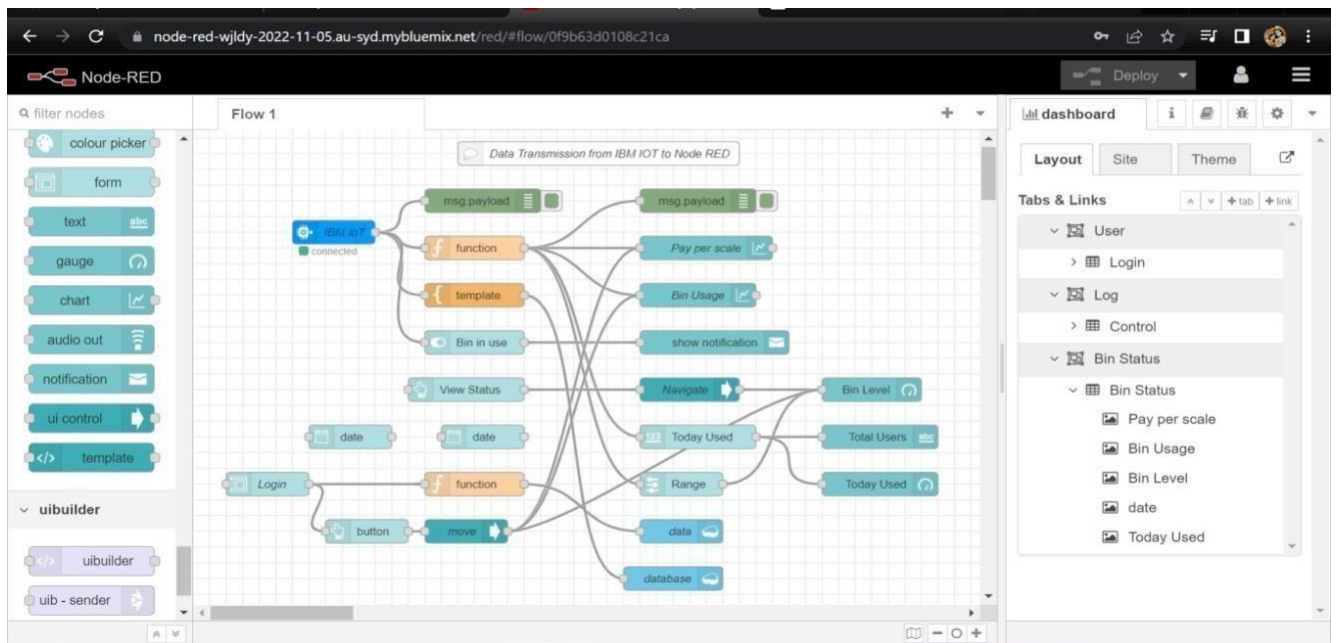
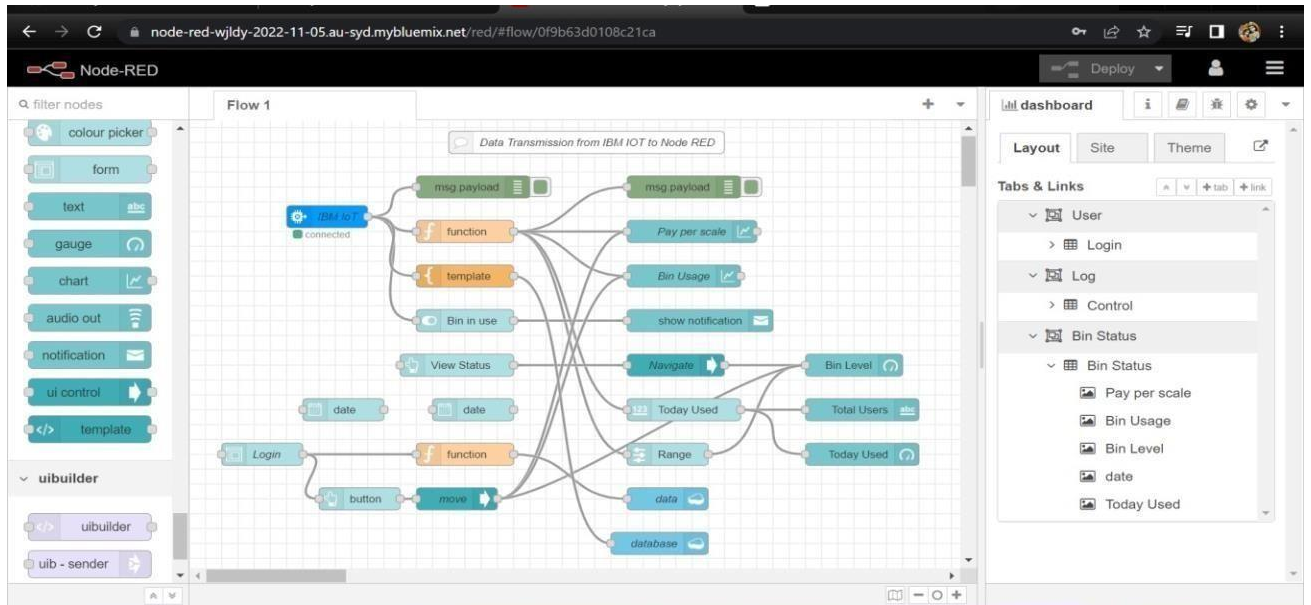


Delivery of Sprint – 3
Node Red Connection to IBM
Cloudant

Date	17 October 2022
Team ID	PNT2022TMID0 5219
Project Name	Project – Smart Waste Management system for metropolitan cities
Maximum Marks	4 Marks

1. Node
-RED

Connection setup for data transmission from IBM Watson IOTplatform to
Node-REDdashboard.



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

The screenshot shows the Wokwi IDE interface. On the left, the code for `esp32-blink.ino` is displayed, featuring logic for sending distance data to an IBM Watson IoT platform. On the right, the simulation window shows a breadboard circuit with an ESP32, a PIR motion sensor, and a serial monitor. The serial monitor output includes:

```

Sending distance: 26.94
Publish OK
Motion Detected
Lid Opened
High Alert!!!,Trash bin is about to be full
Lid Closed

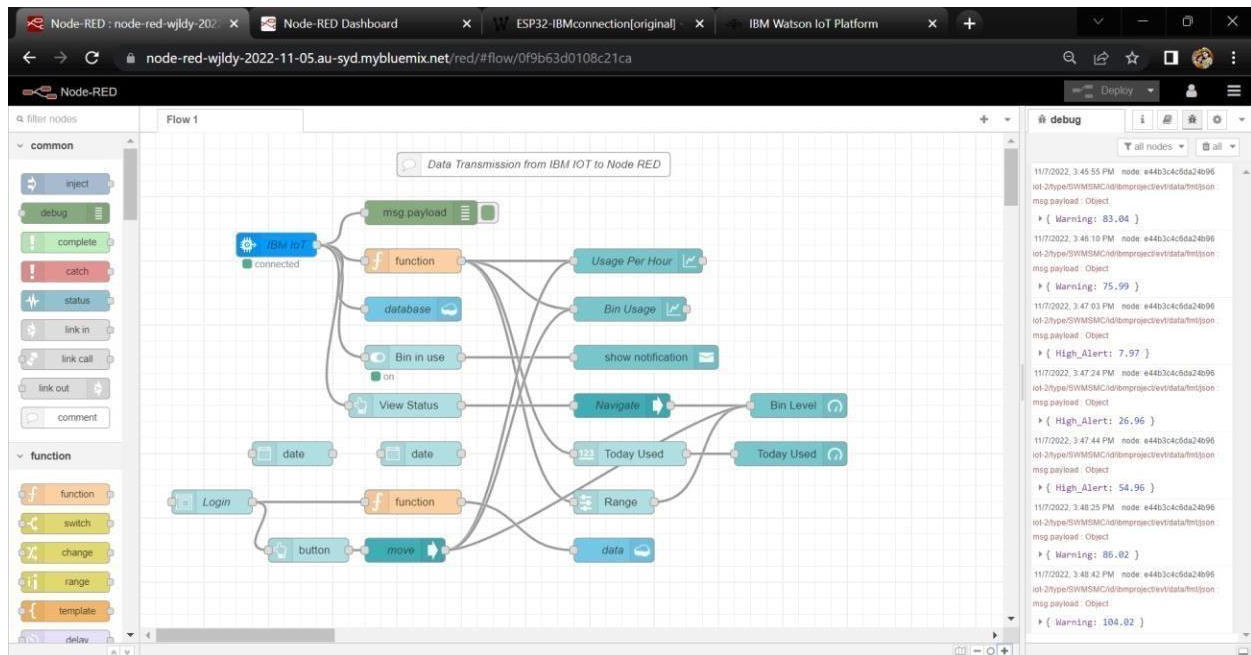
```

3.Data transfer to Watson IOT platform.

The screenshot displays the IBM Watson IoT Platform dashboard. The 'Browse' tab is selected, showing a table of recent events. The table has four columns: Event, Value, Format, and Last Received.

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

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



5. Storing database in IBM cloudant DB.

ee6aeb4a-3006-499e-940e-af19edf953bf-bluemix.cloudant.com/dashboard.html#/all_dbs

Databases

Your Databases

Name	Size	# of Docs	Partitioned	Actions
login_credentials	13.7 KB	111	No	
noderedwjldy20221105	37.4 KB	4	No	
sample	59.4 KB	351	No	
sensor_data	15.7 KB	90	No	

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

id	key	value
0198213c192cb2c244cc2433f1...	0198213c192cb2c244cc2433f1...	{"rev": "1-cde2dd17c519394df...",
0198213c192cb2c244cc2433f1...	0198213c192cb2c244cc2433f1...	{"rev": "1-d26c5b40891e13c6c...",
0198213c192cb2c244cc2433f1...	0198213c192cb2c244cc2433f1...	{"rev": "1-cde2dd17c519394df...",
0198213c192cb2c244cc2433f1...	0198213c192cb2c244cc2433f1...	{"rev": "1-f96eb0460bc16cfab0...",
1a921f21cbe229b86f599acb45...	1a921f21cbe229b86f599acb45...	{"rev": "1-7226f08794cd47b7c...",
1a921f21cbe229b86f599acb45...	1a921f21cbe229b86f599acb45...	{"rev": "1-1bbdd9a985bd56cf9...",
20a854e5445fa818e6c1de049...	20a854e5445fa818e6c1de049...	{"rev": "1-7226f08794cd47b7c...",
20a854e5445fa818e6c1de049...	20a854e5445fa818e6c1de049...	{"rev": "1-3ad288ecad57f039e...",
20a854e5445fa818e6c1de049...	20a854e5445fa818e6c1de049...	{"rev": "1-1bbdd9a985bd56cf9...",
298ed6f9d9b3h815f5ac7c061e...	298ed6f9d9b3h815f5ac7c061e...	{"rev": "1-4e7240f6e5307a1b9...",

6.Data is stored in JSON format

```

1 {
2   "_id": "0198213c192cb2c244cc2433f1802b91",
3   "_rev": "1-cde2dd17c519394df774738c495f8b",
4   "topic": "iot-2/type/SWMSMC/id/ibmproject/evt/data/fmt/json",
5   "payload": {
6     "Warning!!!: 244.971left"
7   },
8   "deviceId": "ibmproject",
9   "deviceType": "SWMSMC",
10  "eventType": "data",
11  "format": "json"
12 }

```

