

## Sprint Delivery – 2

|              |   |
|--------------|---|
| Date         | 09 November 2022                        |
| Team ID      | PNT2022TMID43416                        |
| Project Name | Project - SMART WASTE MANAGEMENT SYSTEM |

### Connecting IoT Simulator to IBM Watson IoT Platform:

Give the credentials of your device in IBM Watson IoT Platform. Click on connect My credentials given to simulator are:

Organization ID: 8wd932

Device Type: Node\_Mcu

Device ID: 123456789

Authentication Method: use-token-auth

Authentication Token: 123456789

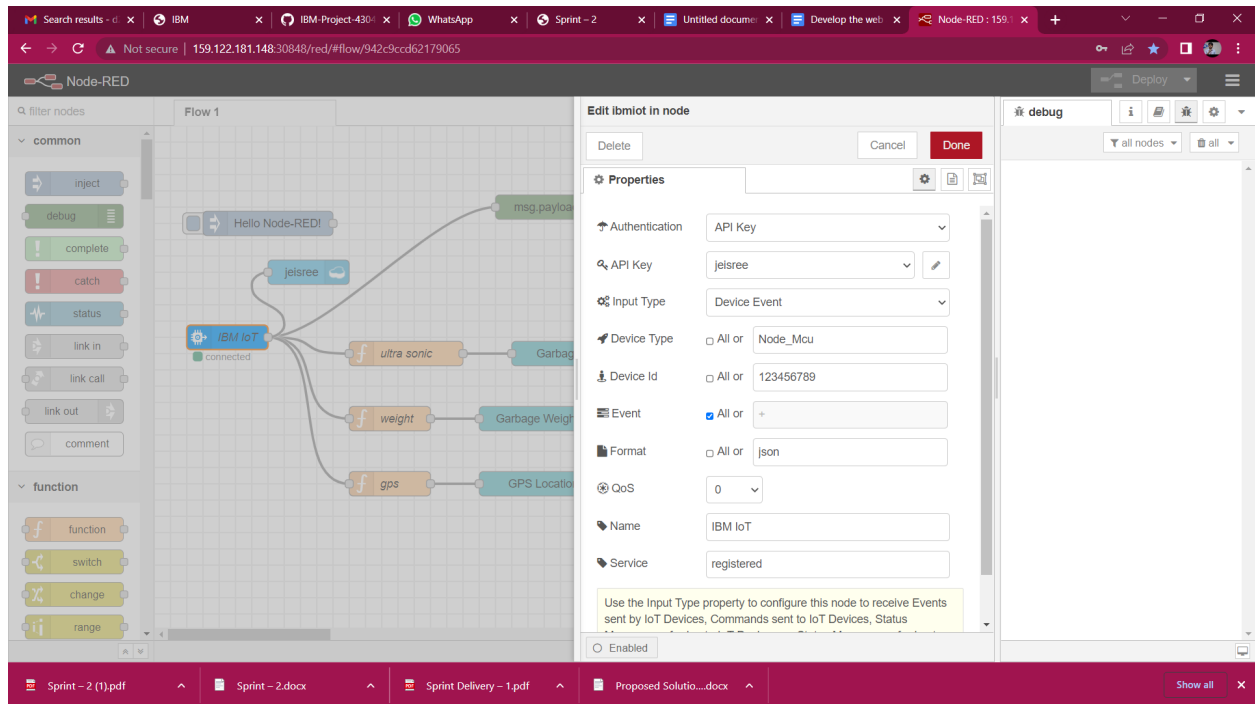
For initial testing , a node MCU device is created in IBM Watson IOT platform .Further the simulation is made run and Json data is seen in recent events of the same device.

The screenshot displays the IBM Watson IoT Platform interface. The top navigation bar includes tabs for 'Browse', 'Action', 'Device Types', and 'Interfaces'. A search bar is present with the text 'Search by Device ID'. Below the navigation bar, a table lists devices. The first device is '123456789', which is 'Connected' and of type 'Node\_Mcu'. It was added on 'Nov 9, 2022 8:21 PM'. A dropdown menu for this device shows details under the 'Identity' tab: Device ID (123456789), Device Type (Node\_Mcu), Date Added (Nov 9, 2022 8:21 PM), Added By (d201602@psgitech.ac.in), and Connection Status (Connected). The connection status details include 'Connection Time: Nov 10, 2022 8:22 PM' and 'Client Address: 157.51.89.189 SecureToken'. The bottom of the page shows 'Items per page: 50' and '1-1 of 1 item'.

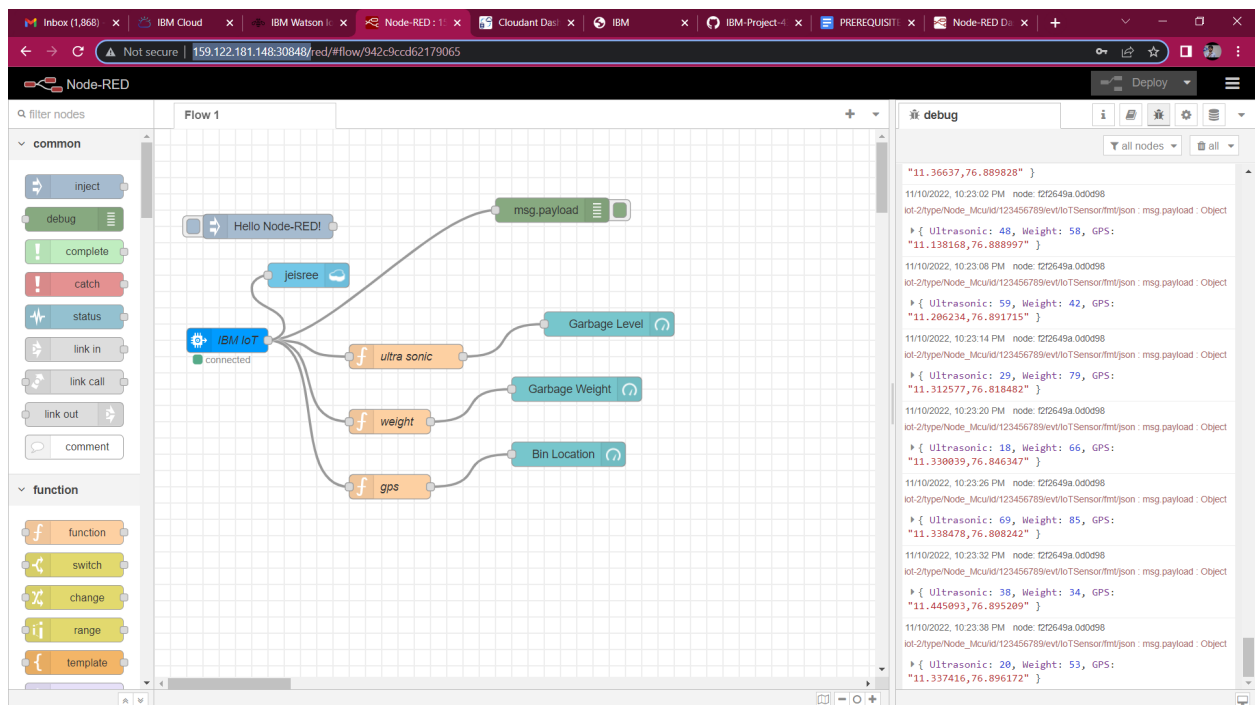
| Device ID | Status    | Device Type | Class ID | Date Added          | Descriptive Location |
|-----------|-----------|-------------|----------|---------------------|----------------------|
| 123456789 | Connected | Node_Mcu    | Device   | Nov 9, 2022 8:21 PM |                      |

| Identity          | Device Information                        | Recent Events | State | Logs |
|-------------------|---|---------------|-------|------|
| Device ID         | 123456789                                 |               |       |      |
| Device Type       | Node_Mcu                                  |               |       |      |
| Date Added        | Nov 9, 2022 8:21 PM                       |               |       |      |
| Added By          | d201602@psgitech.ac.in                    |               |       |      |
| Connection Status | Connected                                 |               |       |      |
|                   | Connection Time: Nov 10, 2022 8:22 PM     |               |       |      |
|                   | Client Address: 157.51.89.189 SecureToken |               |       |      |

For the next process, the randomly generated values should be displayed in Node Red. So the Node red is configured.



## Configuring Node-RED:



- ☐ Once it is connected, Node-Red receives data from the device. Display the data using a debug node for verification. Connect the function node and write the Java script code to get each reading separately.
- ☐ The Java script code for the function node is:  

```
msg.payload=msg.payload.Ultrasonic;
global.set('u',msg.payload)
return msg;
```
- ☐ Finally connect Gauge nodes from the dashboard to see the data in UI.

