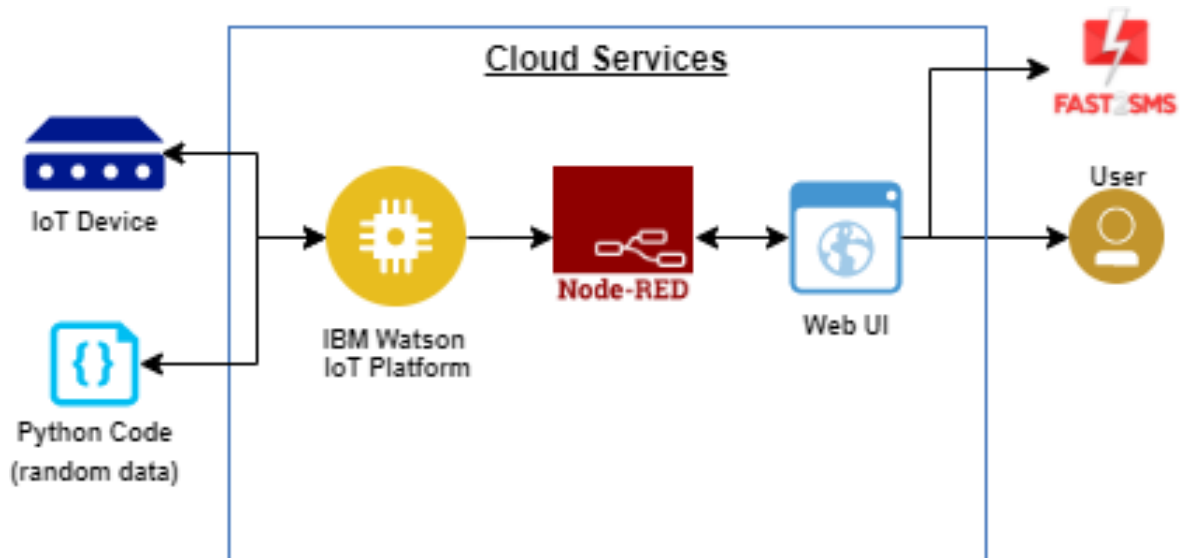


SPRINT- III

PROJECT DEVELOPMENT PHASE

DATE	16 OCTOBER 2022
TEAM LEADER	VISHNU KUMAR N
TEAM MEMBERS	SURESH S MATHAN KUMAR T SASI KUMAR K
PROJECT NAME	REAL TIME RIVER WATER QUALITY MONITERING AND CONTROL SYSTEM

WHOLE PROJECT OVERVIEW



DEVICE CONNECTED IN WATSON PLATFORM

IBM Watson IoT Platform

Browse Action Device Types Interfaces

Add Device +

Browse Devices

All Devices Diagnose

This table shows a summary of all devices that have been added. It can be filtered, organized, and searched on using different criteria. To get started, you can add devices by using the Add Device button, or by using API.

Search by Device ID

Device Simulator ☒

<input type="checkbox"/>	Device ID	Status	Device Type	Class ID	Date Added
<input type="checkbox"/>	12345	Disconnected	testDeviceType	Device	Oct 22, 2022 7:47 PM

Items per page 50 | 1-1 of 1 item

1 of 1 page < 1 >

1 Simulation running

IBM Watson IoT Platform

Your boards Public boards

Create New Board +

Your boards

Sort By Recently changed

TESTBOARD

2 Cards

Owned by you

RISK AND SECURITY

4 Cards

Owned by you

USAGE OVERVIEW

3 Cards

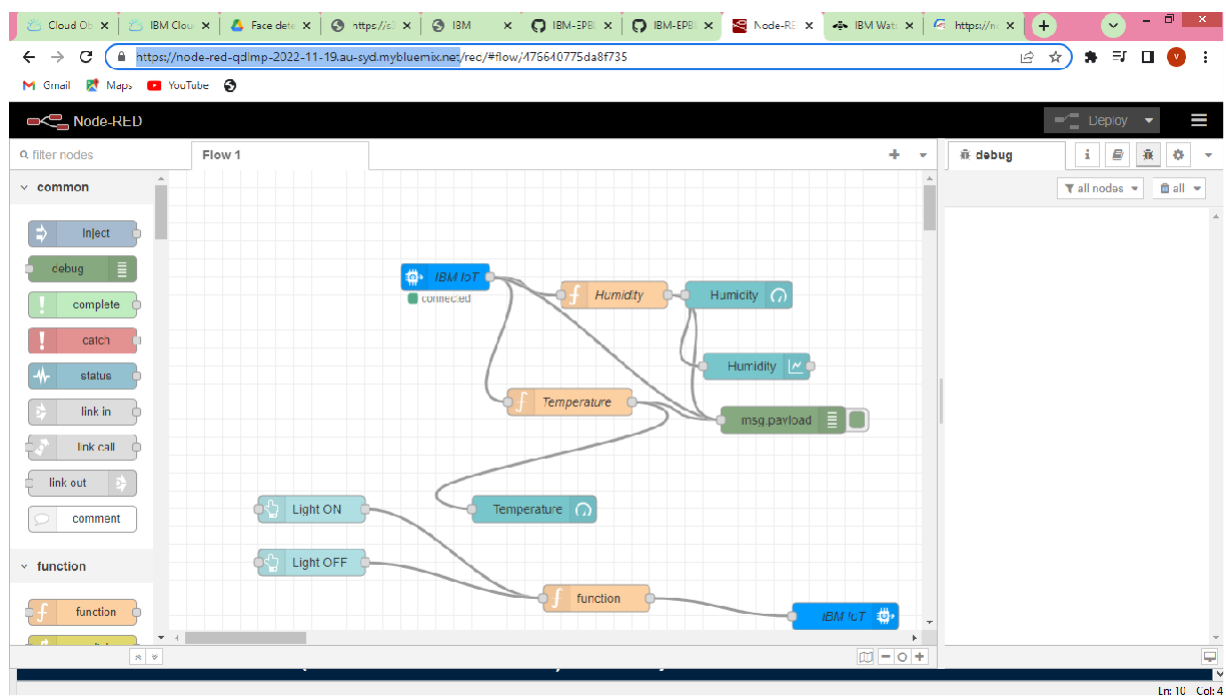
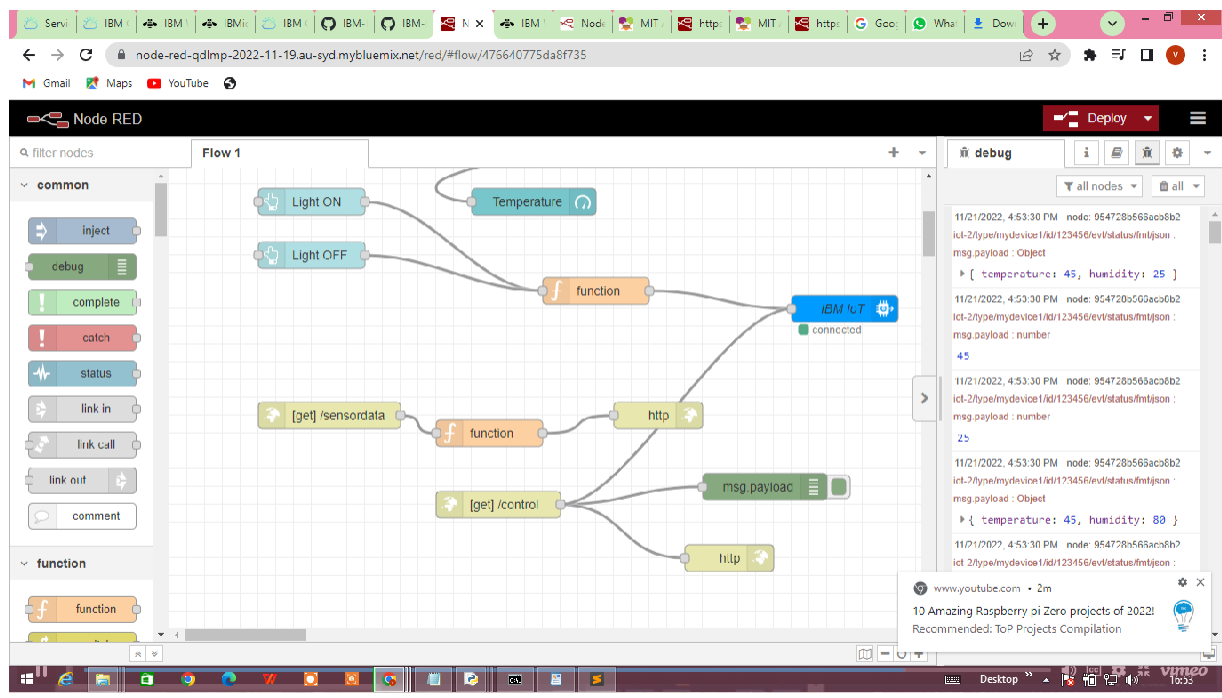
Owned by you

+

Boards shared with you

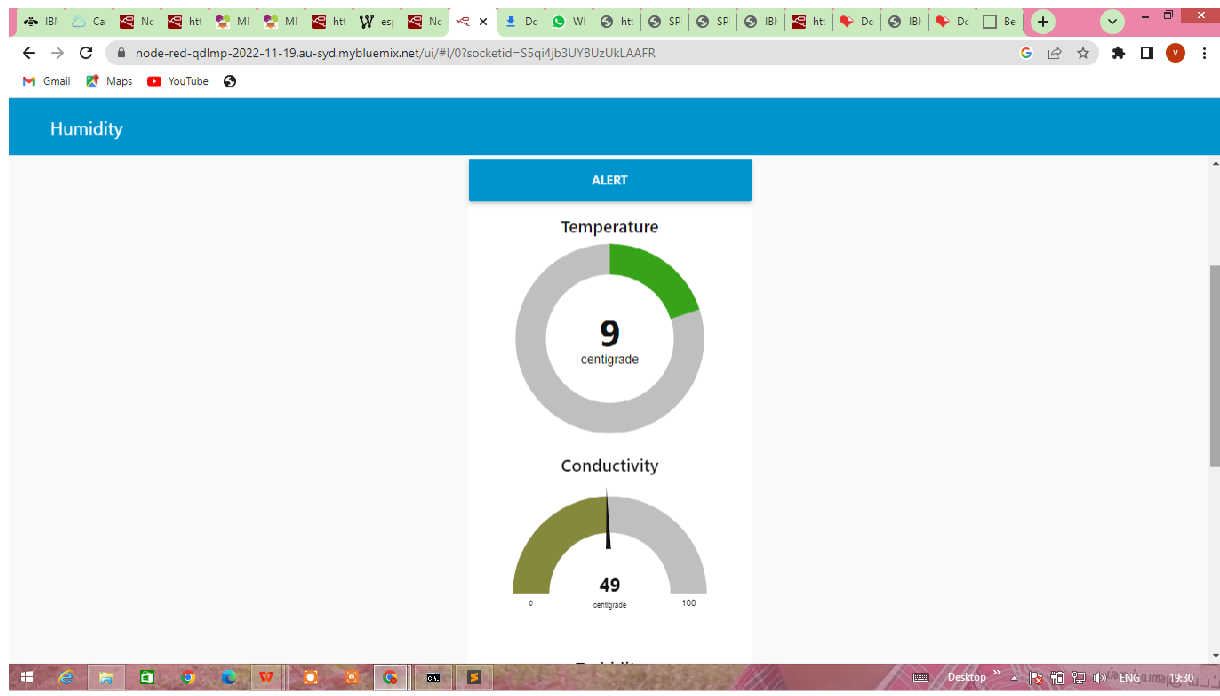
1 Simulation running

NODE-RED CONNECTED WITH SOURCE CODE WITH WATSON DEVICE

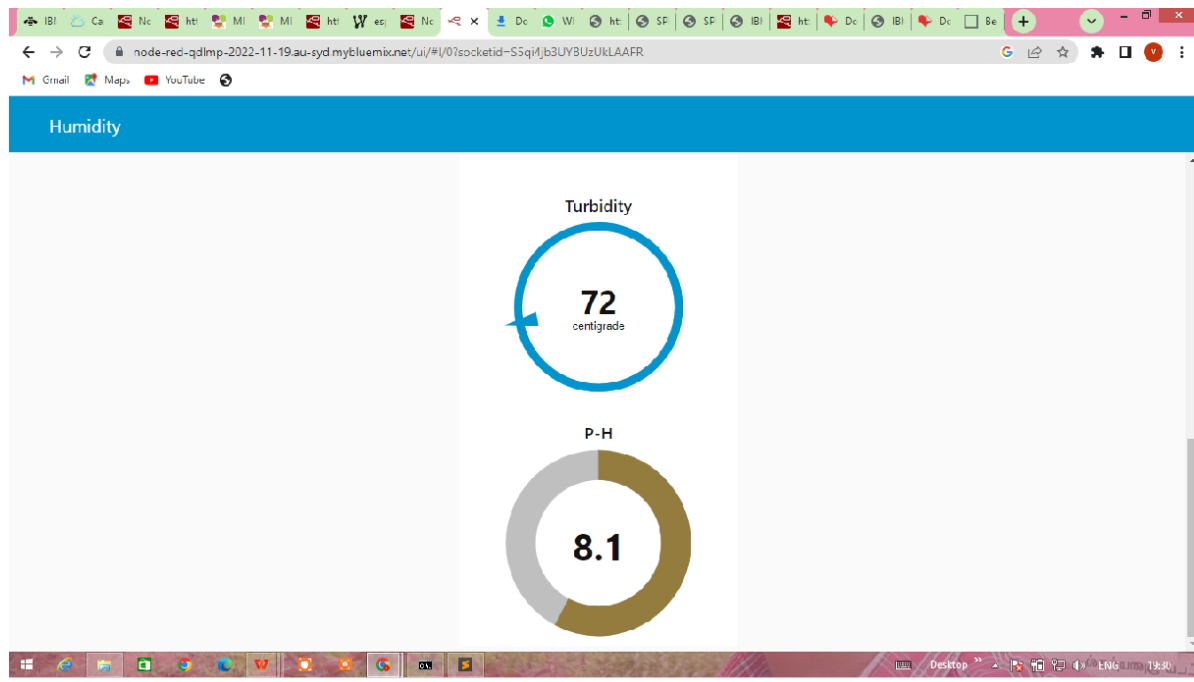


WEB-UI

TEMPERATURE AND CONDUCTIVITY



TURBIDITY AND P-H



NOW IN SPRINT ONE WE ARE IN DEVELOPING PYTHON CODE(RANDOM VALUES)

```
import wiotp.sdk.device
```

```
import time
```

```
import random
```

```
myConfig = {
```

```
    "identity": {
```

```
        "orgId": "ttr4ty",
```

```
        "typeId": "mydevice1",
```

```
        "deviceId": "123456"
```

```
    },
```

```
    "auth": {
```

```
        "token": "abcd1234"
```

```
    }
```

```
}
```

```
def myCommandCallback(cmd):
```

```
    #print("Message received from IBM IoT Platform: %s" %  
cmd.data['command'])
```

```
    m=cmd.data['command']
```

```
if m == "lighton":
```

```
    print("Water is Quality is Bad !!!!! ")
```

```
    print("\n")
```

```
client = wiotp.sdk.device.DeviceClient(config=myConfig,  
logHandlers=None)
```

```
client.connect()
```

```
while True:
```

```
    temp=random.randint(-20,125)
```

```
    hum=random.randint(0,100)
```

```
    con = random.randint(0,100)
```

```
    tur = random.randint(0,100)
```

```
    phh = round(random.uniform(6.5,8.5),1)
```

```
    #k = float(input("Enter ph level of water : "))
```

```
    #if (k >= 6.5 and k <= 8.5):
```

```
        # phh = k
```

```
    #else:
```

```
        # phh = 0
```

```
    myData={'temperature':temp,  
'humidity':hum,'conductivity':con,'turbidity':tur,'ph':phh}
```

```
client.publishEvent(eventId="status", msgFormat="json",  
data=myData, qos=0, onPublish=None)
```

```
print(myData)
```

```
print("\n")
```

```
client.commandCallback = myCommandCallback
```

```
time.sleep(2)
```

```
client.disconnect()
```

