

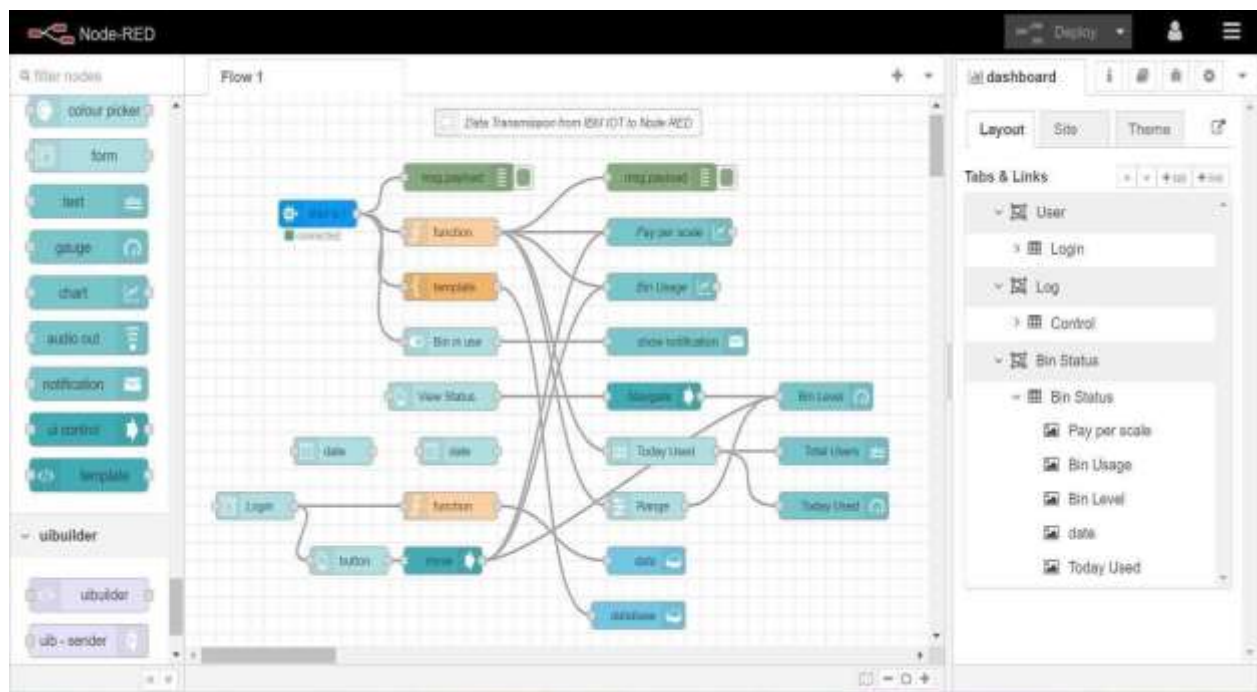
Delivery of Sprint – 4

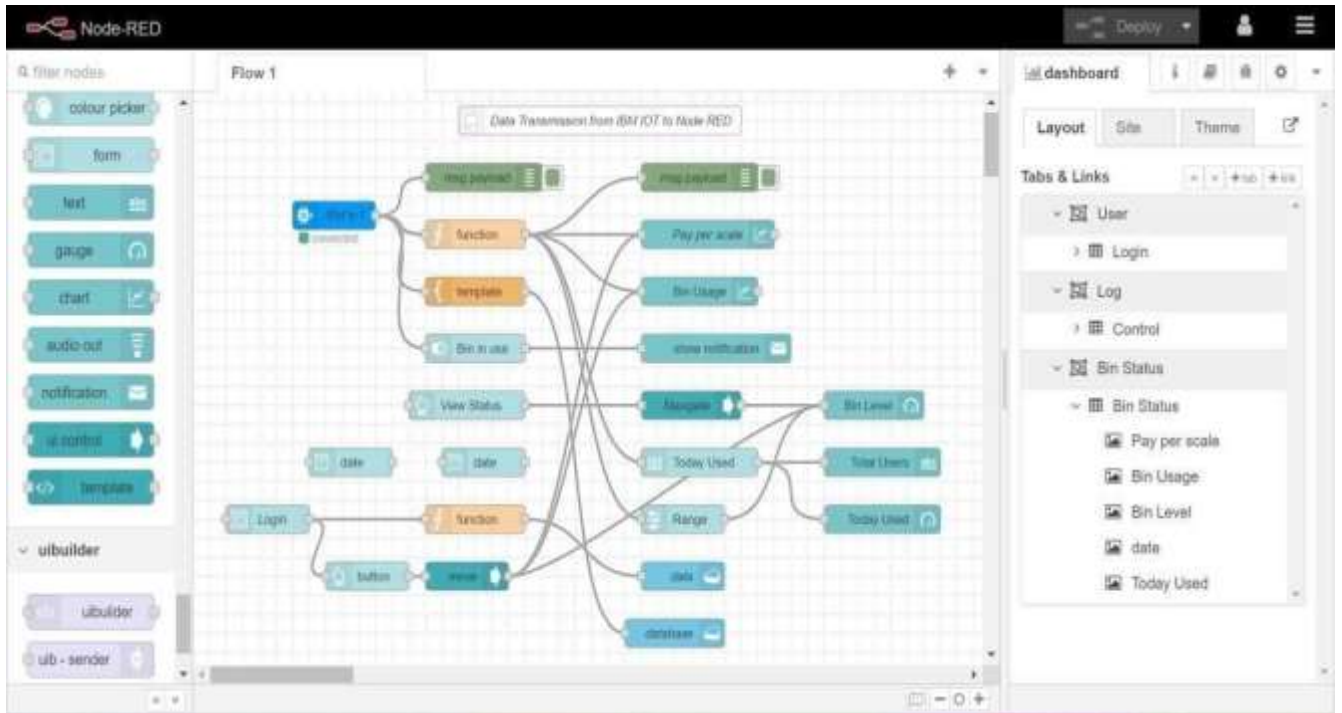
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|--------------|--|------------------|
| Date | Web UI Design and Deploy | 10 November 2022 |
| Team ID | PNT2022TMID01883 | |
| Project Name | Smart Waste Management for Metropolitan Cities | |

1. N

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

77





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

esp32-blink.ino

diagram.json

libraries.txt

Library Manager

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Simulation

00:35.846

99%

PIR Motion Sensor

Simulate motion

Sending distance: 26.94

Publish OK

Motion Detected

Lid Opened

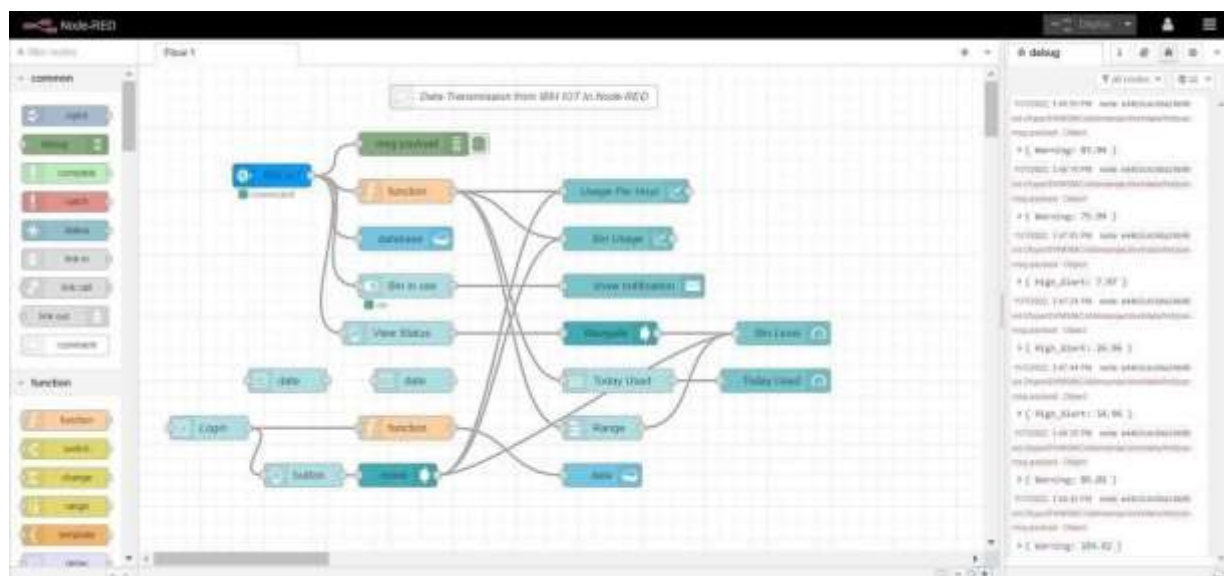
High Alert!!!,Trash bin is about to be full

Lid Closed


3. Data transfer to Watson IOT platform.

| Add Device | | | |
|--|---------------------|--------------|-------------------|
| Browse | Action | Device Types | Interfaces |
| 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":49.99}] | json | a minute ago |
| data | [{"Warning":11.83}] | json | a minute ago |

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

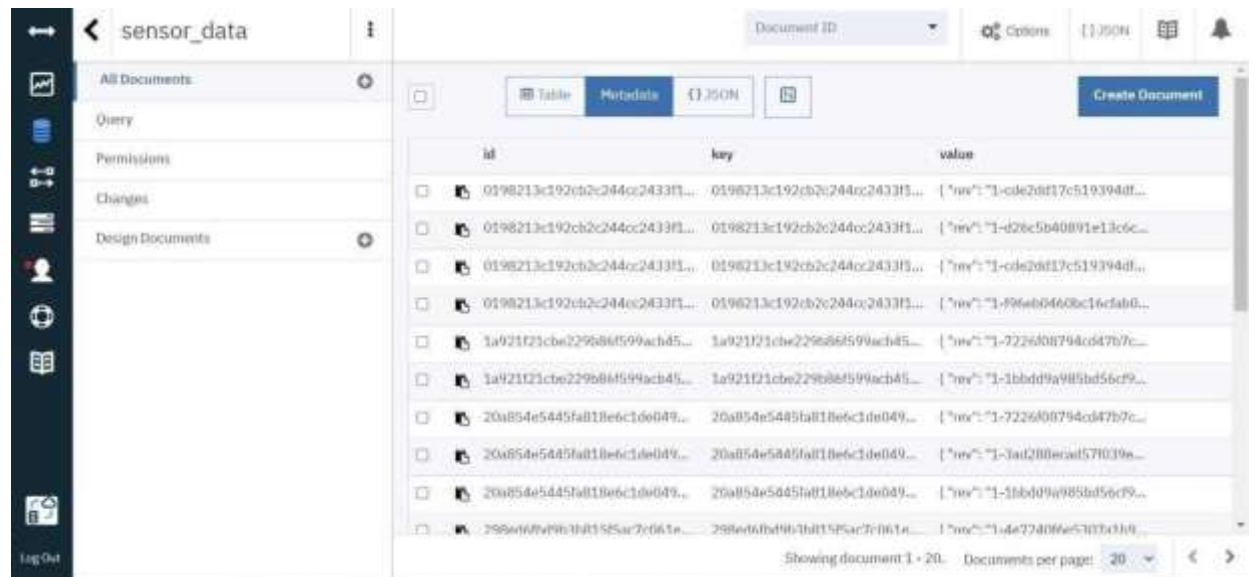


5 . Storing database in IBM cloudant DB.



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 a 'JSON' icon. Below this is a table titled 'Your Databases' with columns: Name, Size, # of Docs, Partitioned, and Actions. The table lists four databases: 'login_credentials' (13.7 KB, 111 docs, not partitioned), 'nodemdwjdy20221105' (37.4 KB, 4 docs, not partitioned), 'sample' (59.4 KB, 351 docs, not partitioned), and 'sensor_data' (15.7 KB, 90 docs, not partitioned). Each database has three action icons: a list icon, a lock icon, and a delete icon. At the bottom, it says 'Showing 1-4 of 4 databases. Databases per page: 20'.

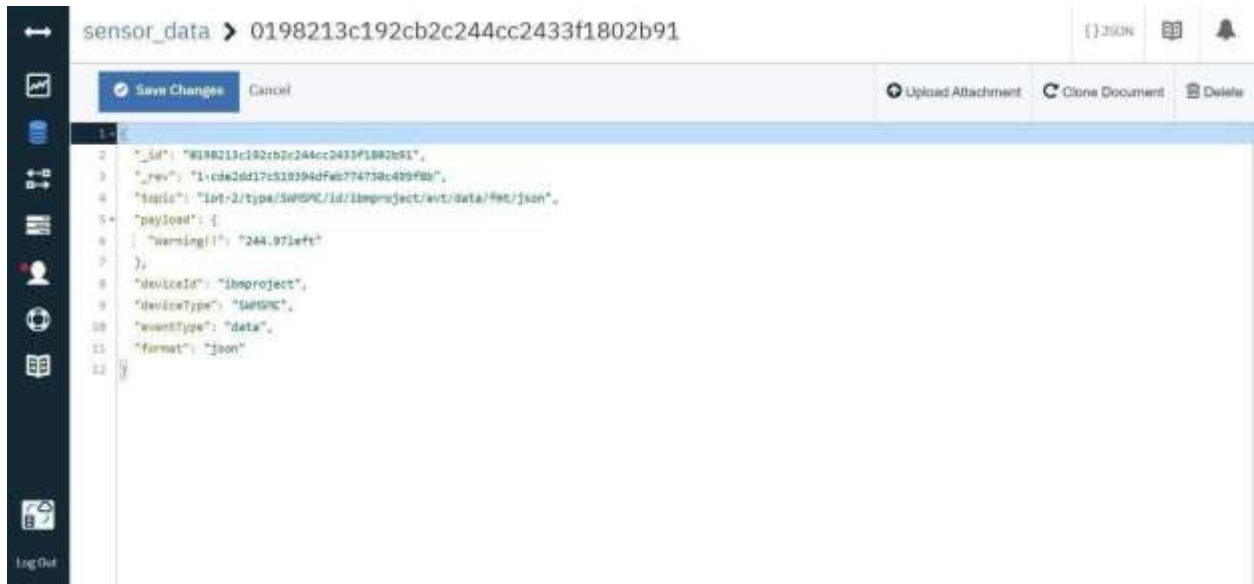
| Name | Size | # of Docs | Partitioned | Actions |
|--------------------|---------|-----------|-------------|---------|
| login_credentials | 13.7 KB | 111 | No | [Icons] |
| nodemdwjdy20221105 | 37.4 KB | 4 | No | [Icons] |
| sample | 59.4 KB | 351 | No | [Icons] |
| sensor_data | 15.7 KB | 90 | No | [Icons] |



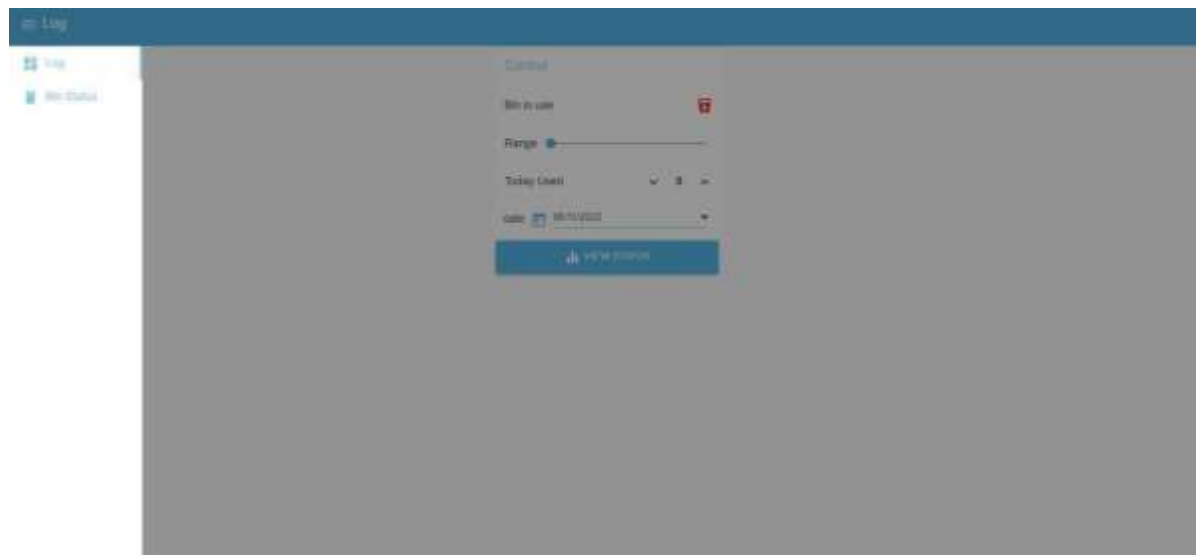
The screenshot shows the IBM Cloudant 'sensor_data' document view. The left sidebar has tabs for 'All Documents', 'Query', 'Permissions', 'Changes', and 'Design Documents'. The main area shows a table with columns: id, key, and value. The table lists 10 documents, each with a unique ID and a JSON value. At the bottom, it says 'Showing document 1 - 20. Documents per page: 20'.

| id | key | value |
|---------------------------------|---------------------------------|-----------------------------------|
| 0198213c192cb2c244cc2433f1... | 0198213c192cb2c244cc2433f1... | { "rev": "1-cde2df17c519394df... |
| 0198213c192cb2c244cc2433f1... | 0198213c192cb2c244cc2433f1... | { "rev": "1-d26c5b40891e13c6c... |
| 0198213c192cb2c244cc2433f1... | 0198213c192cb2c244cc2433f1... | { "rev": "1-cde2df17c519394df... |
| 0198213c192cb2c244cc2433f1... | 0198213c192cb2c244cc2433f1... | { "rev": "1-996eb0460bc16cfab0... |
| 1a921f21cbe229b86f599ach45... | 1a921f21cbe229b86f599ach45... | { "rev": "1-7226d08794cd47b7c... |
| 1a921f21cbe229b86f599ach45... | 1a921f21cbe229b86f599ach45... | { "rev": "1-1bbdd9a985bd56cf9... |
| 20a854e5445fab18e6c1de049... | 20a854e5445fab18e6c1de049... | { "rev": "1-7226d08794cd47b7c... |
| 20a854e5445fab18e6c1de049... | 20a854e5445fab18e6c1de049... | { "rev": "1-3a1200ecad57f039e... |
| 20a854e5445fab18e6c1de049... | 20a854e5445fab18e6c1de049... | { "rev": "1-1bbdd9a985bd56cf9... |
| 2989e6f6f9b3b1f15f5ac7c7b61e... | 2989e6f6f9b3b1f15f5ac7c7b61e... | { "rev": "1-4e72d06e5303cd1b9... |

6. Data is stored in JSON format



7. Web UI



Log

Control

Bin in use

Range

Today Used

date

VIEW STATUS

