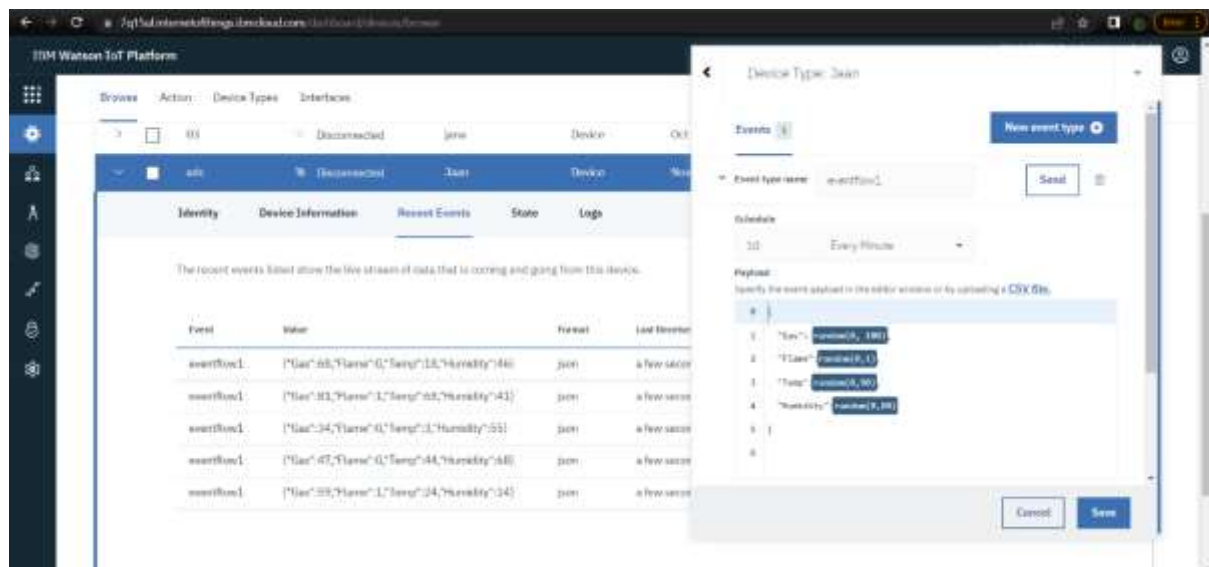
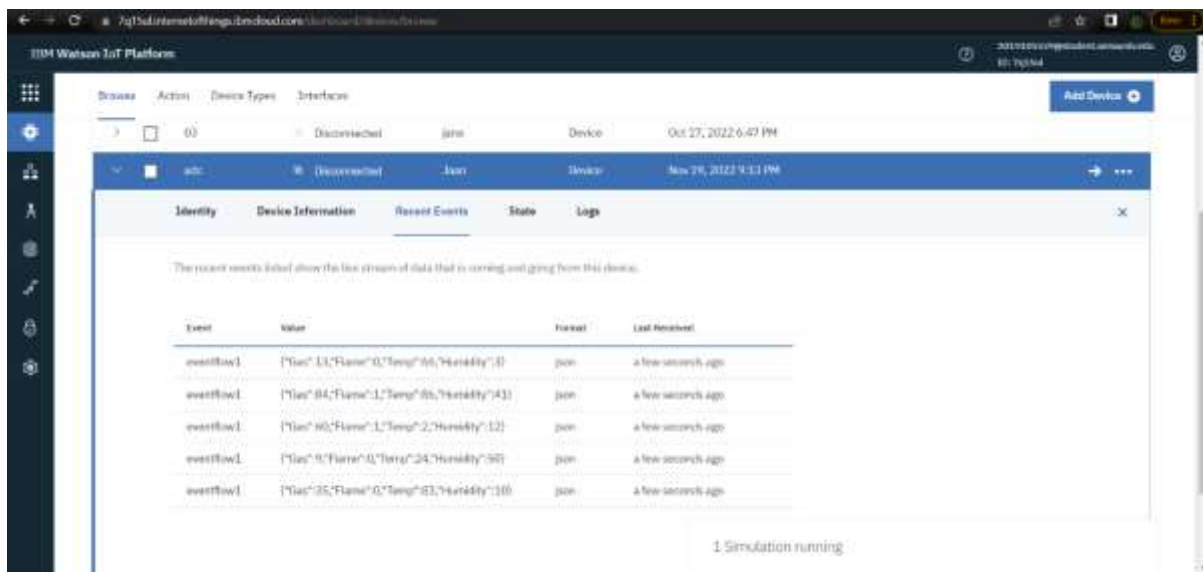


## Sprint-4

Date	19 November 2022
Team ID	PNT2022TMID35457
Project Name	Industry Specific Intelligence Fire Management System
Team Members	Akshaya H Divyapriya D Janani K R Sowmiyaa S U



**CODE:**

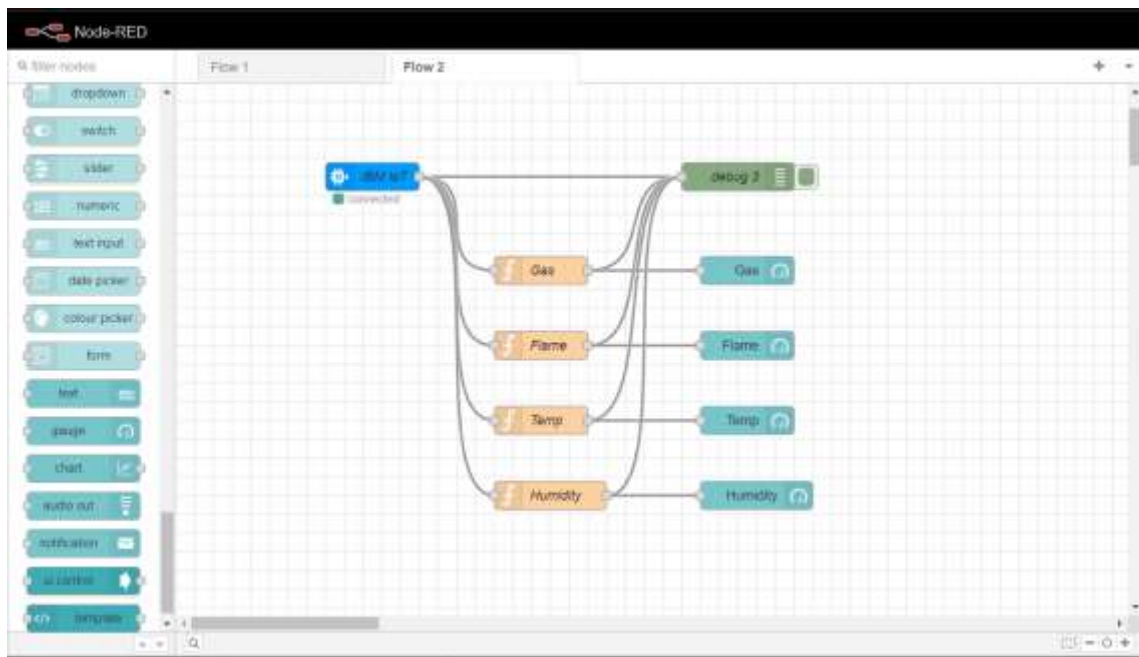
```
#include <WiFi.h>
#include <Wire.h>
#include
<Liquidcrystal.h>
#include
<ESP32Servo.h>
#include
<WiFiClient.h>

unsigned long myChannelNumber = 1;
const char * myWriteAPIKey= "a-7nqq26-ymfksmglqp";
int led_pin = 30;
buzzer= 10;
const int Mql = 4;
int value = 0;

Flame int flame_sensor_pin = 11 ;
output pin int flame_pin = HIGH ;

char ssid[] = "JANANI";
char pass[] = "JANANI";
WiFiClient client;
#define pin_lm35 39
#define adc_vref_mV 3520.0
#define adc_resolution 4563.0
#define relay_pin 17
#define relay_pin1 27

void setup()
{
  Serial.begin(136200);
```



```
pinMode(relay_pin, output);
pinMode(relay_pin1, output);
Serial.print("Connecting
to ");
Serial.println(Sid);
WiFi.begin(Sid, pass);
int wifi_ctr = 0;
while (WiFi.status() != WL_CONNECTED)
{
```

```

    delay(100
0);
Serial.print
(".");
    }
Serial.println("wi_connected ");
Liquidcrystal.begin(client);
pinMode(led_pin, output);
pinMode(Mq2, input);
pinMode ( flame_sensor_pin , input );
pinMode(buzzer, output);
}

```

```

void temperature()
{
int adcVal = analogRead(pin_LM35);
float milliVolt = adcVal * (adc_vref_mV / adc_resolution);
float tempC = milliVolt /10;
Serial.print("Temperature: ");
Serial.print(tempC);
Serial.print("°C");
if(tempC> 60)
{
    Serial.println("Alert");
    digitalWrite(buzzer,high); // turn on
} else
{
    digitalWrite(buzzer, low); // turn on
}
int x = Liquidcrystal.writeField(myChannelNumber,1, tempC, myWriteAPIKey);
}

```

```

void GasSensors()
{

int gassensorAnalogMq1
=analogRead(Mq1);Serial.print("Mq1
Gas Sensor: ")
Serial.print(gassensorAnalogMq1);
Serial.print("\t");
Serial.print("\t");
Serial.print("\t");

```

```

if (gassensorAnalogMq1 > 1000)

```

```

    {
        Serial.println("Mq1Gas");
        Serial.println("Alert");
        digitalWrite(relay_pin1, high);
        delay(100);
    } else
    {
        Serial.println("No Mq1Gas");
        digitalWrite(relay_pin1, low);
        delay(100);
    }
    int a = Liquidcrystal.writeField(myChannelNumber,4,
gassensorAnalogMq1,myWriteAPIKey);

}

void flamesensor()
{ flame_pin = digitalRead ( flame_sensor_pin ) ;
if (flame_pin == LOW ) // applying condition
{
Serial.println ( " alert: flame is detected" ) ;
digitalWrite (buzzer,high ) ;/
    if state is high,
then turn high the buzzer
    }
else
{
Serial.println ( " no flame detected " ) ;

digitalWrite (buzzer , low ) ; // otherwise turn it low
}

int value = digitalRead(flame_sensor_pin); // read the analog value from sensor

if (value ==low)
{
    Serial.print("flame");
    digitalWrite(relay_pin, high);
}
else
{
    Serial.print("no flame");
    digitalWrite(relay_pin, low);
}

```

```
}  
void loop() {  
  temperature();  
  GasSensors();  
  flamesensor();  
}
```

