

## SPRINT 2

**TEAM ID: PNT2022TMID23156**

### **REAL TIME RIVER WATER QUALITY MONITORING AND CONTROL SYSTEM**

#### **AIM:**

To create device in the IOT Watson Platform and Configure Node Red Services.

#### **REQUIREMENT:**

IBM cloud, IBM IOT WATSON PLATFORM,NODE RED SERVICES.

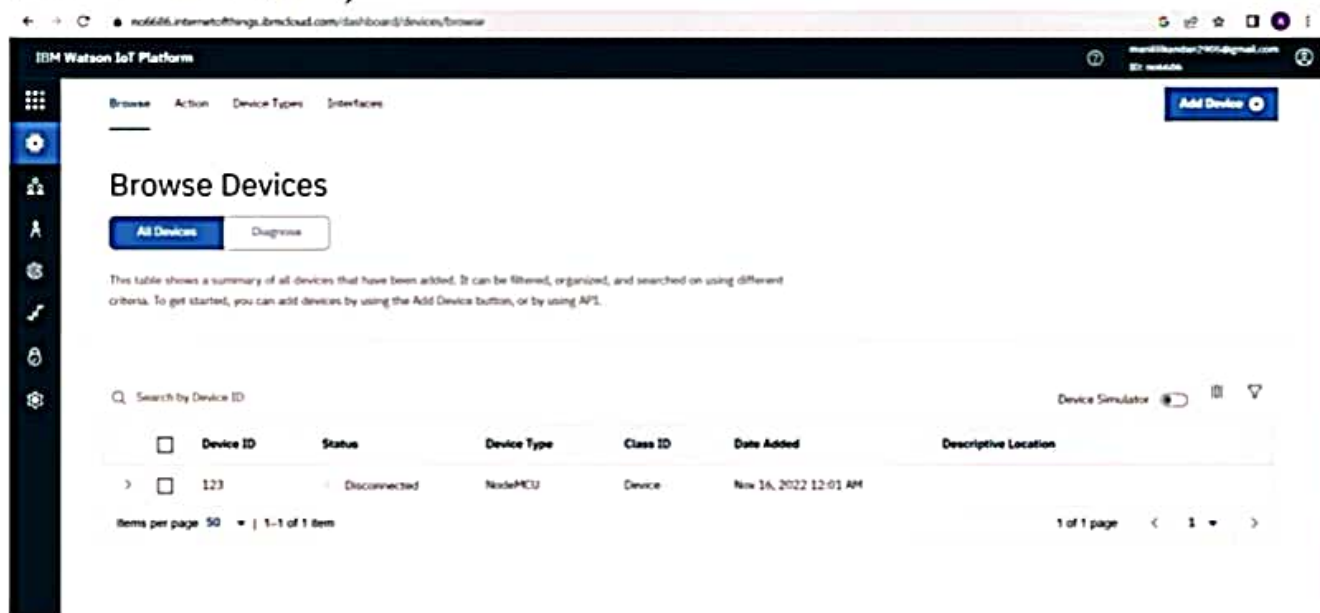
#### **WORKFLOW:**

##### **STEP 1:**

Log on to IBM cloud and create IBM Watson IOT Platform from IBM cloud Dashboard.

##### **STEP 2:**

After Creating IBM Watson IOT Platform,create an Organization (ex.84708c ID: 84708c Bluemix Free)



##### **STEP 3:**

Create an device IBM IOT PALTFORM.

X

## Add Device

●

Identity

○

○

○

○

Summary

Select a device type for the device that you are adding and give the device a unique ID.

Device Type

Select or create a device type...

Device ID

Enter Device ID

Cancel

Next

TYPE THE REQUIRED FIELDS (TYPE: ESP32 , ID: 1234)  
GIVE AUTH-TOKEN.

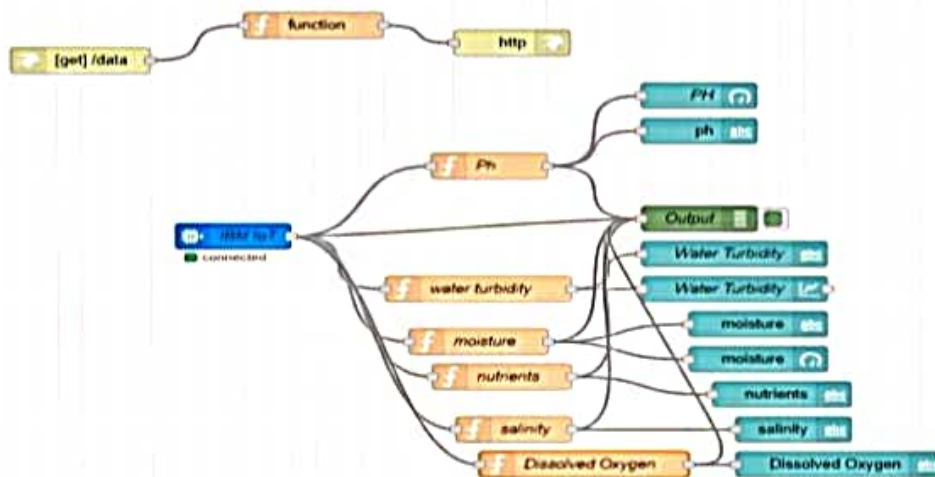
### STEP 4:

NODE RED SERVICE

- INSTALL IBM IOT IN MANGE PALETTE. ●
- INSTALL NODE RED DASHBOARD.

### STEP 5:

Configuring the corresponding nodes



### STEP 6:

Deploy the Services and verify the output values.

**OUTPUT IN IBM WATSON IOT PLATFORM:**

# Event Payload

Event Name IoTSensor

Time Received Nov 18, 2022 9:48 PM

```
1 {  
2   "temp": 107,  
3   "Humid": 97,  
4   "Ph": 4,  
5   "Water_turbidity": 35  
6 }
```

🔍 Search by Device ID

Device Simulator   

Device ID

Status

Device Type

Class ID

Date Added

Descriptive Location

▼

123

Connected

NodeMCU

Device

Nov 16, 2022 12:01 AM

→

...

Identity

Device Information

Recent Events

State

Logs

×

The recent events listed show the live stream of data that is coming and going from this device.

Event

Value

Format

Last Received

IoTSensor

{"temp":110,"Humid":60,"Ph":8,"Water\_turbidity..."}

json

a few seconds ago

IoTSensor

{"temp":108,"Humid":81,"Ph":1,"Water\_turbidity..."}

json

a few seconds ago

IoTSensor

{"temp":106,"Humid":75,"Ph":10,"Water\_turbidit..."}

json

a few seconds ago

IoTSensor

{"temp":101,"Humid":87,"Ph":1,"Water\_turbidity..."}

json

a few seconds ago

IoTSensor

{"temp":103,"Humid":60,"Ph":12,"Water\_turbidit..."}

json

a few seconds ago