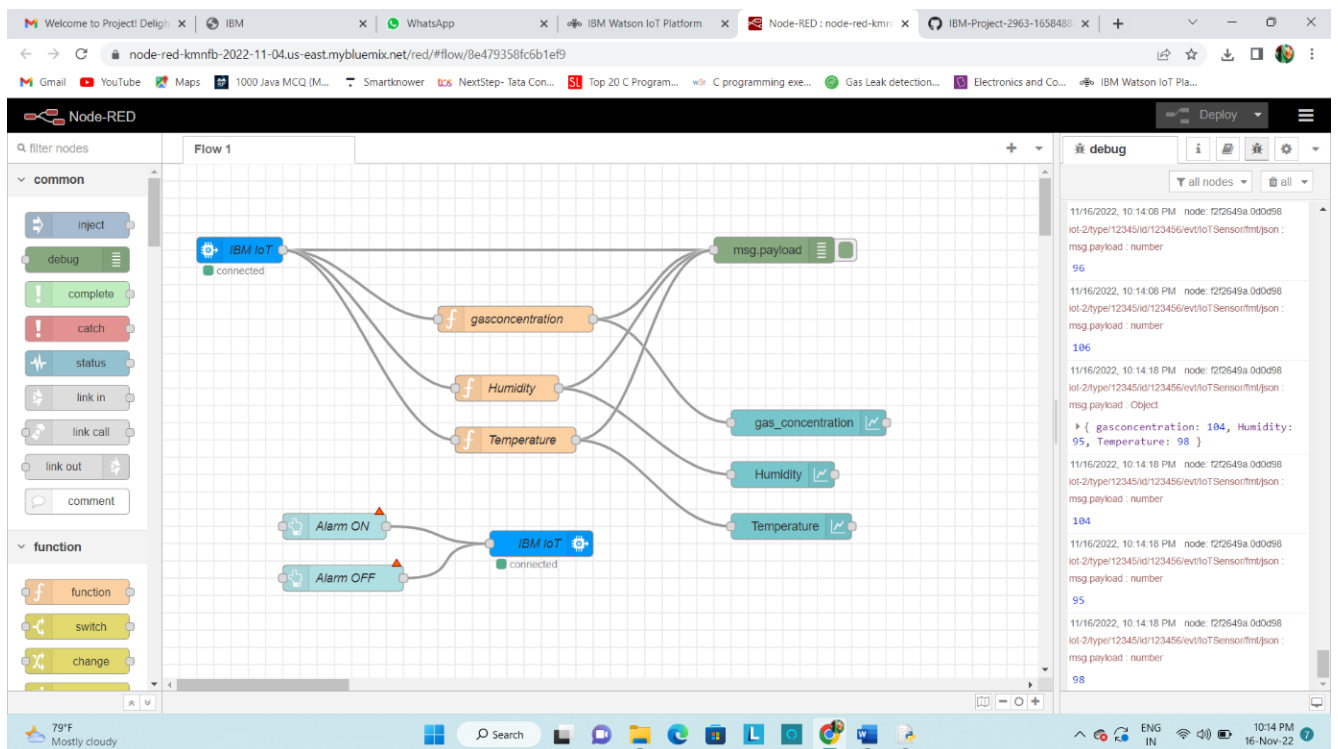


PROJECT DEVELOPMENT PHASE

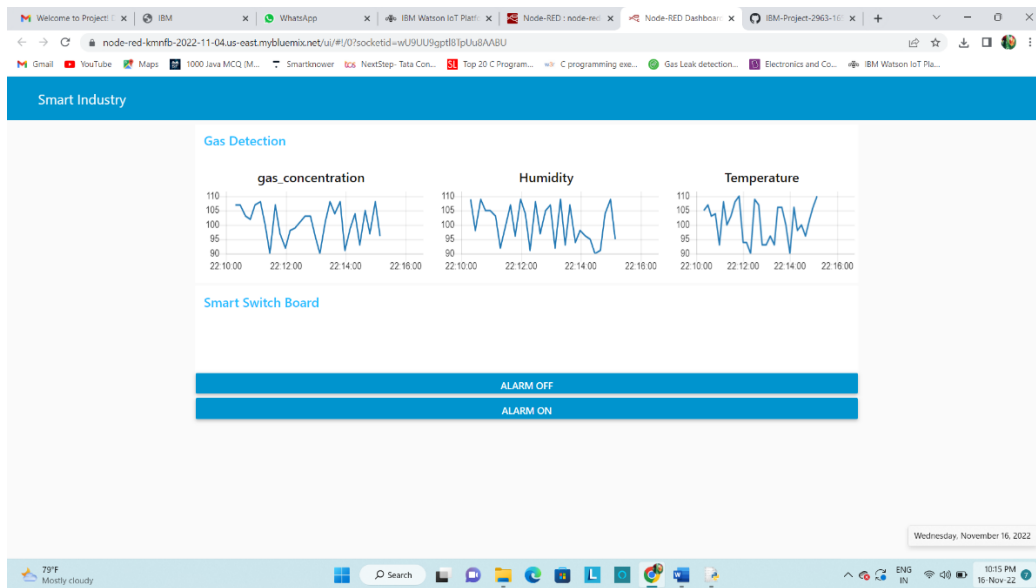
SPRINT 3

Date	16 November 2022
Team ID	PNT2022TMID13514
Project name	Gas Leakage Monitoring & Alerting System for Industries
Maximum marks	4 marks

NODE RED FLOW



NODE RED DASHBOARD :



RECEIVE OF MESSAGE FROM WATSON:

IBM Watson IoT Platform

127fmg.internetofthings.ibmcloud.com/dashboard/devices/browse

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

Event	Value	Format	Last Received
IoT Sensor	{"gasconcentration":92,"humidity":109,"tempera...	json	a few seconds ago
IoT Sensor	{"gasconcentration":97,"humidity":96,"tempera...	json	a few seconds ago
IoT Sensor	{"gasconcentration":107,"humidity":107,"tempe...	json	a few seconds ago
IoT Sensor	{"gasconcentration":90,"humidity":99,"tempera...	json	a few seconds ago
IoT Sensor	{"gasconcentration":100,"humidity":92,"tempera...	json	a few seconds ago

Items per page 50 | 1-1 of 1 item

1 of 1 page

PYTHON CODE OUTPUT:

```
ibmpython.py - C:\Users\USER\Desktop\ibm\ibmpython.py (3.7.0)
File Edit Format Run Options Window Help
import time
import sys
import ibmiotf.application
import ibmiotf.device
import random
organization = "127fmg"
deviceType = "12345"
deviceId = "123456"
authMethod = "token"
authToken = "123456789"
def myCommandCallback(cmd):
    print("Command received: %s" % cmd.data['command'])
    status=cmd.data['command']
    if status=="lighton":
        print ("led is on")
    elif status=="lightoff":
        print ("led is off")
    else:
        print ("Please send proper command")
try:
    deviceOptions = {"org": organization, "type": deviceType, "id": deviceId,"auth-method":authMethod}
    deviceCli = ibmiotf.device.Client(deviceOptions)
except Exception as e:
    print("Caught exception connecting device %s" % str(e))
    sys.exit()
deviceCli.connect()
while True:
    gasConcentration = random.randint(90,110)
    Humidity = random.randint(90,110)
    Temperature = random.randint(90,110)
    data = {'gasconcentration': gasConcentration,'Humidity': Humidity,'Temperature': Temperature}
    def myOnPublishCallback():
        print(" GasConcentration = %s PPM" % gasConcentration, "to IBM Watson")
        print(" Humidity = %s%" % Humidity, "to IBM Watson")
        print(" Temperature = %s C" % Temperature, "to IBM Watson")
    success = deviceCli.publishEvent("IoTSensor", "json", data, qos=0, on_publish=myOnPublishCallback)
    if not success:
        print("Not connected to IoT")
    time.sleep(10)
deviceCli.commandCallback=myCommandCallback
deviceCli.disconnect()

Python 3.7.0 Shell
File Edit Shell Debug Options Window Help
gasconcentration = 109 PPM to IBM Watson
Humidity = 91% to IBM Watson
Temperature = 100 C to IBM Watson
===== RESTART: C:\Users\USER\Desktop\ibm\ibmpython.py =====
2022-11-16 22:09:57,891 ibmiotf.device.Client INFO Connected successfully: d:127fmg:12345:123456
gasConcentration = 110 PPM to IBM Watson
Humidity = 100% to IBM Watson
Temperature = 105 C to IBM Watson
GasConcentration = 98 PPM to IBM Watson
Humidity = 105% to IBM Watson
Temperature = 93 C to IBM Watson
GasConcentration = 107 PPM to IBM Watson
Humidity = 109% to IBM Watson
Temperature = 105 C to IBM Watson
GasConcentration = 107 PPM to IBM Watson
Humidity = 98% to IBM Watson
Temperature = 107 C to IBM Watson
GasConcentration = 103 PPM to IBM Watson
Humidity = 109% to IBM Watson
Temperature = 103 C to IBM Watson
GasConcentration = 102 PPM to IBM Watson
Humidity = 105% to IBM Watson
Temperature = 104 C to IBM Watson
GasConcentration = 107 PPM to IBM Watson
Humidity = 105% to IBM Watson
Temperature = 93 C to IBM Watson
GasConcentration = 108 PPM to IBM Watson
Humidity = 103% to IBM Watson
Temperature = 108 C to IBM Watson
GasConcentration = 100 PPM to IBM Watson
Humidity = 92% to IBM Watson
Temperature = 100 C to IBM Watson
GasConcentration = 90 PPM to IBM Watson
Humidity = 99% to IBM Watson
Temperature = 103 C to IBM Watson
GasConcentration = 107 PPM to IBM Watson
Humidity = 107% to IBM Watson
Temperature = 108 C to IBM Watson
GasConcentration = 97 PPM to IBM Watson
Humidity = 96% to IBM Watson
Temperature = 110 C to IBM Watson
GasConcentration = 92 PPM to IBM Watson
Humidity = 109% to IBM Watson
Temperature = 94 C to IBM Watson
Speakers (Realtek(R) Audio): 100%
Ln: 1 Col: 0
Ln: 10 Col: 0
79°F
Mostly cloudy
Search
16-Nov-22 10:11 PM
```