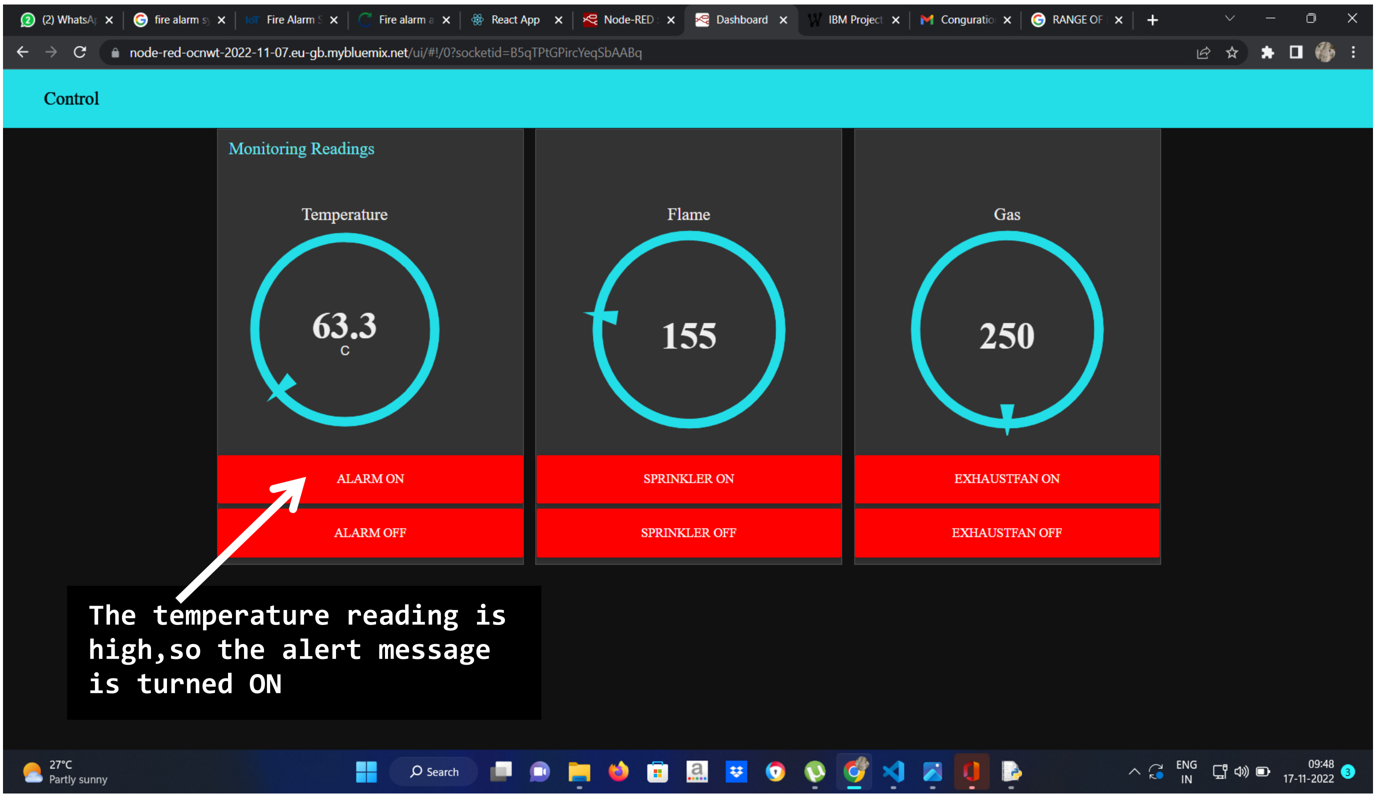
Project Development
Phase Delivery of Sprint - 4

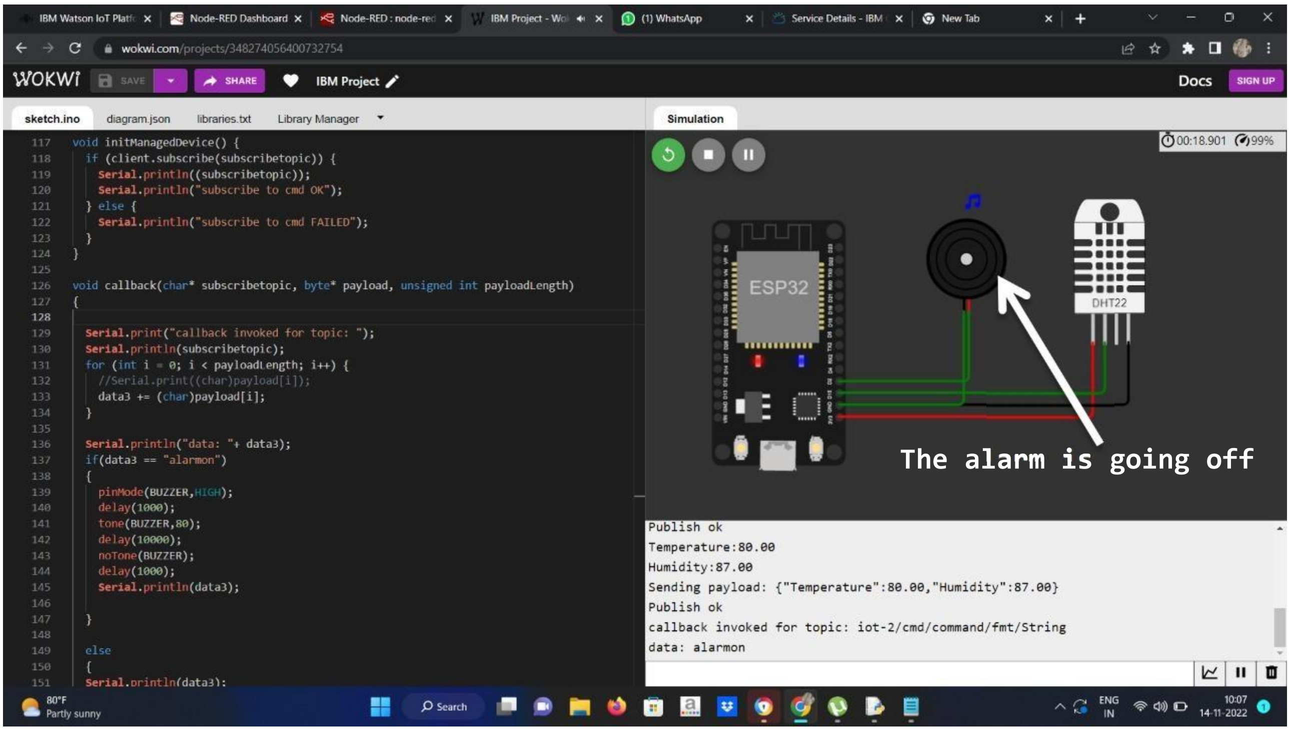
Date	18 November 2022
Team ID	PNT2022TMID30309
Project Name	INDUSTRY SPECIFIC INTELLIGENT FIRE MANAGEMENT SYSTEM

TESTING

- ***Temperature sensor :***



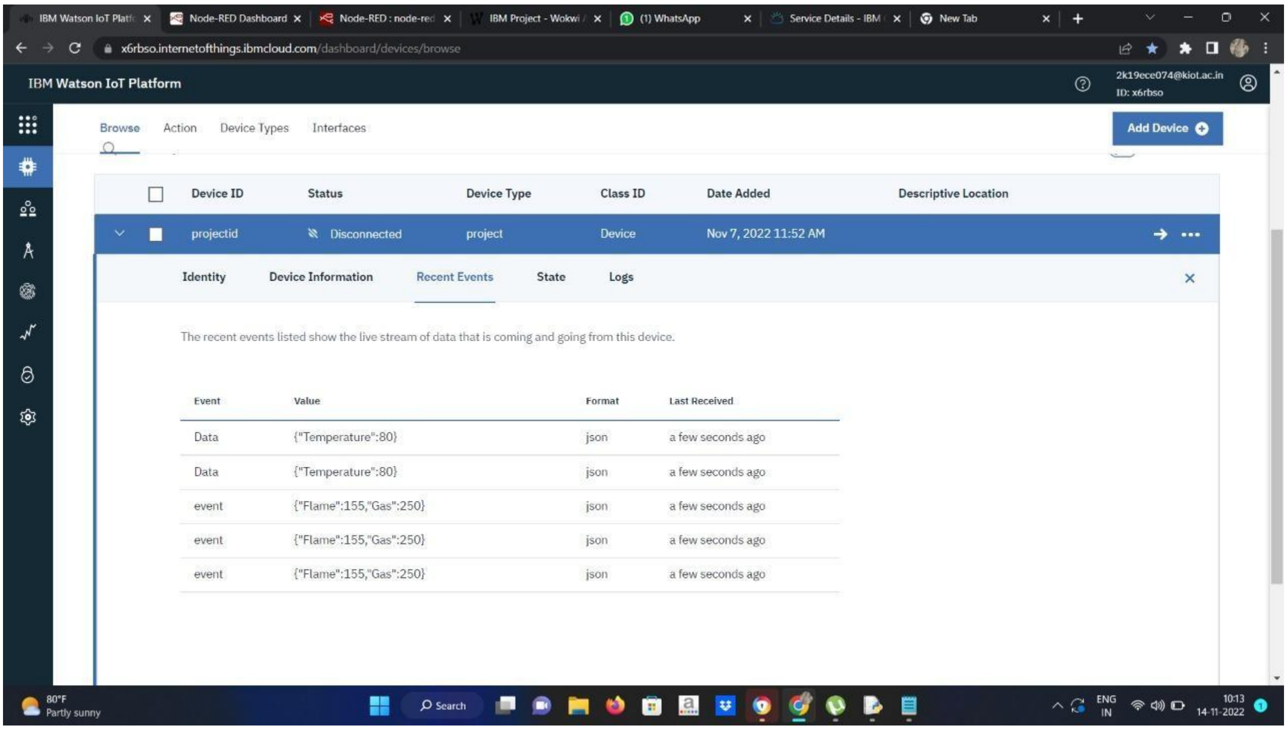
The temperature reading is high,so the alert message is turned ON



```
void initManagedDevice() {
  if (client.subscribe(subscribetopic)) {
    Serial.println((subscribetopic));
    Serial.println("subscribe to cmd OK");
  } else {
    Serial.println("subscribe to cmd FAILED");
  }
}

void callback(char* subscribetopic, byte* payload, unsigned int payloadLength)
{

  Serial.print("callback invoked for topic: ");
  Serial.println(subscribetopic);
  for (int i = 0; i < payloadLength; i++) {
    //Serial.print((char)payload[i]);
    data3 += (char)payload[i];
  }

  Serial.println("data: "+ data3);
  if(data3 == "alarmon")
  {
    pinMode(BUZZER,HIGH);
    delay(1000);
    tone(BUZZER,80);
    delay(10000);
    noTone(BUZZER);
    delay(1000);
    Serial.println(data3);

  }

  else
  {
  Serial.println(data3);
```

```
Publish ok
Temperature:80.00
Humidity:87.00
Sending payload: {"Temperature":80.00,"Humidity":87.00}
Publish ok
callback invoked for topic: iot-2/cmd/command/fmt/String
data: alarmon
```

IBM Cloud :

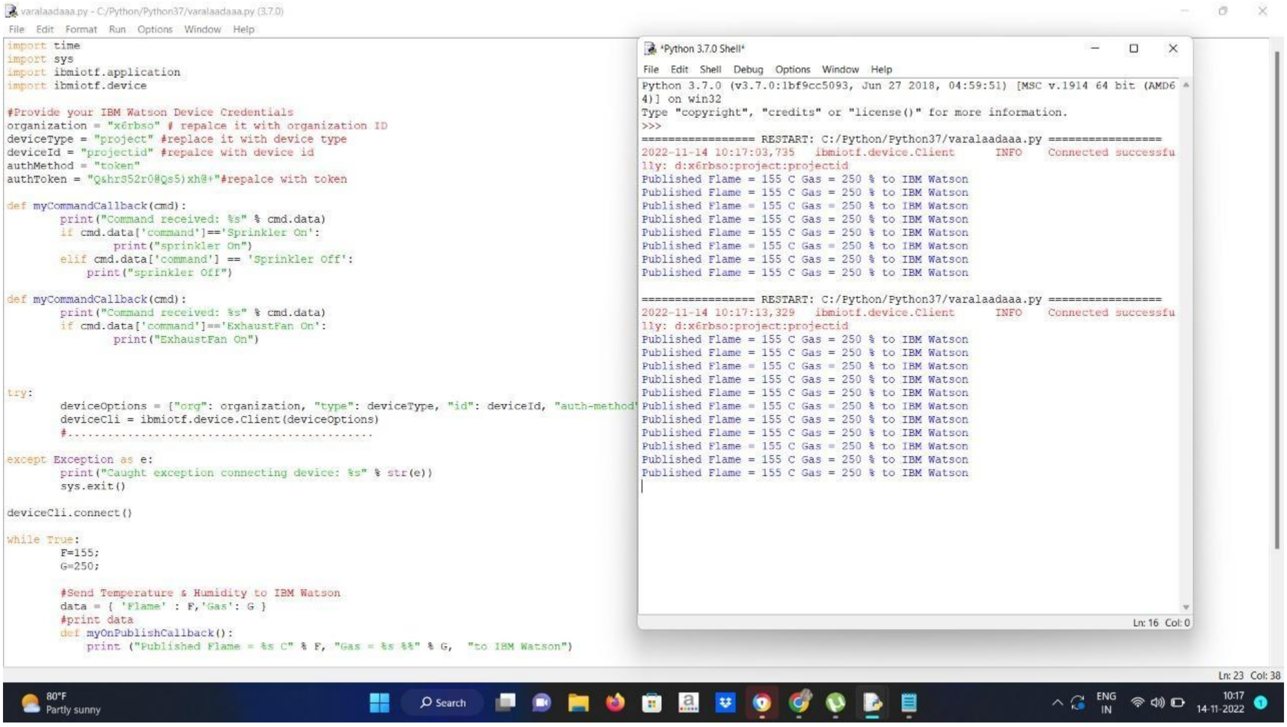


Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
projectid	Disconnected	project	Device	Nov 7, 2022 11:52 AM	

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

Event	Value	Format	Last Received
Data	{"Temperature":80}	json	a few seconds ago
Data	{"Temperature":80}	json	a few seconds ago
event	{"Flame":155,"Gas":250}	json	a few seconds ago
event	{"Flame":155,"Gas":250}	json	a few seconds ago
event	{"Flame":155,"Gas":250}	json	a few seconds ago

Flame and Gas Sensor :


varalaadaaa.py - C:/Python/Python37/varalaadaaa.py (3.7.0)
File Edit Format Run Options Window Help

```
import time
import sys
import ibmiotf.application
import ibmiotf.device

#Provide your IBM Watson Device Credentials
organization = "x6rbso" # repalce it with organization ID
deviceType = "project" #replace it with device type
deviceId = "projectid" #repalce with device id
authMethod = "token"
authToken = "Q&hrS52r0@Qs5)xh@+"#repalce with token

def myCommandCallback(cmd):
        print("Command received: %s" % cmd.data)
        if cmd.data['command']=='Sprinkler On':
                print("sprinkler On")
        elif cmd.data['command'] == 'Sprinkler Off':
            print("sprinkler Off")

def myCommandCallback(cmd):
        print("Command received: %s" % cmd.data)
        if cmd.data['command']=='ExhaustFan On':
                print("ExhaustFan On")



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:
        F=155;
        G=250;

        #Send Temperature & Humidity to IBM Watson
        data = { 'Flame' : F,'Gas': G }
        #print data
        def myOnPublishCallback():
            print ("Published Flame = %s C" % F, "Gas = %s %%" % G,  "to IBM Watson")
```

```
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:59:51) [MSC v.1914 64 bit (AMD6
4)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
================= RESTART: C:/Python/Python37/varalaadaaa.py =================
2022-11-14 10:17:03,735   ibmiotf.device.Client      INFO    Connected successfu
lly: d:x6rbso:project:projectid
Published Flame = 155 C Gas = 250 % to IBM Watson
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================= RESTART: C:/Python/Python37/varalaadaaa.py =================
2022-11-14 10:17:13,329   ibmiotf.device.Client      INFO    Connected successfu
lly: d:x6rbso:project:projectid
Published Flame = 155 C Gas = 250 % to IBM Watson
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```
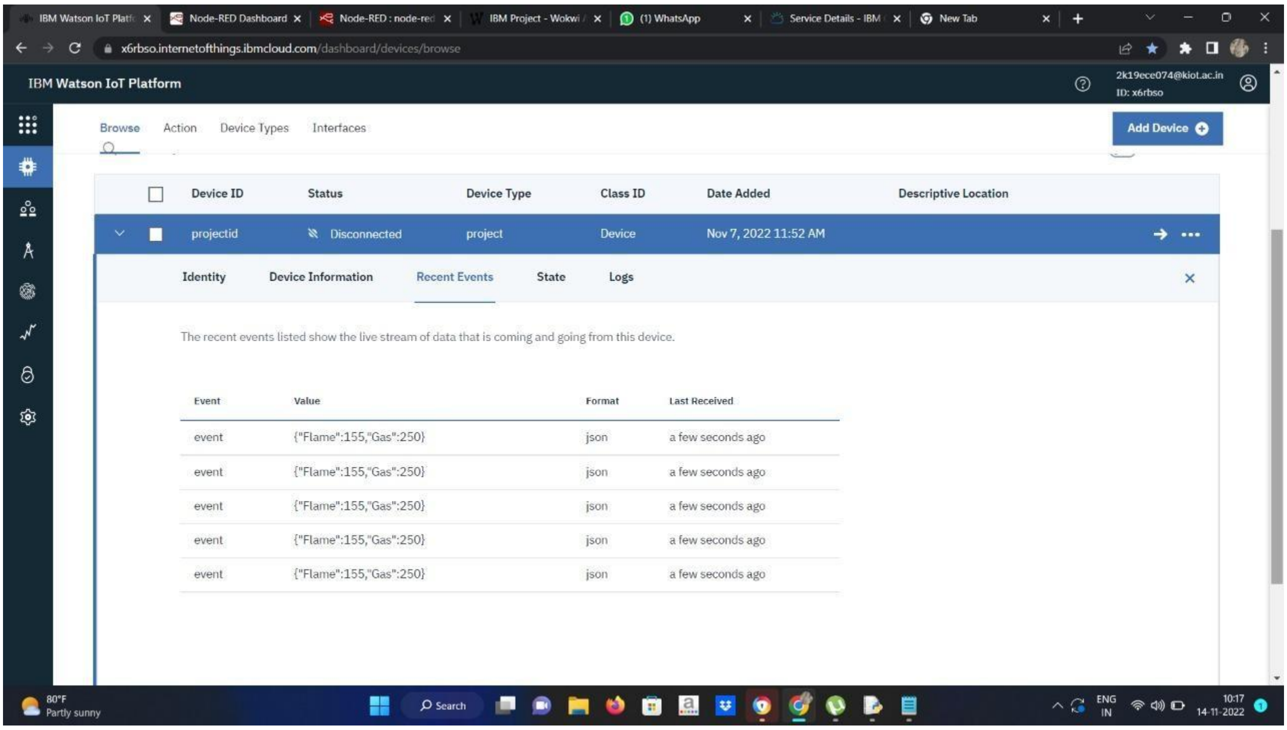

IBM Cloud :



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☐	projectid	Disconnected	project	Device	Nov 7, 2022 11:52 AM	

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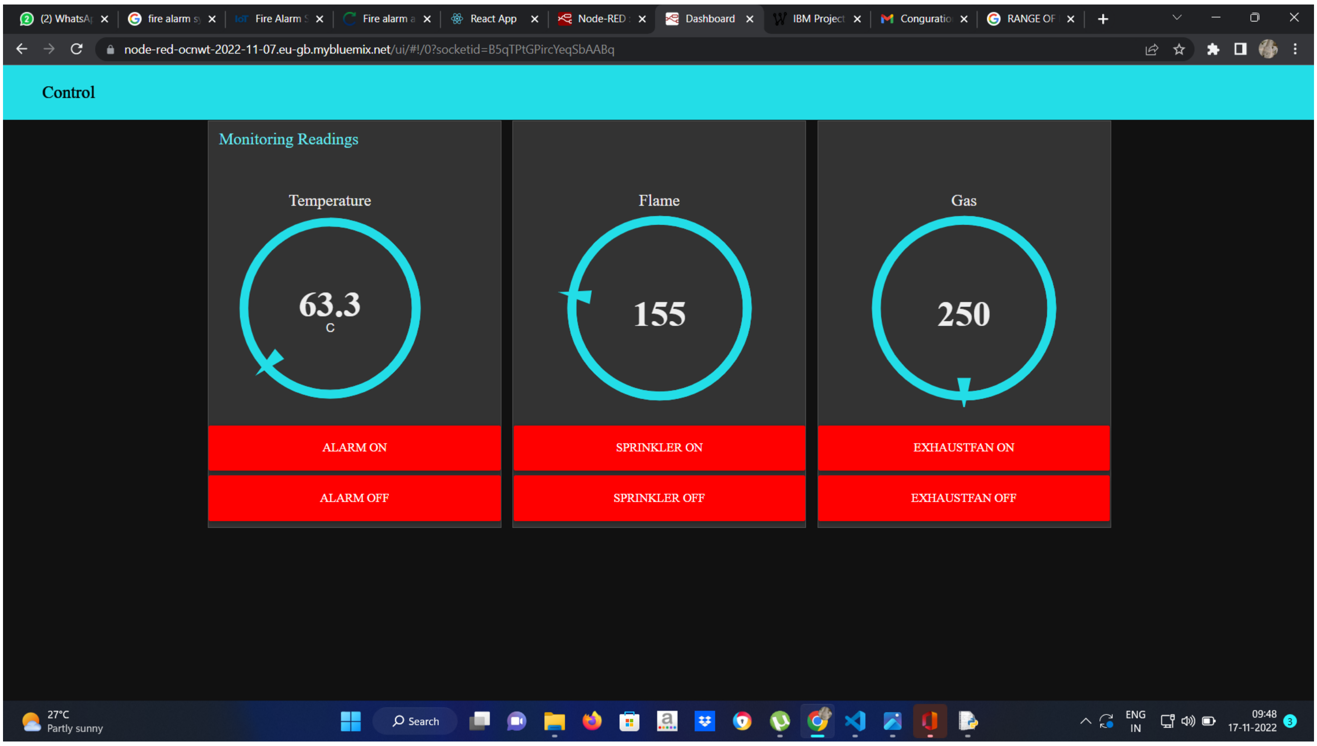
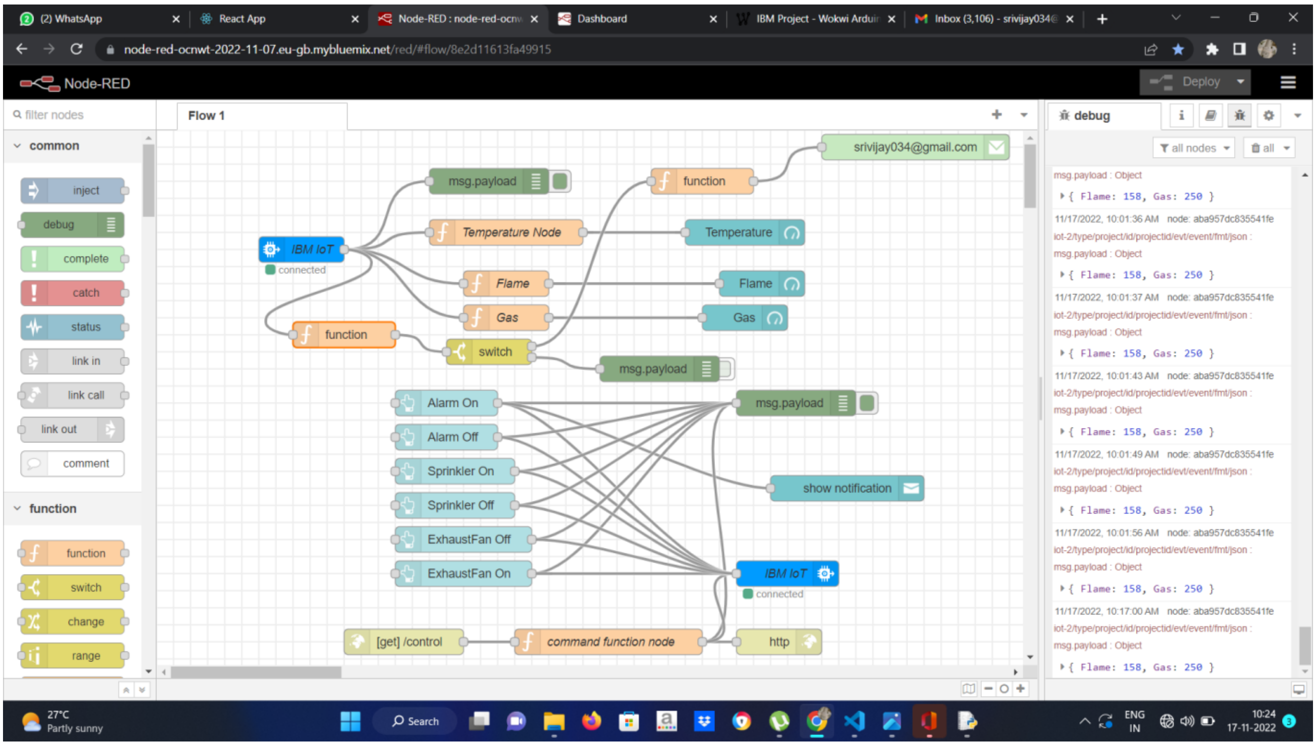
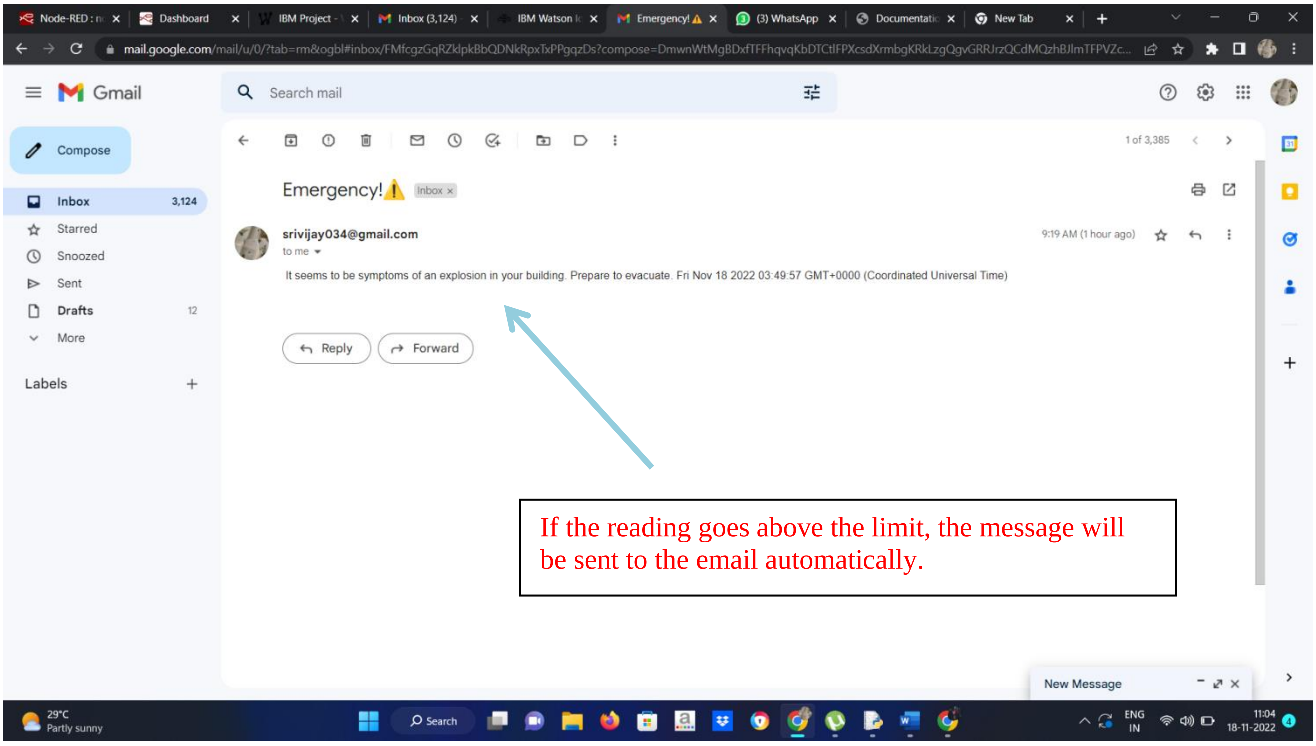


The Alarm , sprinkler and exhaust fan working as per the instruction



```
msg.payload : Object
▸{ Flame: 158, Gas: 250 }
11/17/2022, 10:01:36 AM   node: aba957dc835541fe
iot-2/type/project/id/projectid/evt/event/fmt/json :
msg.payload : Object
▸{ Flame: 158, Gas: 250 }
11/17/2022, 10:01:37 AM   node: aba957dc835541fe
iot-2/type/project/id/projectid/evt/event/fmt/json :
msg.payload : Object
▸{ Flame: 158, Gas: 250 }
11/17/2022, 10:01:43 AM   node: aba957dc835541fe
iot-2/type/project/id/projectid/evt/event/fmt/json :
msg.payload : Object
▸{ Flame: 158, Gas: 250 }
11/17/2022, 10:01:49 AM   node: aba957dc835541fe
iot-2/type/project/id/projectid/evt/event/fmt/json :
msg.payload : Object
▸{ Flame: 158, Gas: 250 }
11/17/2022, 10:01:56 AM   node: aba957dc835541fe
iot-2/type/project/id/projectid/evt/event/fmt/json :
msg.payload : Object
▸{ Flame: 158, Gas: 250 }
11/17/2022, 10:17:00 AM   node: aba957dc835541fe
iot-2/type/project/id/projectid/evt/event/fmt/json :
msg.payload : Object
▸{ Flame: 158, Gas: 250 }
```



Emergency!⚠ Inbox

srivijay034@gmail.com
to me

9:19 AM (1 hour ago)

It seems to be symptoms of an explosion in your building. Prepare to evacuate. Fri Nov 18 2022 03:49:57 GMT+0000 (Coordinated Universal Time)

If the reading goes above the limit, the message will be sent to the email automatically.