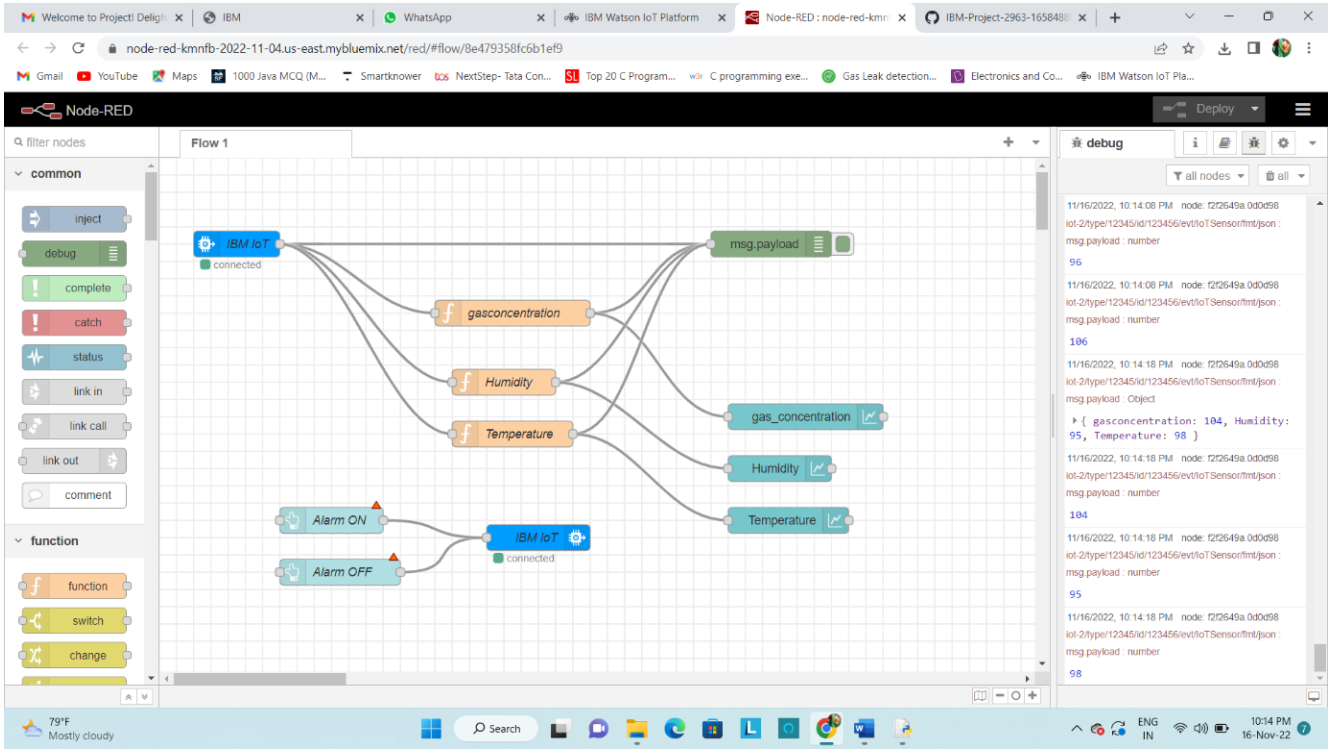
PROJECT DEVELOPMENT PHASE

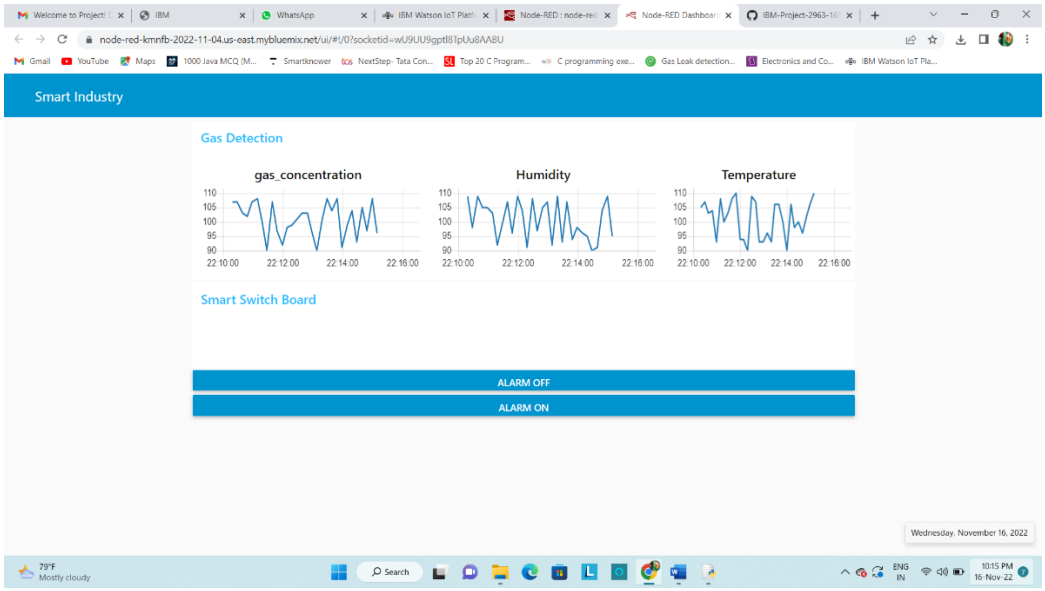
SPRINT 3

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

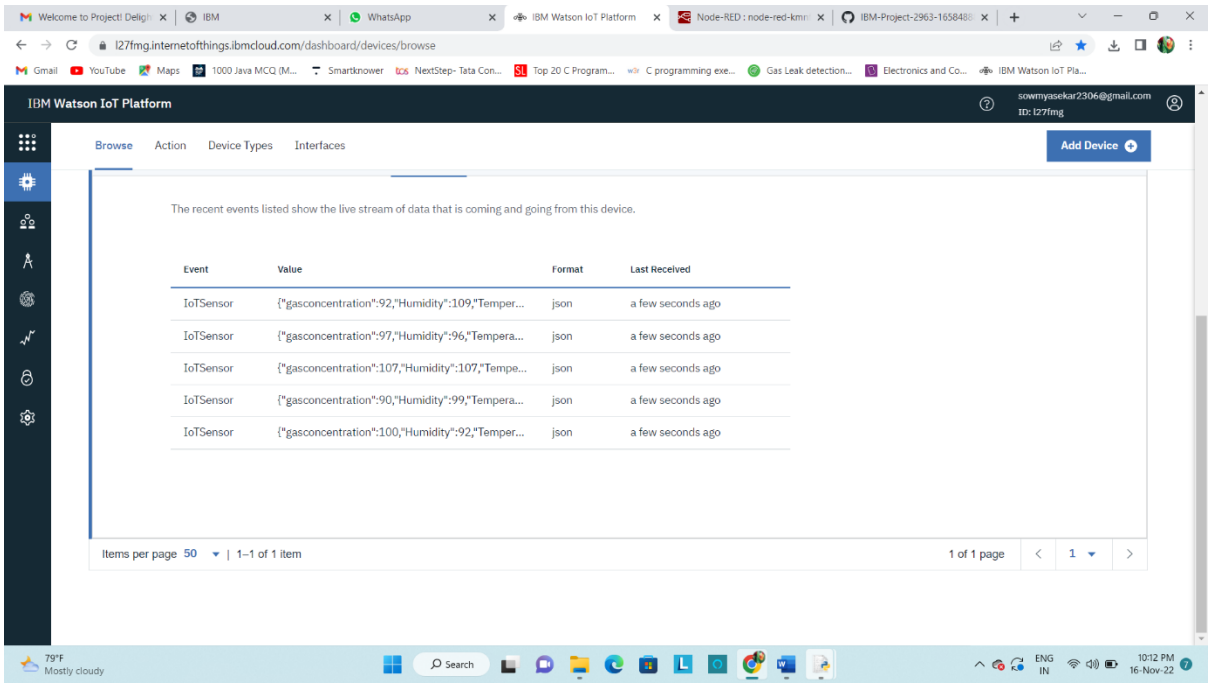
NODE RED FLOW



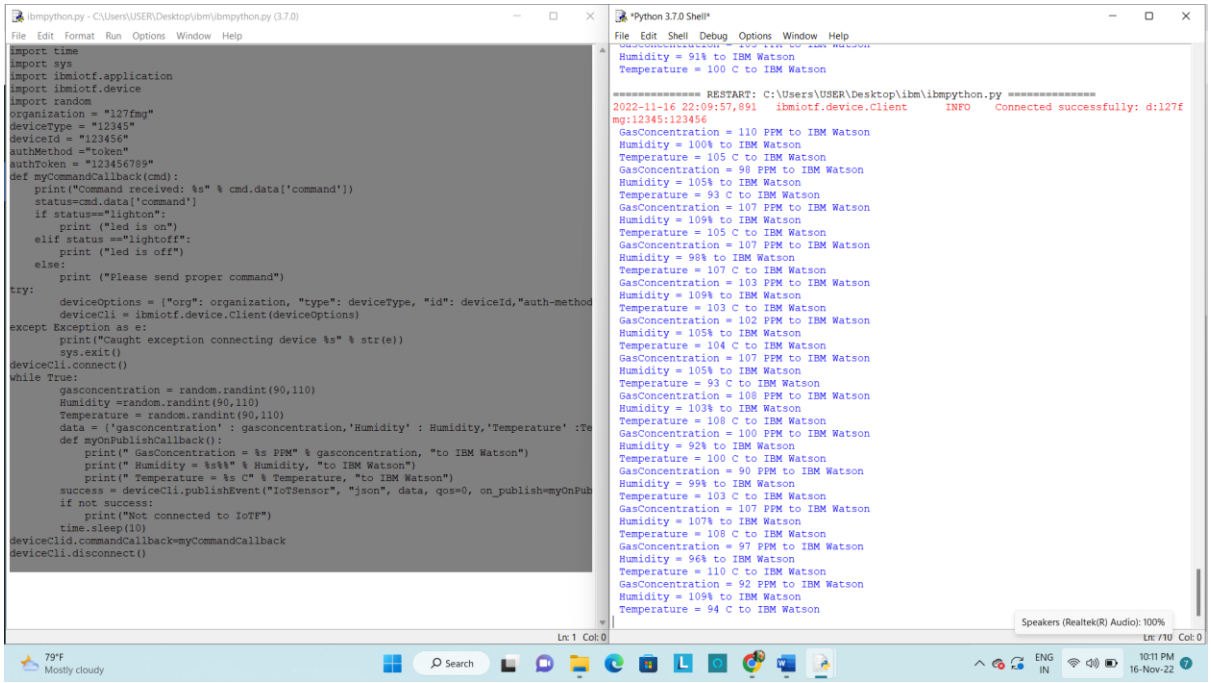
NODE RED DASHBOARD :



RECEIVE OF MESSAGE FROM WATSON:



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
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' :Te
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=myOnPub
if not success:
print("Not connected to IoTF")
time.sleep(10)
deviceCli.commandCallback=myCommandCallback
deviceCli.disconnect()
Ln: 1 Col: 0
Python 3.7.0 Shell
File Edit Shell Debug Options Window Help
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:127f
mg: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: 710 Col: 0
79°F
Mostly cloudy
Search
ENG
IN
10:11 PM
16-Nov-22