

SPRINT 2

TEAM ID	PNT2022TMID36752
PROJECT NAME	REAL-TIME RIVER WATER QUALITY MONITORING AND CONTROL SYSTEM
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CODE

<https://wokwi.com/projects/348635341987512915>

The screenshot displays the Wokwi web IDE interface. On the left, the 'sketch.ino' file is open, showing the following code:

```
56 Serial.print("temp:");
57 Serial.println(t);
58 Serial.print("humidity:");
59 Serial.println(h);
60
61 n = digitalRead(33);
62 s = digitalRead(25);
63 e = digitalRead(26);
64 w = digitalRead(27);
65
66 PublishData(t, h, n, s, e, w);
67 delay(1000);
68 if (!client.loop()) {
69   mqttconnect();
70 }
71 }
72
73
74
75 /*.....retrieving to Cloud.....*/
76
77 void PublishData(float temp, float humid, int n, int s, int e, int w) {
78   mqttconnect();//Function call for connecting to ibm
79   /*
80    | creating the String in in form JSon to update the data to ibm cloud
81    */
```

The right side of the IDE shows a 'Simulation' window with a visual representation of the ESP32 microcontroller and the DHT22 sensor module. Below the simulation, the output log displays the following data:

```
Publish ok
temp:55.20
humidity:78.50
Sending payload:
{"temp":55.20,"humidity":78.50,"North":0,"South":0,"East":0,"West":0}
Publish ok
```

The bottom of the image shows the Windows taskbar with the search bar and system tray icons, indicating the time is 07:50 PM on 18-11-2022.

<https://node-red-eheqi-2022-11-12.eu-gb.mybluemix.net/red/#flow/366dfb6a751f52c5>

The screenshot displays a Node-RED web interface in a browser. The main workspace shows a flow named 'Flow 1' with the following components:

- msg payload** node connected to two **function** nodes.
- The first **function** node is connected to a **Humidity** gauge node.
- The second **function** node is connected to a **temperature** gauge node.
- A **[get] /sensor** node is connected to an **http** node.
- The **http** node is connected to a **function** node.

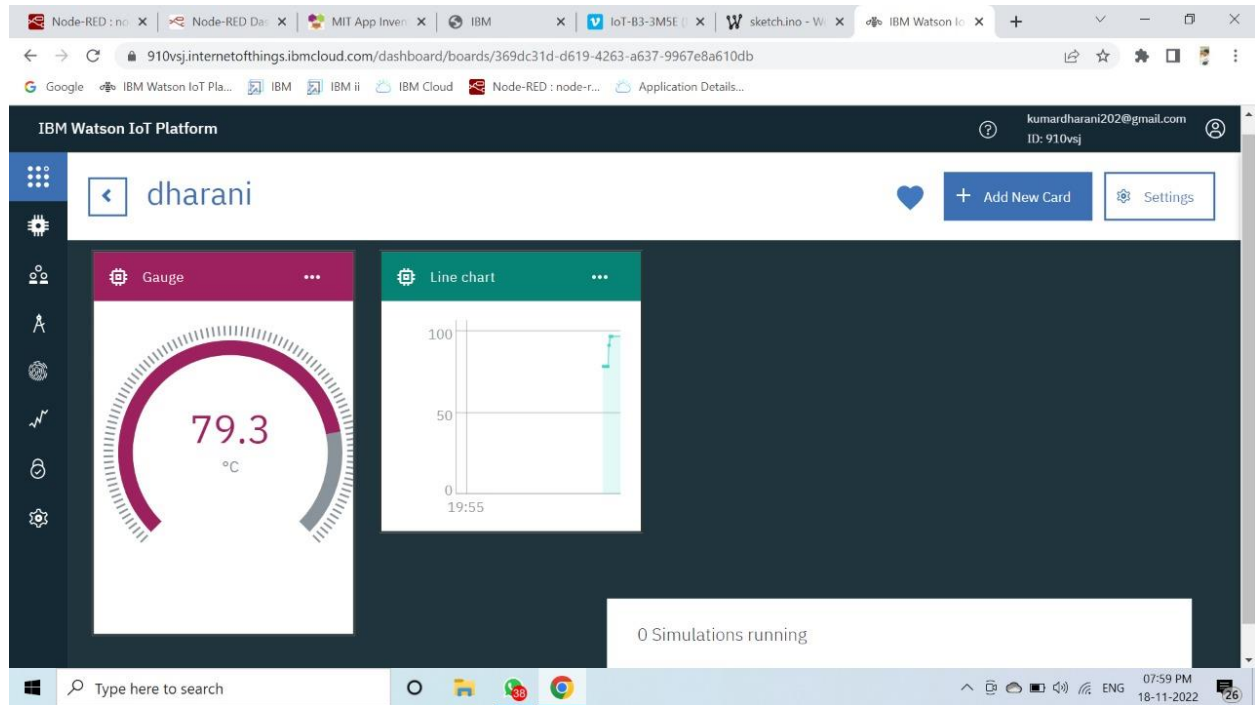
The left sidebar contains a list of available nodes: button, dropdown, switch, slider, numeric, text input, date picker, colour picker, form, text, gauge, chart, audio out, notification, ui control, and template.

The right sidebar shows the **debug** console with the following log entries:

```
let 2btpedemo123fdbdemo123evlDataFnfnjgon: msg payload: Object
* { temperature: 38.9, humidity: 69.5 }
11/18/2022, 8:37:31 PM node: 2da5e920b1cd029e
function: (error)
"TypeError: Cannot read properties of undefined
(reading 'temp')"
```

The bottom of the image shows a Windows taskbar with the search bar and system tray icons, including the date and time: 08:37 PM, 18-11-2022.

OUTPUT



URL REFERENCE

<https://wokwi.com/projects/348674569513468499>