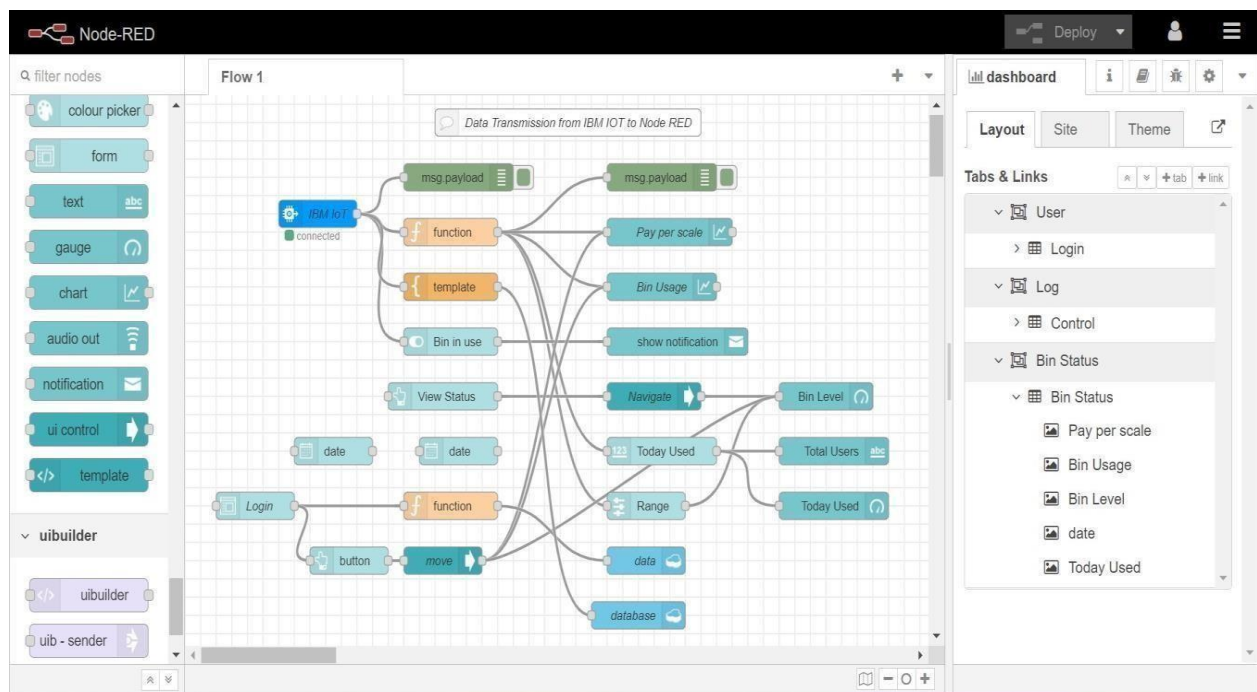


## Sprint – 4

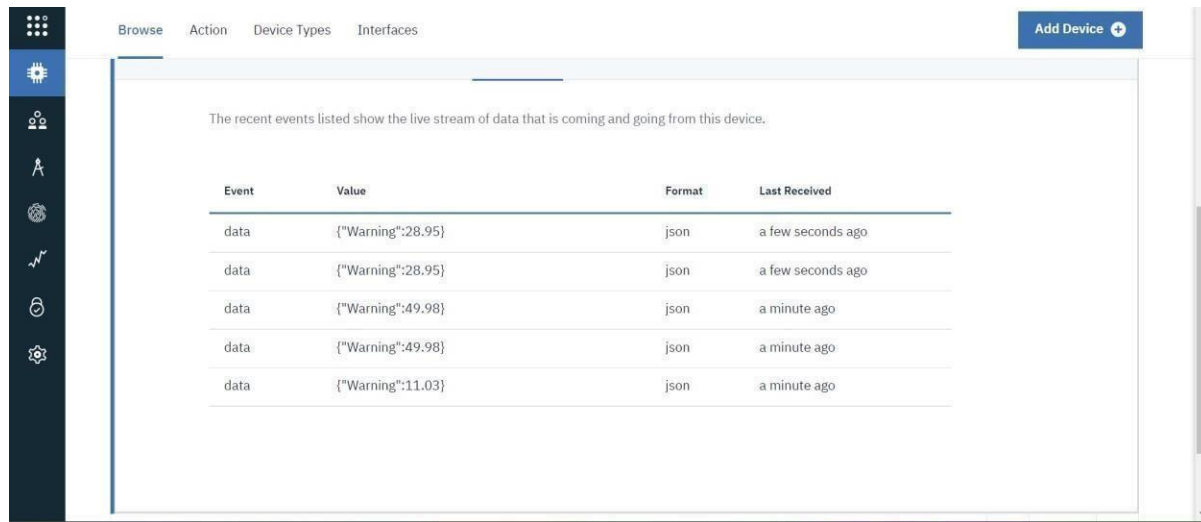
Date	18 November 2022
Team ID	PNT2022TMID15286
Project Name	Project – Smart Waste Management for Metropolitan Cities

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





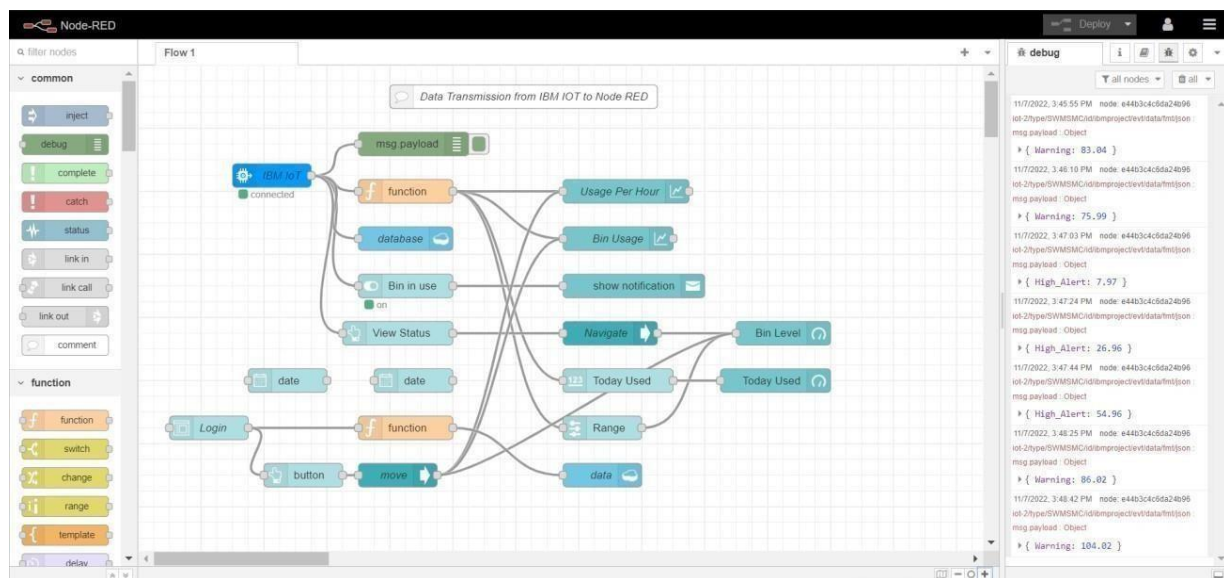
### 3. Data transfer to Watson IOT platform.



The screenshot shows the IBM Watson IoT Platform interface. At the top, there are tabs for 'Browse', 'Action', 'Device Types', and 'Interfaces'. A blue 'Add Device' button is in the top right. Below the tabs, a message states: 'The recent events listed show the live stream of data that is coming and going from this device.' Below this message is a table with the following data:

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.

The screenshot shows the IBM Cloudant Databases interface. At the top, there's a 'Databases' header with a 'Database name' dropdown, a 'Create Database' button, and icons for JSON, a book, and a bell. Below this is a section titled 'Your Databases' containing a table with the following data:

Name	Size	# of Docs	Partitioned	Actions
login_credentials	13.7 KB	111	No	[Icons: Edit, Lock, Delete]
noderedwjlidy20221105	37.4 KB	4	No	[Icons: Edit, Lock, Delete]
sample	59.4 KB	351	No	[Icons: Edit, Lock, Delete]
sensor_data	15.7 KB	90	No	[Icons: Edit, Lock, Delete]

At the bottom, it says 'Showing 1-4 of 4 databases.' and 'Databases per page: 20' with a dropdown arrow. There's also a 'Log Out' button in the bottom left corner.

The screenshot shows the IBM Cloudant interface for the 'sensor\_data' database. On the left, there's a sidebar with 'All Documents' (selected), 'Query', 'Permissions', 'Changes', and 'Design Documents'. The main area has a 'Document ID' dropdown, 'Options' gear icon, JSON icon, book icon, and bell icon. Below this is a 'Create Document' button. The table below shows a list of documents with columns 'id', 'key', and 'value'. The first few rows are truncated, showing only the first part of the document IDs and keys. The last row shows a full document ID and key.

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...
298ed6fhd9b3b815f5ac7c061e...	298ed6fhd9b3b815f5ac7c061e...	{ "rev": "1-4e7240f6e5307a1h9...

At the bottom, it says 'Showing document 1 - 20.' and 'Documents per page: 20' with a dropdown arrow. There's also a 'Log Out' button in the bottom left corner.

## 6. Data is stored in JSON format

↔

sensor\_data > 0198213c192cb2c244cc2433f1802b91

{ } JSON

✓ Save Changes

Cancel

Upload Attachment

Clone Document

Delete

1- {

2    "\_id": "0198213c192cb2c244cc2433f1802b91",

3    "\_rev": "1-cde2dd17c519394dfcb774730c495f8b",

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

5    "payload": {

6      "Warning!": "244.97left"

7    },

8    "deviceId": "ibmproject",

9    "deviceType": "SWMSMC",

10   "eventType": "data",

11   "format": "json"

12 }

Log Out

## 7. Web UI

≡ Log

Log

Bin Status

Control

Bin in use

Range

Today Used

0

date

06/11/2022

VIEW STATUS

≡ Log

Control

Bin in use

Range

Today Used

0

date

06/11/2022

VIEW STATUS

