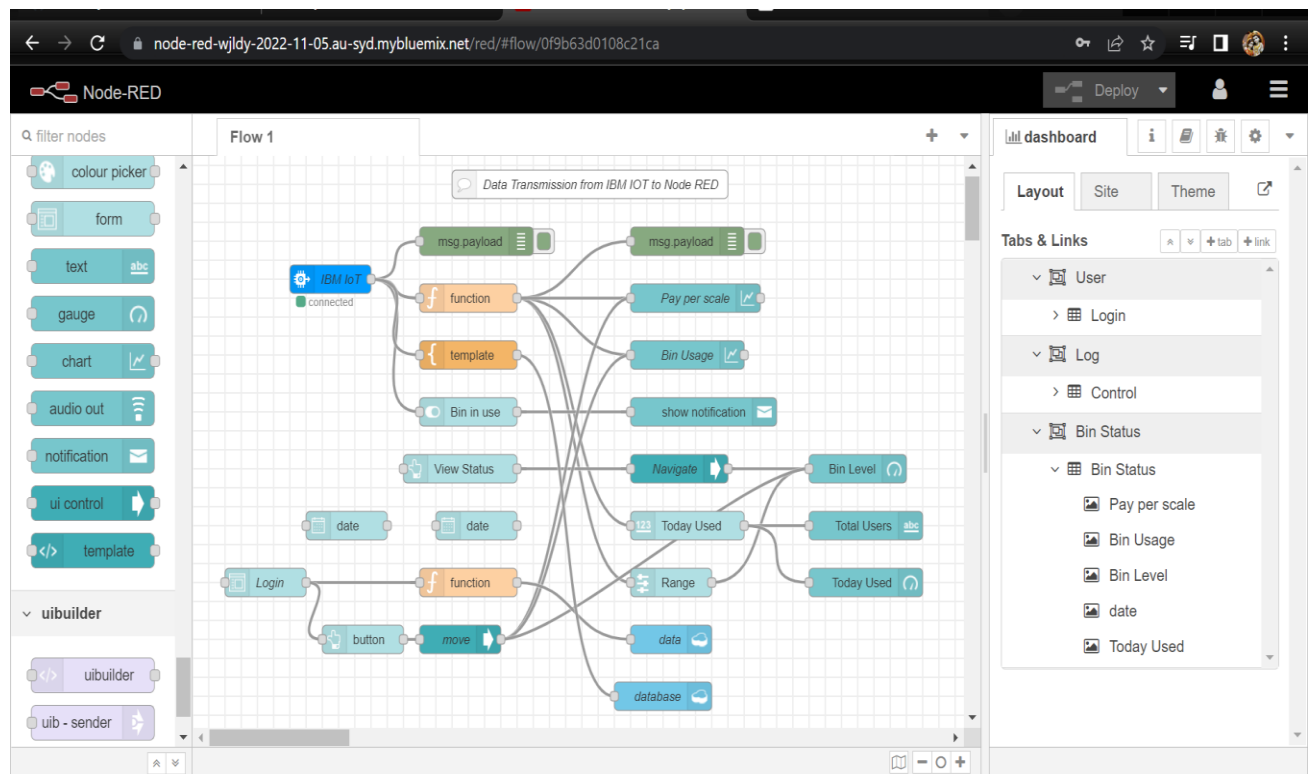


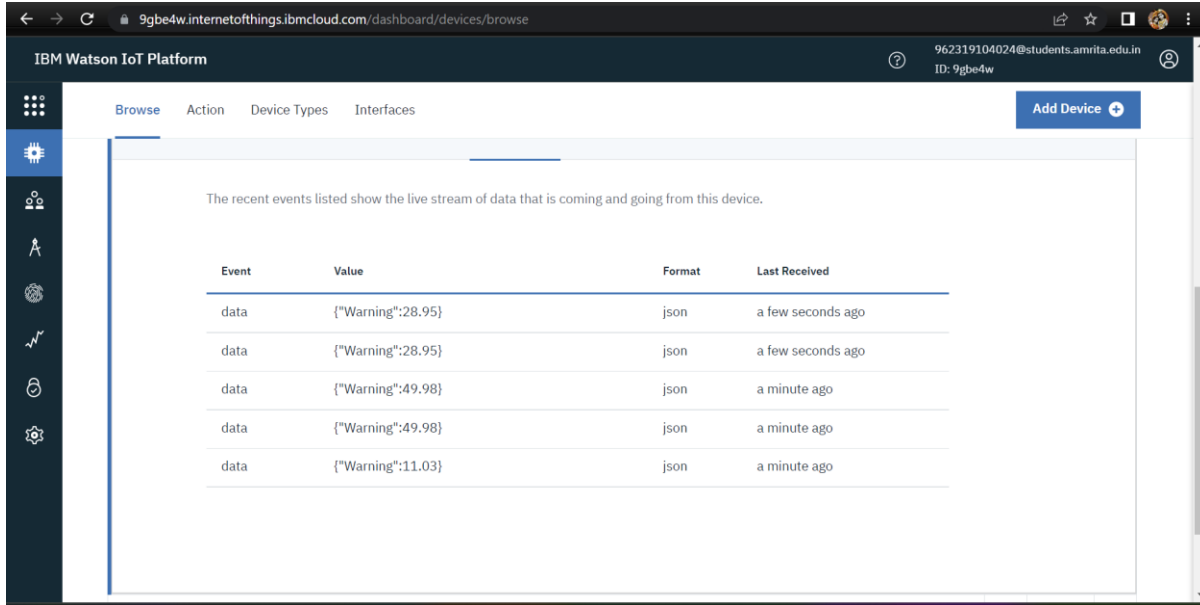
Web UI Design and Deploy

DATE	5 NOVEMBER 2022
TEAM ID	PNT2022TMID01026
PROJECT NAME	SMART WASTE MANAGEMENT FOR METROPOLITAN CITIES-IOT

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



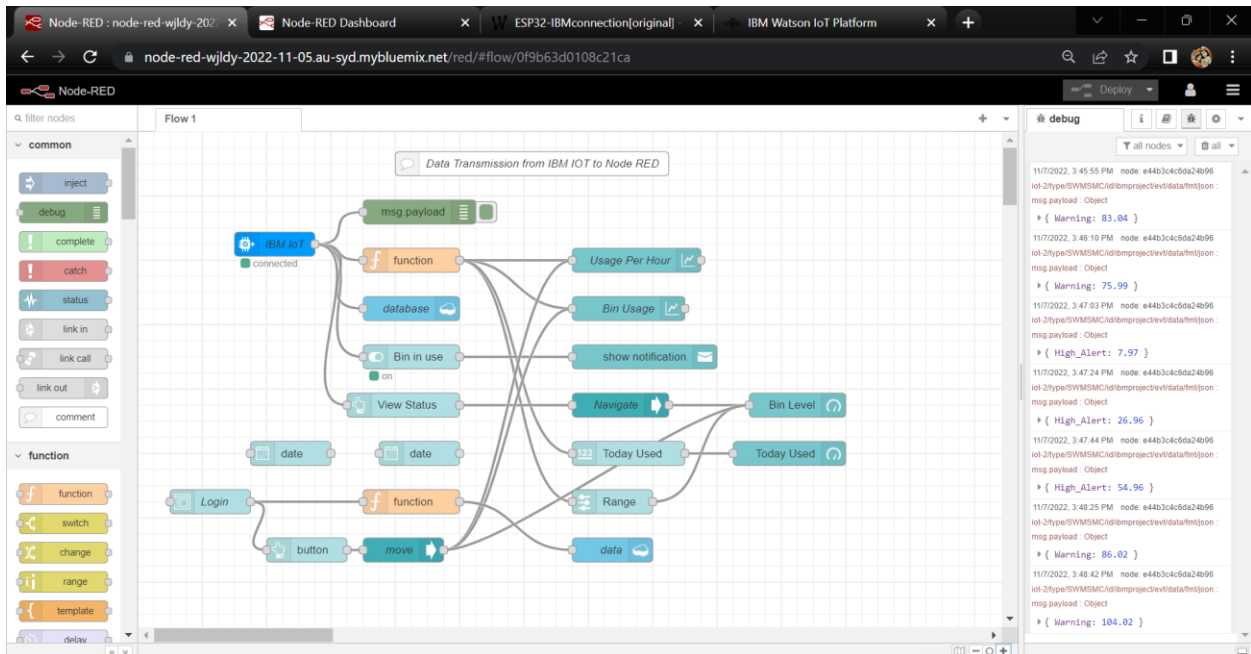
3. Data transfer to Watson IOT platform.



The screenshot shows the IBM Watson IoT Platform dashboard. The top navigation bar includes "Browse", "Action", "Device Types", and "Interfaces". A sidebar on the left contains various icons for navigation. The main content area displays a table of recent events. The table has four columns: "Event", "Value", "Format", and "Last Received". The events listed are all "data" events with a "Warning" value, in "json" format, received "a few seconds ago" or "a minute ago".

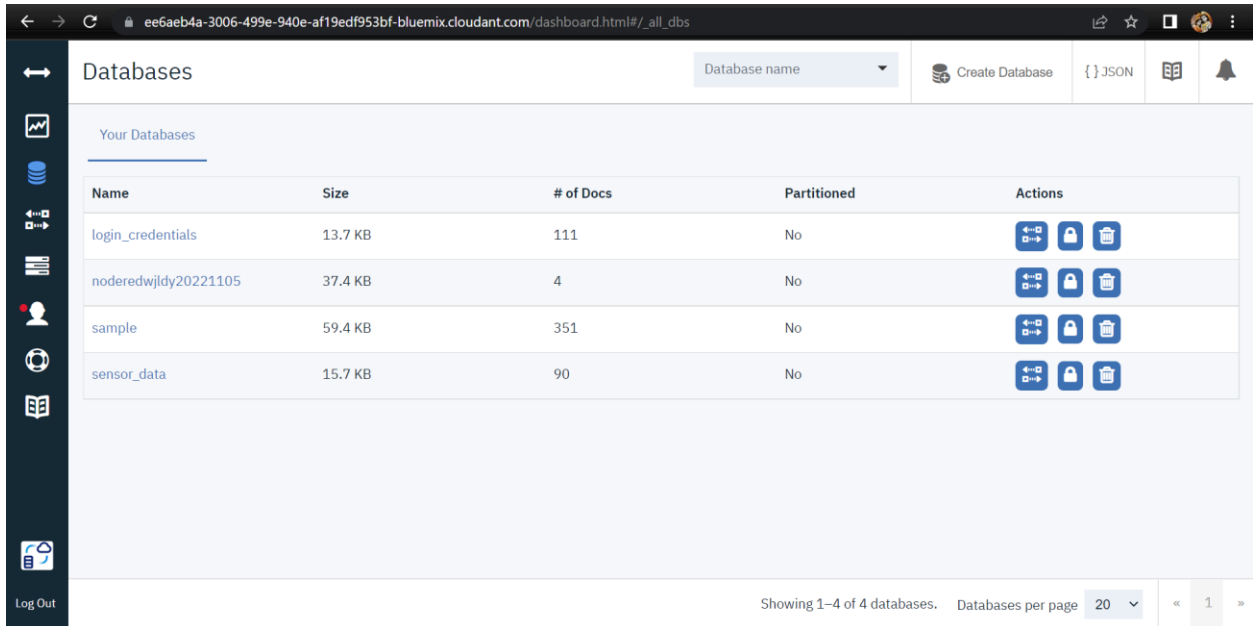
Event	Value	Format	Last Received
data	{"Warning":28.95}	json	a few seconds ago
data	{"Warning":28.95}	json	a few seconds ago
data	{"Warning":49.98}	json	a minute ago
data	{"Warning":49.98}	json	a minute ago
data	{"Warning":11.03}	json	a minute ago

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



The screenshot shows the Node-RED dashboard with a flow titled "Data Transmission from IBM IOT to Node RED". The flow starts with an "IBM IoT" node, which connects to a "msg payload" node. From there, the data is processed by a "function" node, which then branches into several output nodes: "Usage Per Hour", "Bin Usage", "show notification", "Navigate", "Bin Level", "Today Used", "Range", and "data". The flow also includes a "Login" node, a "button" node, and a "move" node. The right sidebar shows the "debug" console with a log of messages received from the IBM IoT platform, including warning and high alert notifications.

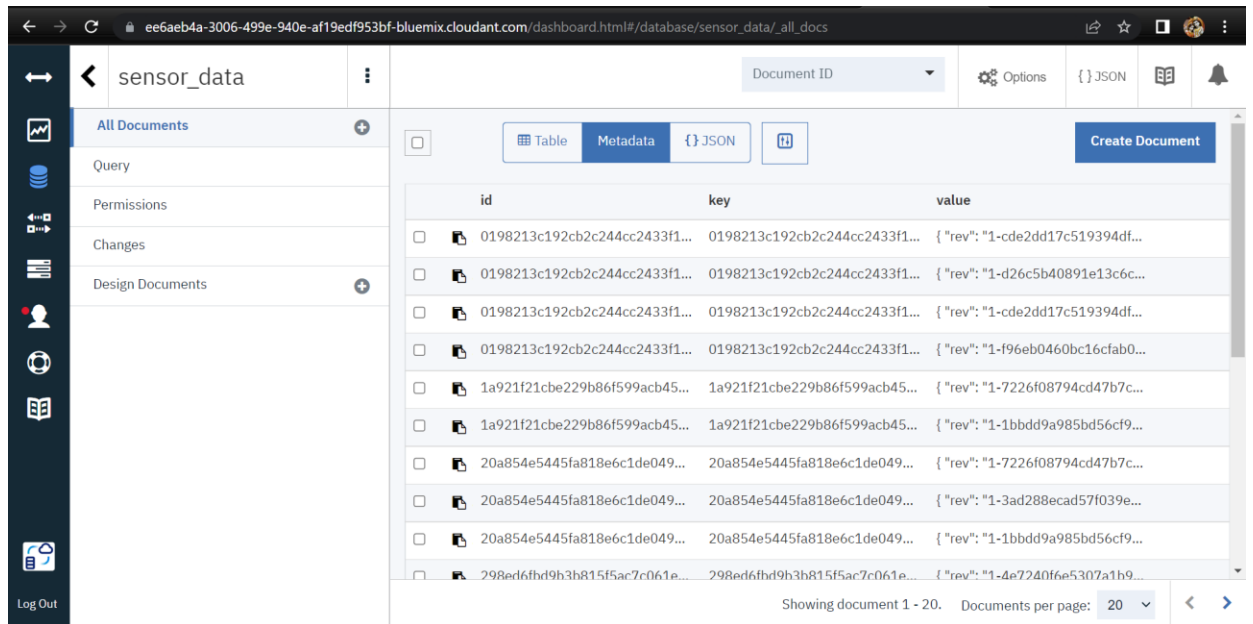
5 . Storing database in IBM cloudant DB.



The screenshot shows the IBM Cloudant Databases dashboard. The URL is `ee6aeb4a-3006-499e-940e-af19edf953bf-bluemix.cloudant.com/dashboard.html#/all_dbs`. The dashboard displays a table of databases under the heading "Your Databases".

Name	Size	# of Docs	Partitioned	Actions
login_credentials	13.7 KB	111	No	[Icons for view, edit, delete]
noderedwjldy20221105	37.4 KB	4	No	[Icons for view, edit, delete]
sample	59.4 KB	351	No	[Icons for view, edit, delete]
sensor_data	15.7 KB	90	No	[Icons for view, edit, delete]

At the bottom, it says "Showing 1-4 of 4 databases. Databases per page: 20".



The screenshot shows the IBM Cloudant document view for the "sensor_data" database. The URL is `ee6aeb4a-3006-499e-940e-af19edf953bf-bluemix.cloudant.com/dashboard.html#/database/sensor_data/all_docs`. The view displays a table of documents with columns "id", "key", and "value".

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": "1-4e7240f6e5307a1b9..." }

At the bottom, it says "Showing document 1 - 20. Documents per page: 20".

6. Data is stored in JSON format

ee6aeb4a-3006-499e-940e-af19edf953bf-bluemix.cloudant.com/dashboard.html#database/sensor_data/0198213c192cb2c244cc2433f1802b91

sensor_data > 0198213c192cb2c244cc2433f1802b91

Save Changes Cancel Upload Attachment Clone Document Delete

```
1-  
2  "_id": "0198213c192cb2c244cc2433f1802b91",  
3  "_rev": "1-cde2dd17c519394dfeb774730c495f8b",  
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 }
```

Log Out

7. Web UI

node-red-wjldy-2022-11-05.au-syd.mybluemix.net/ui/#/!0?socketid=mTvbzmznbI9ri5aUmAACX

Log

Log Bin Status

Control

Bin in use

Range

Today Used 0

date 06/11/2022

VIEW STATUS

