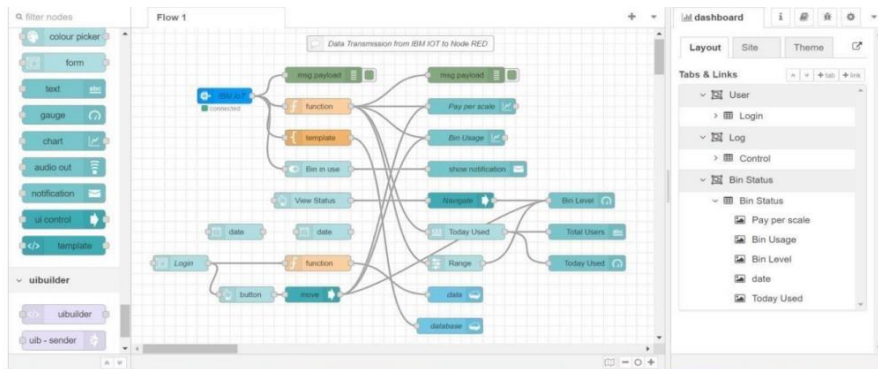
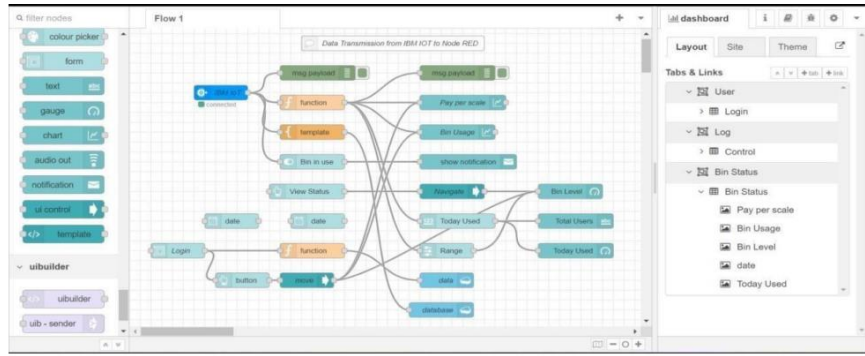


SPRINT 3

Date	7 November 2022
Team ID	PNT2022TMID26000
Project Name	Smart Waste Management System for Metropolitan cities

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



Simulate Wokwi connection to transmit data from wokwi account to IBM Watson IOT platform and then to Node Red dashboard.

```

esp32-4link.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.println(payload);
189     Serial.print("Sending payload: ");
190     Serial.println(payload);
191
192     if (client.publish(publishTopic, (char*) payload.c_str()))
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.println(payload);

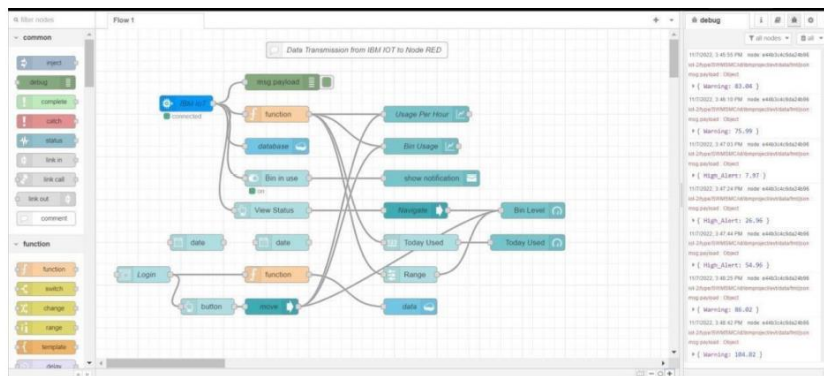
```

Data transfer to Watson IOT platform.

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

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



Storing database in IBM cloudant DB.

The screenshot shows the IBM Cloudant Databases dashboard. It lists four databases: login_credentials, noderedwjd20221105, sample, and sensor_data. Each database has columns for Name, Size, # of Docs, Partitioned, and Actions.

Name	Size	# of Docs	Partitioned	Actions
login_credentials	13.7 KB	111	No	[Icons for Add, Edit, Delete]
noderedwjd20221105	37.4 KB	4	No	[Icons for Add, Edit, Delete]
sample	59.4 KB	351	No	[Icons for Add, Edit, Delete]
sensor_data	15.7 KB	90	No	[Icons for Add, Edit, Delete]

Showing 1-4 of 4 databases. Databases per page: 20

Data is stored in JSON format

sensor_data > 0198213c192cb2c244cc2433f1802b91

Save ChangesCancel

Upload AttachmentClone DocumentDelete

1

```
2  "_id": "0198213c192cb2c244cc2433f1802b91",
3  "_rev": "1-c0628d17c519394afe6774738c495f80",
4  "topic": "iot-2/type/SWPHMC/1d/1bmproject/evt/data/fmt/json",
5  "payload": {
6    | "warning!!": "244.971left"
7  },
8  "deviceId": "1bmproject",
9  "deviceType": "SWPHMC",
10 "eventType": "data",
11 "format": "json"
12 }
```

Log Out

