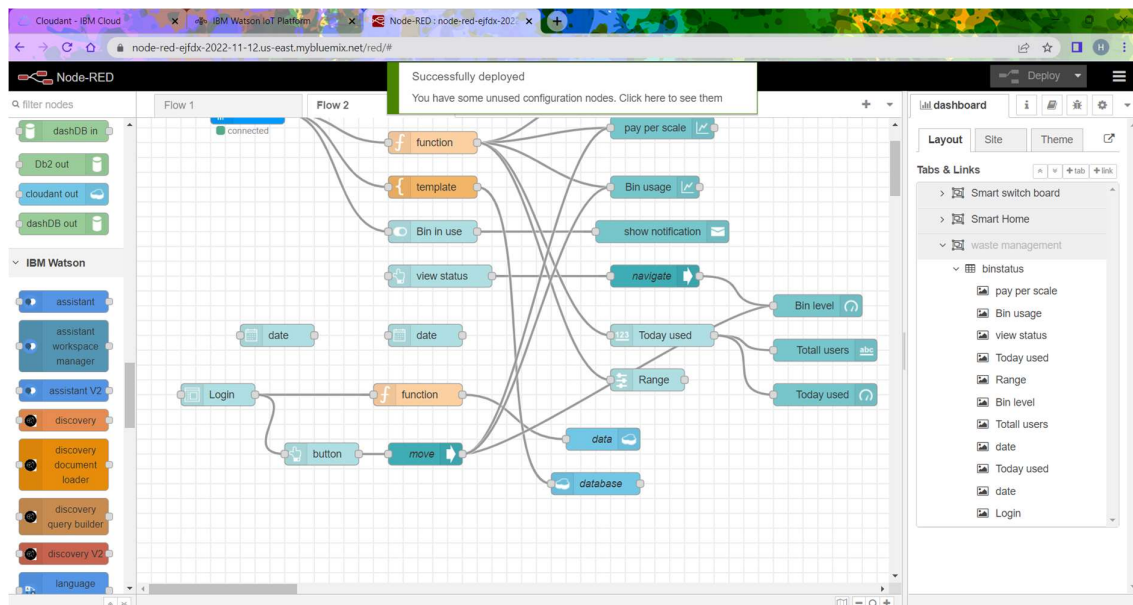
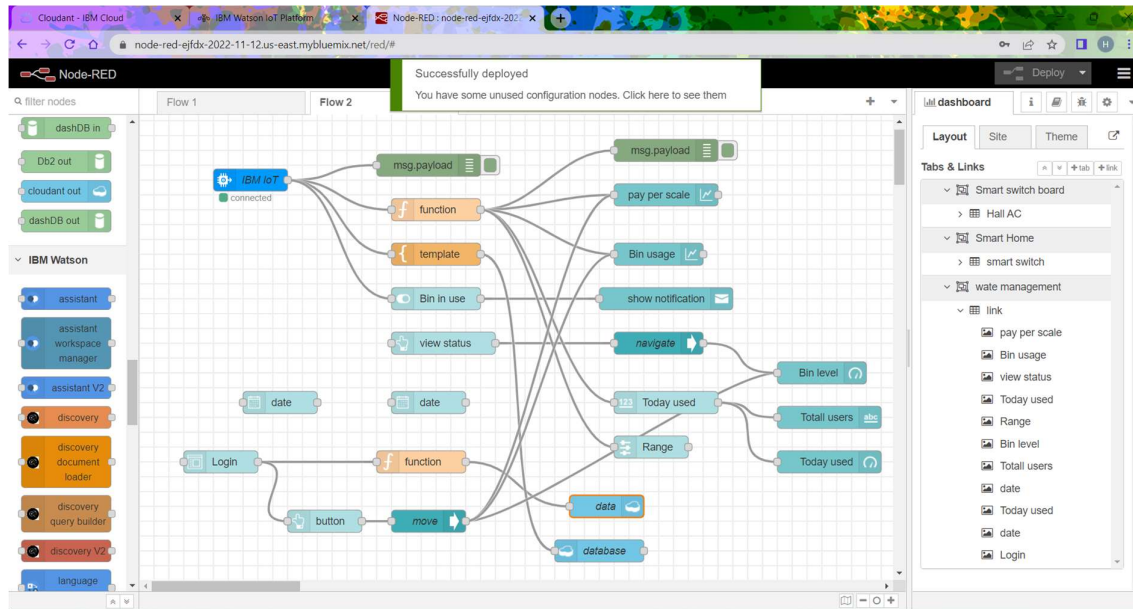


DELIVERY OF SPRINT 3

SMART WASTE MANAGEMENT SYSTEM

TEAM ID: PNT2022TMID21674



WOKWI

SAVE

SHARE

DOCS

SIGN UP

esp32-blink.ino

diagram.json

libraries.txt

Library Manager

```

1 #include <WiFi.h> // library for wifi
2 #include <PubSubClient.h> // library for MQTT
3 #include <LiquidCrystal_I2C.h>
4 #include <ArduinoJson.h>
5 LiquidCrystal_I2C lcd(0x27, 20, 4);
6
7 //----- credentials of IBM Accounts -----
8
9 #define ORG "6qx44q" // IBM organisation id
10 #define DEVICE_TYPE "abcd" // Device type mentioned in ibm watson iot plat
11 #define DEVICE_ID "1234" // Device ID mentioned in ibm watson iot platform
12 #define TOKEN "12345678" // Token
13
14 //----- customise above values -----
15
16 char server[] = ORG ".messaging.internetofthings.ibmcloud.com"; // server n
17 char publishTopic[] = "iot-2/evt/data/fmt/json"; // topic na
18 char topic[] = "iot-2/cmd/led/fmt/String"; // cmd Repr
19 char authMethod[] = "use-token-auth"; // authenti
20 char token[] = TOKEN;
21 char clientId[] = "d:" ORG ":" DEVICE_TYPE ":" DEVICE_ID; //client id
22
23 //
24
25 WiFiClient wificlient; // creating i
26 PubSubClient client(server, 1883, wificlient);
27
28 #define ECHO_PIN 12
29 #define TRIG_PIN 13
30 float dist;
31 String data3;
32 bool SealBin = true;
33 void setup()
34 {
35   Serial.begin(115200);

```

Simulation

01:26:07 99%

PIR Motion Sensor

Simulate motion

Sending payload: {"High_Alert":41.97 }

Publish OK

Motion Detected

Lid Opened

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

Lid Closed

Cloudant - IBM Cloud

IBM Watson IoT Platform

Node-RED: node-red-efda-20

ESP32-IBMCoinnection(original)

6qx44q.internetofthings.ibmcloud.com/dashboard/devices/browse

142219104069@smartintrnz.com

ID: 6qx44q

IBM Watson IoT Platform

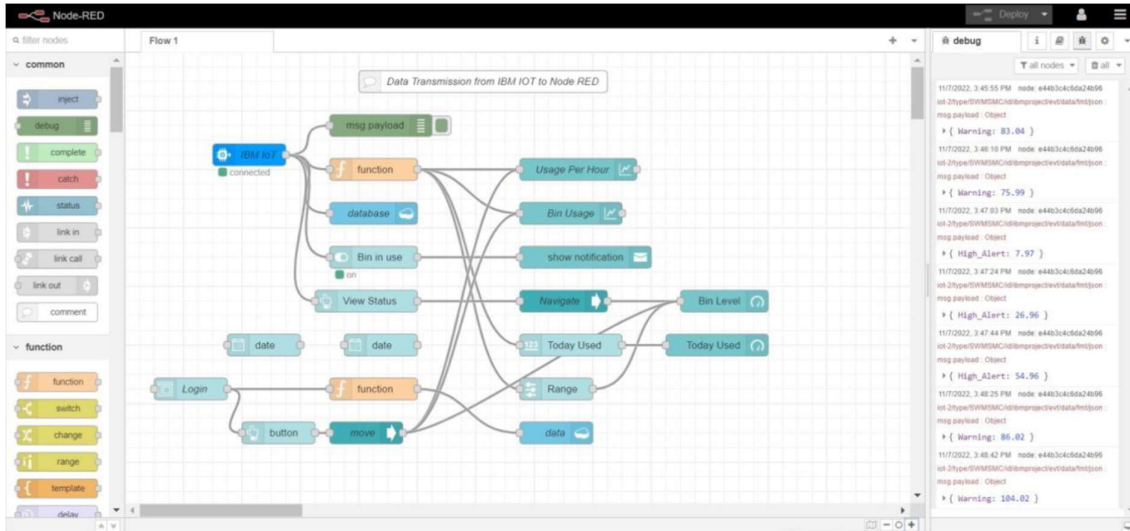
Browse Action Device Types Interfaces

Add Device

Identity Device Information Recent Events State Logs

The recent events listed show the live stream of data that is coming and going from this device.

Event	Value	Format	Last Received
events	{"warning":148}	json	a few seconds ago
events	{"warning":100}	json	a few seconds ago
events	{"warning":136}	json	a minute ago
events	{"warning":27}	json	a minute ago
events	{"warning":25}	json	a minute ago



Databases

Database name Create Database

Your Databases

Name	Size	# of Docs	Partitioned	Actions
login_credentials	13.7 KB	111	No	<input type="button" value="🔍"/> <input type="button" value="🔒"/> <input type="button" value="🗑️"/>
noderedwjldy20221105	37.4 KB	4	No	<input type="button" value="🔍"/> <input type="button" value="🔒"/> <input type="button" value="🗑️"/>
sample	59.4 KB	351	No	<input type="button" value="🔍"/> <input type="button" value="🔒"/> <input type="button" value="🗑️"/>
sensor_data	15.7 KB	90	No	<input type="button" value="🔍"/> <input type="button" value="🔒"/> <input type="button" value="🗑️"/>

Showing 1-4 of 4 databases. Databases per page

←

sensor_data

⋮

📊

All Documents

+

🔍

Query

🔐

Permissions

🔄

Changes

📁

Design Documents

+

👤

Log Out

Document ID

Options

{ } JSON

🔔

☐











Table

Metadata

{ } JSON

📄

Create Document

	id	key	value
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<input type="checkbox"/>	 0198213c192cb2c244cc2433f1...	0198213c192cb2c244cc2433f1...	{ "rev": "1-cde2dd17c519394df..." }
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Showing document 1 - 20. Documents per page: 20