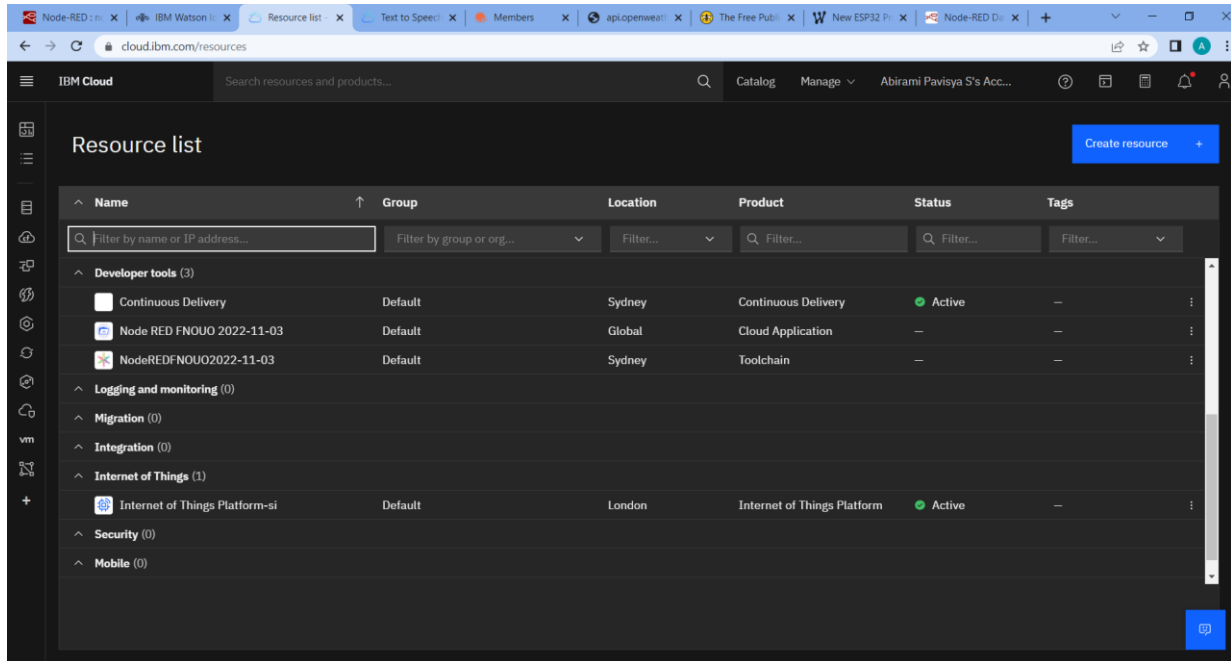
Event	Value	Format	Last Received
event_1	{"d":{"name":"qwerty123","temperature":36,"hu..."	json	a few seconds ago
event_1	{"d":{"name":"qwerty123","temperature":15,"hu..."	json	a few seconds ago
event_1	{"d":{"name":"qwerty123","temperature":16,"hu..."	json	a few seconds ago
event_1	{"d":{"name":"qwerty123","temperature":82,"hu..."	json	a few seconds ago
event_1	{"d":{"name":"qwerty123","temperature":86,"hu..."	json	a few seconds ago

DEVICE SIMULATION

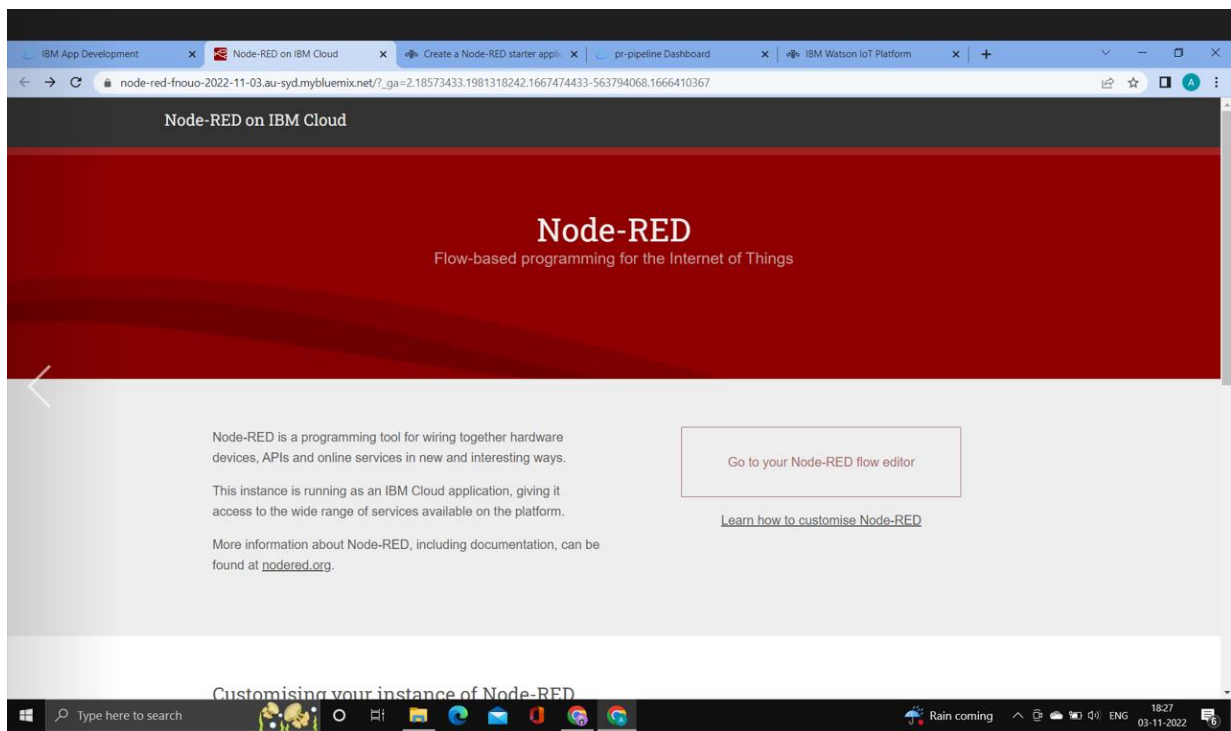
CREATE NODE-RED SERVICES

To implements the IBM WATSON PLATFORM device values, we need to deploy NODE-RED Services which is rendered by IBM Cloud and with the help of it we deploy the IOT as GUI friendly website and as a simulator and it is also connected to python interpreter. While creating the NODE-RED Services it's

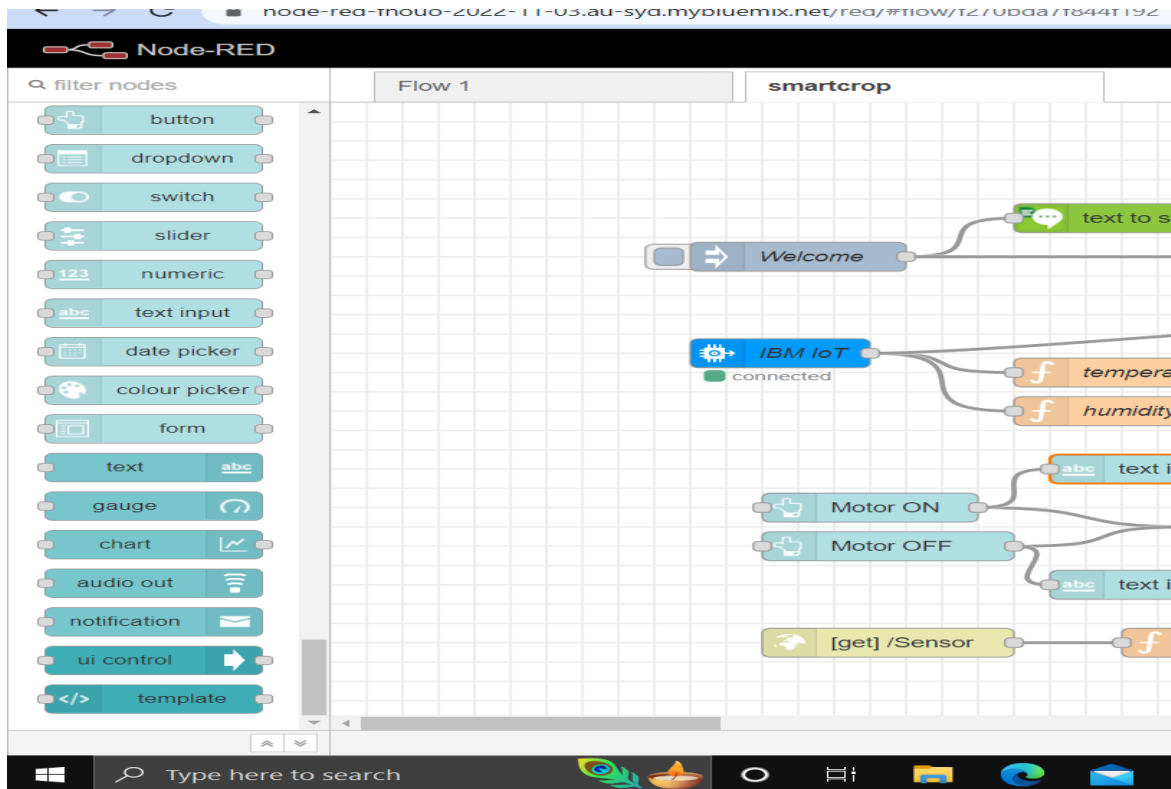
important to note URL for the NODE-RED flow editor. here in NODE-RED we have so many Nodes which makes task to be implemented easily



NODE-RED SERVICE CONNECTION ESTABLISHMENT



NODE-RED WEBSITE URL



NODE-RED FLOW EDITOR

CREATE A CLOUDANT DATABASE AND CLOUD OBJECT

In order to store the NODE-RED value or any service provider we need to have a Database here the cloudant database is created inorder to store the values of the sensor reading of the devices

Name	Size	# of Docs	Partitioned	Actions
noderedfnouo20221103	36.7 KB	4	No	
sample	0 bytes	0	Yes	
sample1	0.9 MB	4076	No	

Node-RED x IBM Watson x Text to Speech x Members x xplopenw x The Free P x W New ESP3 x Node-RED x Node-RED x Cloudant x

0967e772-6c20-448c-89f4-1d4d9f540183-bluemix.cloudant.com/dashboard.html#database/sample1/_all_docs

sample1

Document ID Options {} JSON

All Documents +

Query

Permissions

Changes

Design Documents +

Table Metadata {} JSON

Create Document

	id	key	value
<input type="checkbox"/>	02c9db35bd912af5aeb4c9108645d540	02c9db35bd912af5aeb4c9108645d540	{ "rev": "1-6c0d8a0ab163ca3e5ea48e9480...
<input type="checkbox"/>	03fc1a9006d3f6fc8392d971209e6511	03fc1a9006d3f6fc8392d971209e6511	{ "rev": "1-b4ae960207938960e733cf1ed255...
<input type="checkbox"/>	07335b582c951f2e2c2faaee31056d31	07335b582c951f2e2c2faaee31056d31	{ "rev": "1-e2ad7802efc1e79086d607041c0...
<input type="checkbox"/>	07335b582c951f2e2c2faaee3109e67a	07335b582c951f2e2c2faaee3109e67a	{ "rev": "1-f7bdb07e948f8e721a37ea21035e...
<input type="checkbox"/>	07335b582c951f2e2c2faaee313745d1	07335b582c951f2e2c2faaee313745d1	{ "rev": "1-881a8696ecf3fee8f54a28de9777e...
<input type="checkbox"/>	07335b582c951f2e2c2faaee314bbabd	07335b582c951f2e2c2faaee314bbabd	{ "rev": "1-e5c2bf8951f863f55f3cd864657a7...
<input type="checkbox"/>	07335b582c951f2e2c2faaee3171e386	07335b582c951f2e2c2faaee3171e386	{ "rev": "1-b0646de1870f95a55d59de0ffb1ca...
<input type="checkbox"/>	07335b582c951f2e2c2faaee3173b632	07335b582c951f2e2c2faaee3173b632	{ "rev": "1-20a2b6b133a7ed92e66c845d35b...
<input type="checkbox"/>	07335b582c951f2e2c2faaee31768ac0	07335b582c951f2e2c2faaee31768ac0	{ "rev": "1-29bfa44a24c7f4e45df617189c7b2...
<input type="checkbox"/>	07335b582c951f2e2c2faaee31769426	07335b582c951f2e2c2faaee31769426	{ "rev": "1-7e5162ad616c53e3854b69c5474f...
<input type="checkbox"/>	07335b582c951f2e2c2faaee317a46de	07335b582c951f2e2c2faaee317a46de	{ "rev": "1-354ea9a1aa60b32b1e5bd3362eff...
<input type="checkbox"/>	07335b582c951f2e2c2faaee317b2734	07335b582c951f2e2c2faaee317b2734	{ "rev": "1-1a36bf3c8add94ecc212bbc872bef...
<input type="checkbox"/>	07335b582c951f2e2c2faaee317b7691	07335b582c951f2e2c2faaee317b7691	{ "rev": "1-e41e68f23f2f9969d390cc9aad77f...
<input type="checkbox"/>	07335b582c951f2e2c2faaee317b030d	07335b582c951f2e2c2faaee317b030d	{ "rev": "1-5c5c3a100d12d04d6cdd0b0789d...

Showing document 1 - 20. Documents per page: 20