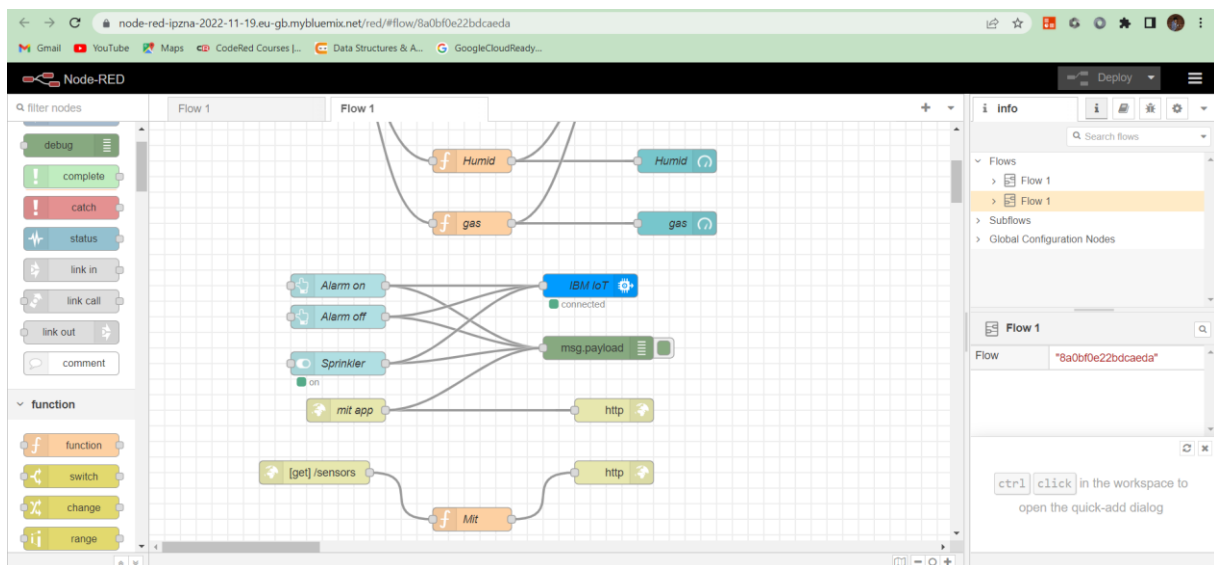
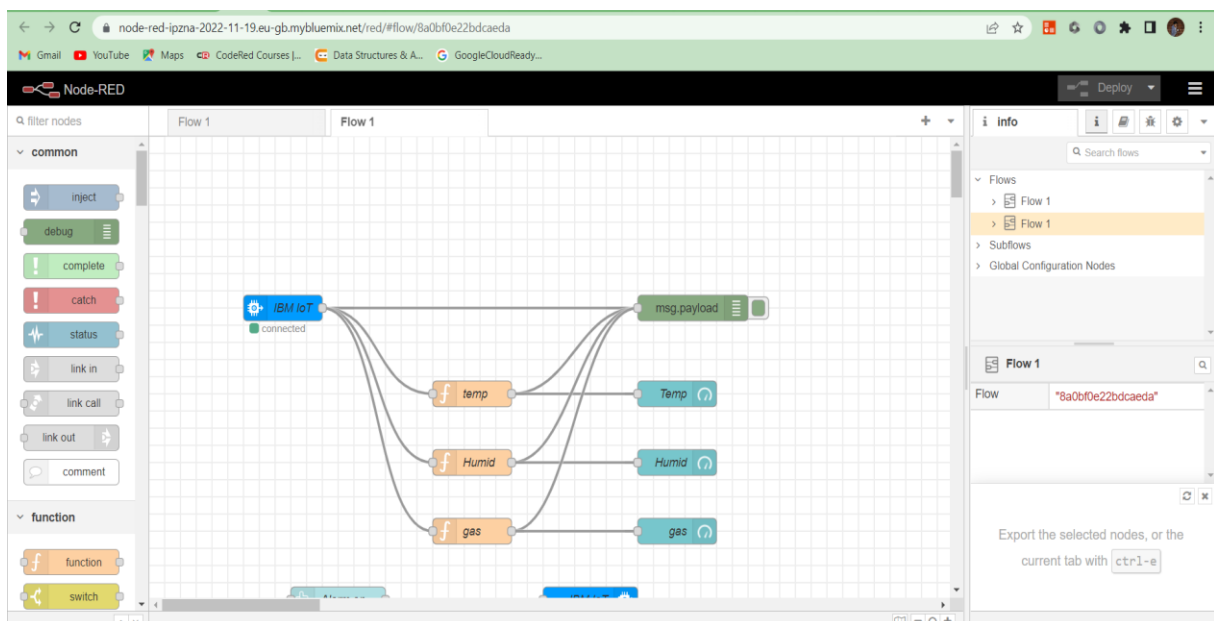


## Project Development Phase Delivery of Sprint 4

Date	15 November 2022
Team ID	PNT2022TMID21494
Project Name	Project –Gas leakage monitoring and alerting system for industries
Marks	20 marks

Open Node Red from IBM Cloud :

- GOT CONNECTED
- VALUES ARE FROM IBM WATSON



```

D:\sem7\New folder>python data.py
2022-11-19 12:51:50,886 ibmiotf.device.Client INFO Connected successfully: d:0zi0vb:gas:11111
Published Temperature = 36 C Humidity = 50 % Gas_Level =40 % to IBM Watson
Published Temperature = 22 C Humidity = 54 % Gas_Level =48 % to IBM Watson
Published Temperature = 0 C Humidity = 92 % Gas_Level =25 % to IBM Watson
Published Temperature = 38 C Humidity = 99 % Gas_Level =17 % to IBM Watson
Published Temperature = 64 C Humidity = 15 % Gas_Level =63 % to IBM Watson
Published Temperature = 76 C Humidity = 61 % Gas_Level =92 % to IBM Watson
Published Temperature = 14 C Humidity = 18 % Gas_Level =3 % to IBM Watson
Published Temperature = 44 C Humidity = 78 % Gas_Level =28 % to IBM Watson
Published Temperature = 31 C Humidity = 60 % Gas_Level =10 % to IBM Watson
Published Temperature = 87 C Humidity = 97 % Gas_Level =98 % to IBM Watson
Published Temperature = 69 C Humidity = 98 % Gas_Level =49 % to IBM Watson
Published Temperature = 67 C Humidity = 88 % Gas_Level =11 % to IBM Watson
Published Temperature = 60 C Humidity = 79 % Gas_Level =69 % to IBM Watson
Published Temperature = 75 C Humidity = 57 % Gas_Level =99 % to IBM Watson
Published Temperature = 68 C Humidity = 53 % Gas_Level =79 % to IBM Watson
Published Temperature = 11 C Humidity = 7 % Gas_Level =74 % to IBM Watson
Published Temperature = 40 C Humidity = 67 % Gas_Level =53 % to IBM Watson
Published Temperature = 86 C Humidity = 73 % Gas_Level =100 % to IBM Watson
Published Temperature = 61 C Humidity = 55 % Gas_Level =75 % to IBM Watson
Published Temperature = 63 C Humidity = 43 % Gas_Level =54 % to IBM Watson
Published Temperature = 51 C Humidity = 5 % Gas_Level =88 % to IBM Watson
Published Temperature = 10 C Humidity = 83 % Gas_Level =59 % to IBM Watson
Published Temperature = 85 C Humidity = 64 % Gas_Level =50 % to IBM Watson
Published Temperature = 58 C Humidity = 29 % Gas_Level =21 % to IBM Watson
Published Temperature = 70 C Humidity = 38 % Gas_Level =43 % to IBM Watson
Published Temperature = 74 C Humidity = 1 % Gas_Level =89 % to IBM Watson

```

IBM Watson IoT Platform

kgowtham1@student.tcs.edu  
ID: 0zi0vb

Browse Action Device Types Interfaces

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

Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
> 11111	Connected	gas	Device	Nov 19, 2022 12:50 PM	
> 12345	Disconnected	gasleakage	Device	Nov 18, 2022 11:11 PM	

Items per page 50 | 1-2 of 2 items 1 of 1 page < 1 >

1 Simulation running

IBM Watson IoT Platform

11111 Connected gas Device Nov 19, 2022 12:50 PM

Identity Device Information Recent Events State Logs

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

Event	Value	Format	Last Received
IoTSensor	{"temp":28,"Humid":40,"gas":29}	json	a few seconds ago
IoTSensor	{"temp":9,"Humid":93,"gas":31}	json	a few seconds ago
IoTSensor	{"temp":21,"Humid":30,"gas":68}	json	a few seconds ago
IoTSensor	{"temp":95,"Humid":39,"gas":18}	json	a few seconds ago
IoTSensor	{"temp":60,"Humid":33,"gas":19}	json	a few seconds ago

1 Simulation running

IBM Watson IoT Platform

12345 Disconnected SmartGasMonitoring Device Nov 18, 2022 1:05 PM

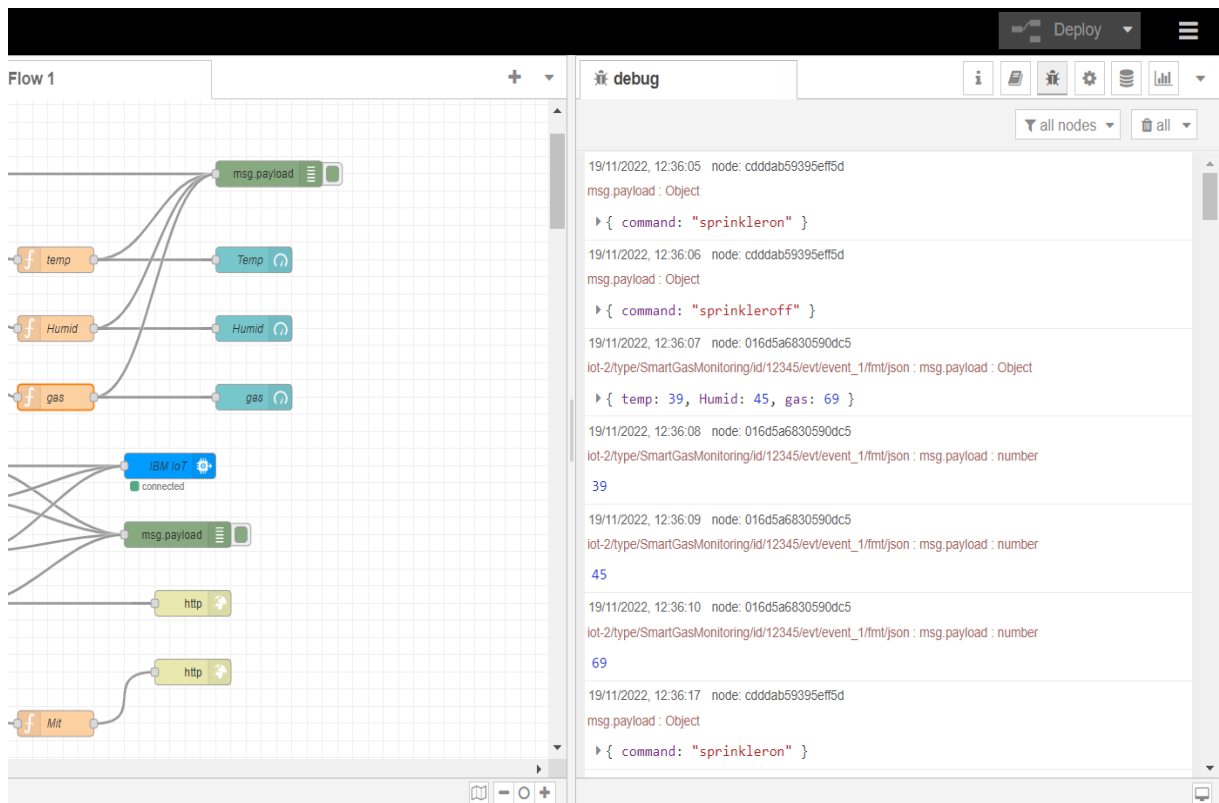
Identity Device Information Recent Events State Logs

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

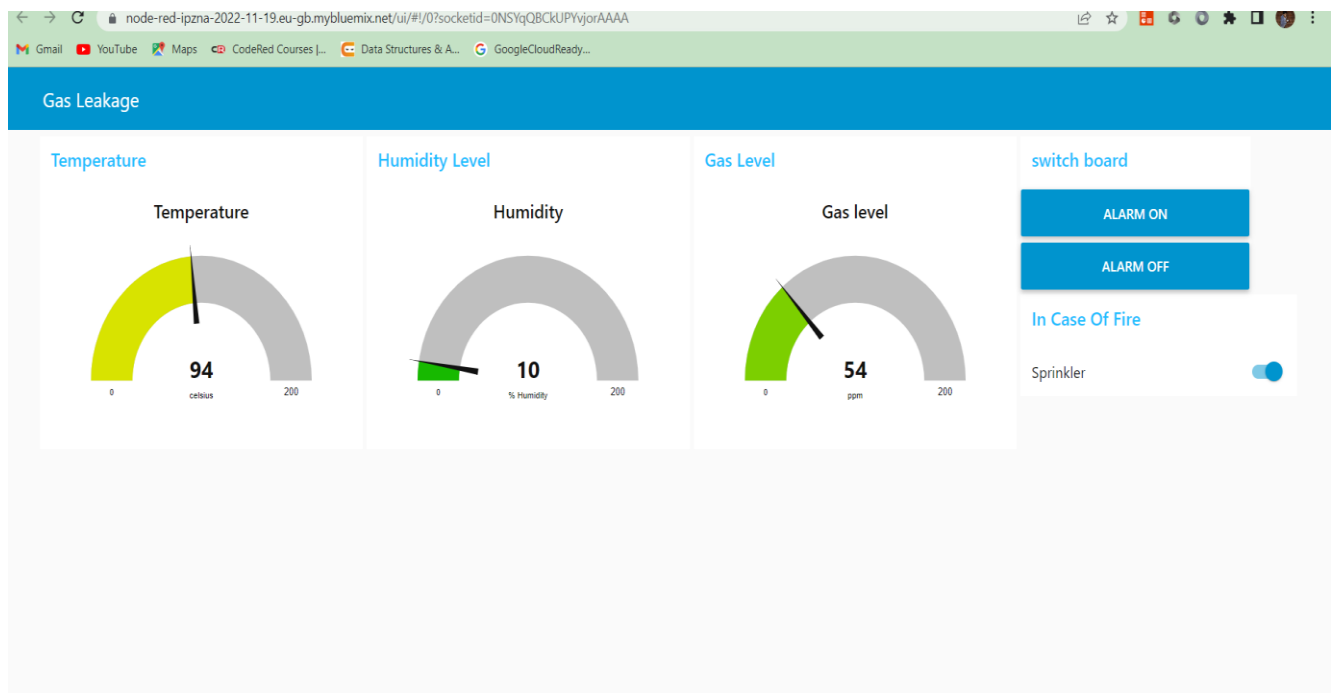
Event	Value	Format	Last Received
event_1	{"temp":6,"Humid":12,"gas":53}	json	a few seconds ago
event_1	{"temp":47,"Humid":41,"gas":75}	json	a few seconds ago
event_1	{"temp":9,"Humid":58,"gas":19}	json	a few seconds ago
event_1	{"temp":100,"Humid":80,"gas":23}	json	a few seconds ago

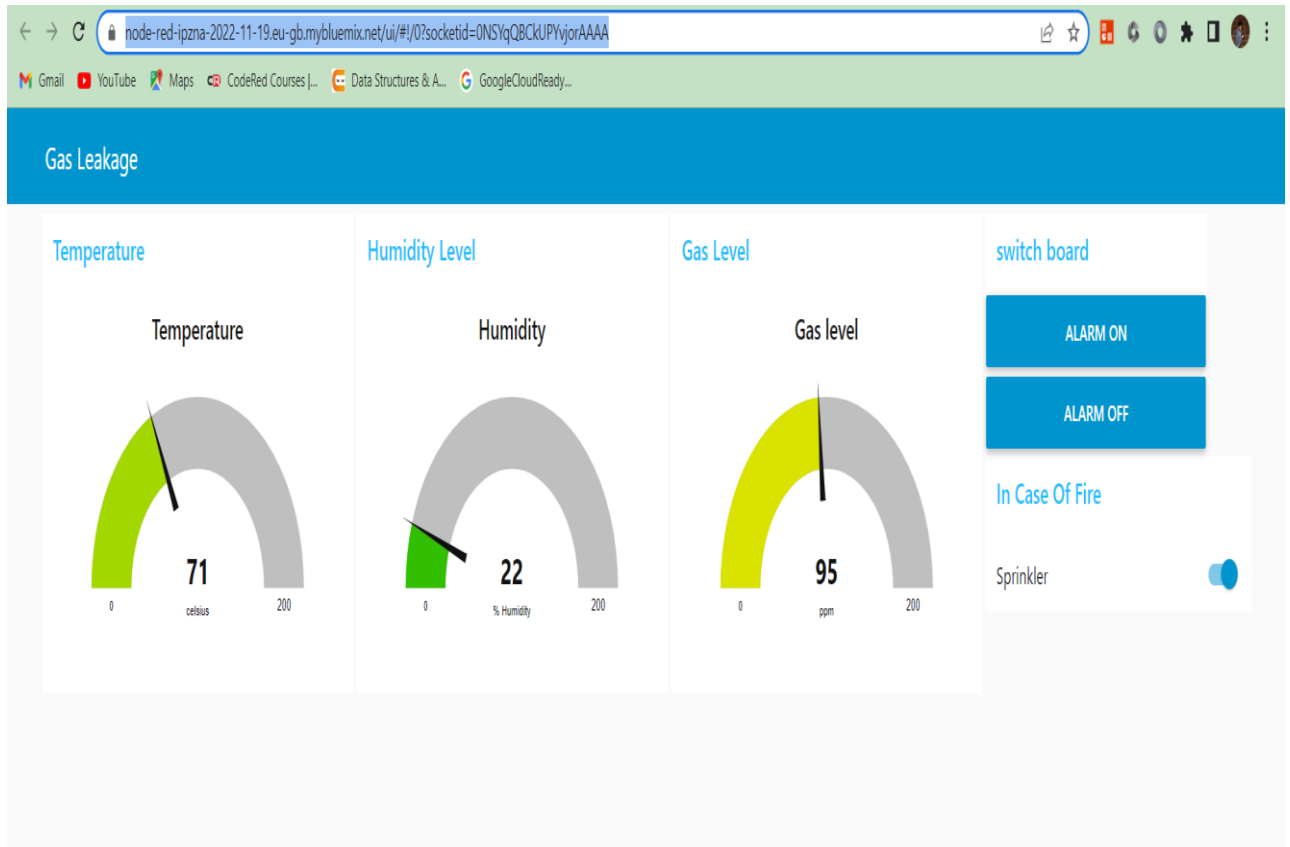
1 Simulation running

Activate Windows  
Go to Settings to activate Windows.



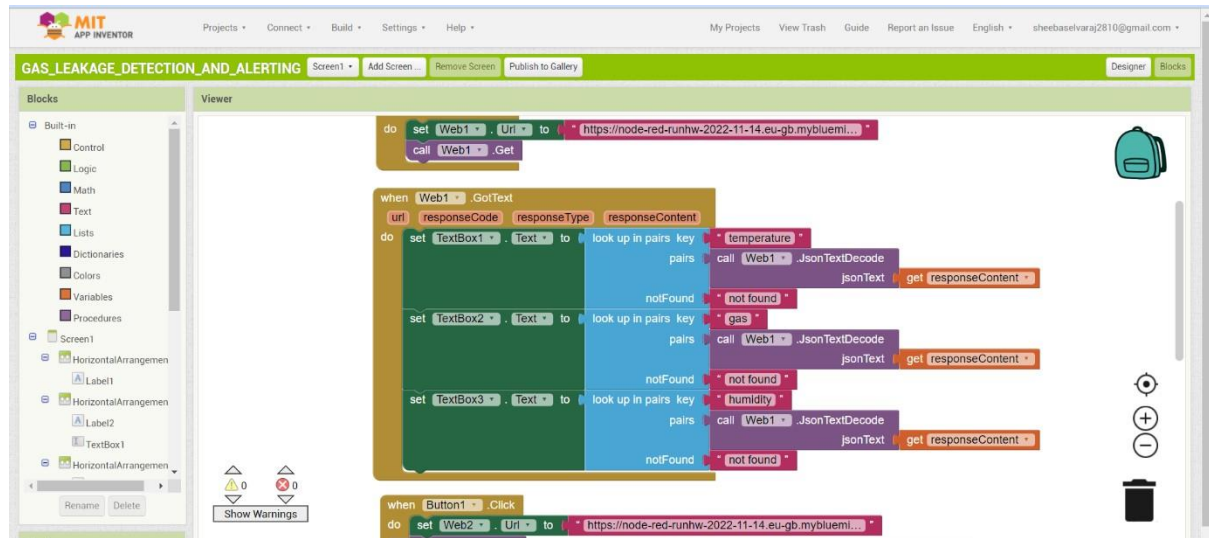
## WEB DESIGN (UI):





Generated link is pasted <https://node-red-runhw-2022-11-14.eu-gb.mybluemix.net/sensor>  
<https://node-red-runhw-2022-11-14.eu-gb.mybluemix.net/control?command=alarmon>  
<https://node-red-runhw-2022-11-14.eu-gb.mybluemix.net/control?command=sprinkleron>  
<https://node-red-runhw-2022-11-14.eu-gb.mybluemix.net/control?command=alarmoff>  
<https://node-red-runhw-2022-11-14.eu-gb.mybluemix.net/control?command=sprinkleroff>

Paste the links in the sensor and button blocks and the results of blocks of backend is shown



The final input using MIT app inventor is displayed:

The screenshot shows a mobile application interface titled "Screen1" with a green header bar. The status bar at the top displays the time "7:33 PM", signal strength, and battery level at "81%". The app's main title is "GAS LEAKAGE DETECTION AND ALERTING". Below the title, there are three input fields for sensor data: "TEMPERATURE LEVEL" with the value "45", "GAS LEVEL" with the value "98", and "HUMIDITY LEVEL" with the value "38". At the bottom of the interface, there are four buttons arranged in a 2x2 grid: "ALARM ON", "ALARM OFF", "SPRINKLER ON", and "SPRINKLER OFF". The bottom of the screen shows the standard Android navigation bar with back, home, and recent apps icons.

GAS LEAKAGE DETECTION AND ALERTING	
TEMPERATURE LEVEL	45
GAS LEVEL	98
HUMIDITY LEVEL	38
ALARM ON	ALARM OFF
SPRINKLER ON	SPRINKLER OFF