

## **DELIVERY OF SPRINT – 3**

### **NODE RED CONNECTION TO IBM CLOUDANT**

<b>Date</b>	<b>10 November 2022</b>
<b>Team ID</b>	<b>92172019104055</b>
<b>Project Name</b>	<b>Smart Waste Management for Metropolitan Cities</b>

1. Node-RED Connection setup for data transmission from IBM Watson IOT platform to Node-RED dashboard.



esp32-blink.ino

diagram.json

libraries.txt

Library Manager

```

177
178
179
180
181
182   if(cm <= 25)
183   {
184     digitalWrite(21,HIGH);
185     String payload = "{\"High_Alert\":\"";
186     payload += cm;
187     payload += " }";
188     Serial.print("\n");
189     Serial.print("Sending payload: ");
190     Serial.println(payload);
191
192     if (client.publish(publishTopic, (char*) payload.c_str())) // if
193     {
194       Serial.println("Publish OK");
195     }
196   }
197   if(cm <= 50)
198   {
199     digitalWrite(22,HIGH);
200     String payload = "{\"Warning\":\"";
201     payload += cm ;
202     payload += " }";
203     Serial.print("\n");

```

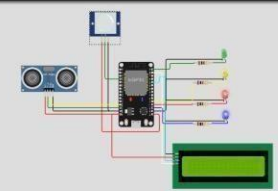
Simulation

00:35.846

99%

PIR Motion Sensor

Simulate motion



Sending distance: 26.94

Publish OK

Motion Detected

Lid Opened

High Alert!!!,Trash bin is about to be full

Lid Closed

- Data transfer to Watson IOT platform.
- Data transfer from IBM Watson IOT platform and wokwi to Node red.

Browse

Action

Device Types

Interfaces

Add Device +

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

Event	Value	Format	Last Received
data	{"Warning":28.95}	json	a few seconds ago
data	{"Warning":28.95}	json	a few seconds ago
data	{"Warning":49.98}	json	a minute ago
data	{"Warning":49.98}	json	a minute ago
data	{"Warning":11.03}	json	a minute ago



[illegible]

6. Data is stored in JSON format

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🗄️

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Log Out

sensor\_data > 0198213c192cb2c244cc2433f1802b91

{ } JSON

📖

🔔

✔ Save Changes Cancel

📎 Upload Attachment

🔄 Clone Document

🗑️ Delete

1 {

2 "id": "0198213c192cb2c244cc2433f1802b91",

3 "\_rev": "1-cde2dd17c519394dfeb774738c495f8b",

4 "topic": "iot-2/type/SWMSMC/id/ibmproject/evt/data/fmt/json",

5 "payload": {

6 | "Warning!!": "244.971eft"

7 },

8 "deviceId": "ibmproject",

9 "deviceType": "SWMSMC",

10 "eventType": "data",

11 "format": "json"

12 }