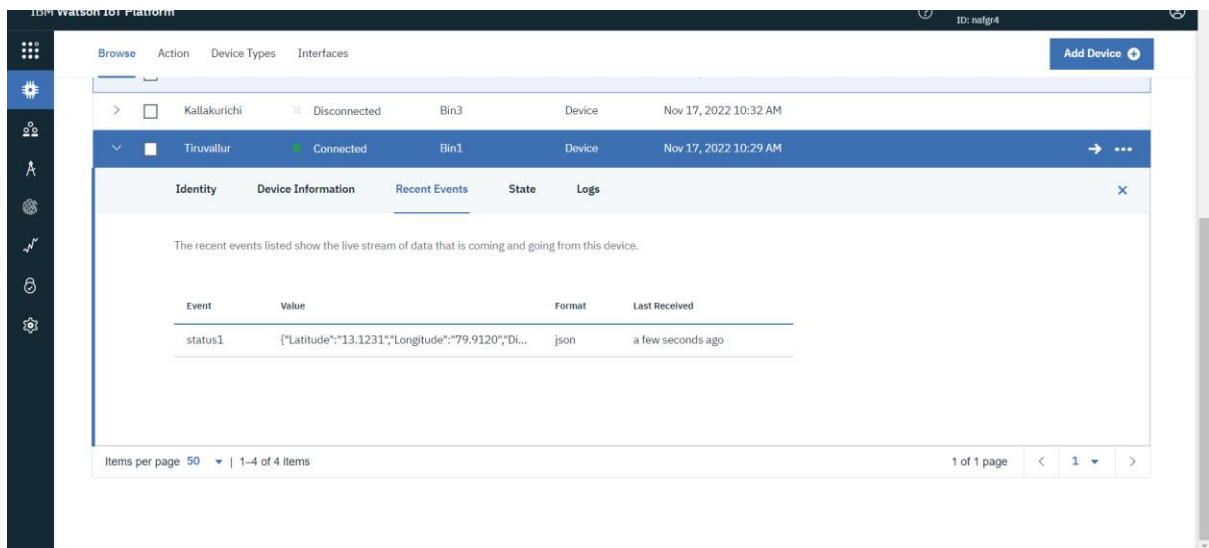
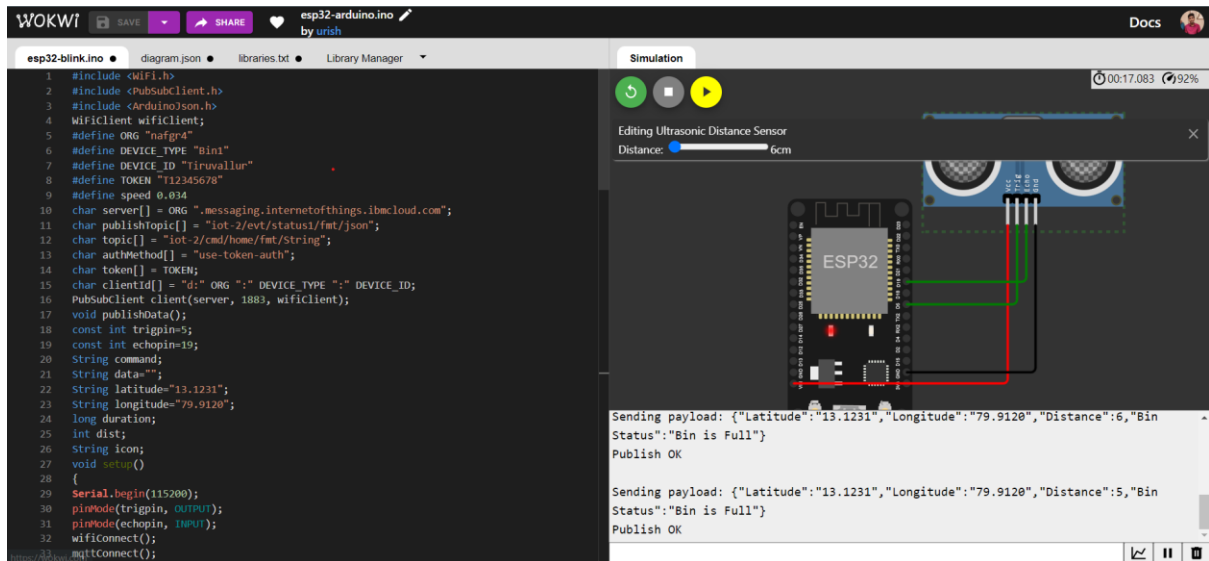


# Sprint-[2]

Team ID	PNT2022TMID02550
Project Name	Smart waste management system for metropolitan cities

BIN 1:



## BIN 2:

WOKWI SAVE SHARE esp32-dht22.ino copy Docs

esp32-dht22.ino diagram.json libraries.txt Library Manager

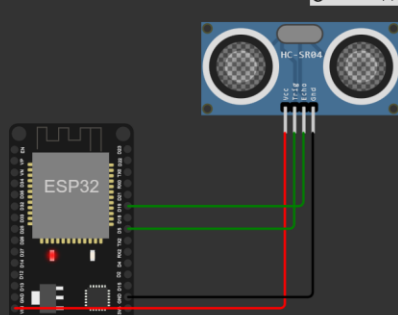
```

1 #include <WiFi.h>
2 #include <PubSubClient.h>
3 #include <ArduinoJson.h>
4 WiFiClient wifiClient;
5 #define ORG "naigr4"
6 #define DEVICE_TYPE "Bin2"
7 #define DEVICE_ID "Chennai"
8 #define TOKEN "C12345678"
9 #define speed 0.034
10 char server[] = ORG ".messaging.internetofthings.ibmcloud.com";
11 char publishTopic[] = "iot-2/evt/status1/fmt/json";
12 char topic[] = "iot-2/cmd/home/fmt/String";
13 char authMethod[] = "use-token-auth";
14 char token[] = TOKEN;
15 char clientId[] = "d:" ORG ":" DEVICE_TYPE ":" DEVICE_ID;
16 PubSubClient client(server, 1883, wifiClient);
17 void publishData();
18 const int trigpin=5;
19 const int echopin=19;
20 String command;
21 String data="";
22 String latitude="13.0827";
23 String longitude="80.2707";
24 String icon="";
25 long duration;
26 int dist;
27 void setup()
28 {
29   Serial.begin(115200);
30   pinMode(trigpin, OUTPUT);
31   pinMode(echopin, INPUT);
32   wifiConnect();
33   mqttConnect();

```

Simulation

00:20.749 99%



```

full"}
Publish OK

Sending payload:
{"Latitude":"13.0827","Longitude":"80.2707","Distance":75,"Status":"Bin is not
full"}
Publish OK

```

IBM Watson IoT Platform ID: naigr4

Browse Action Device Types Interfaces Add Device

Chennai Connected Bin2 Device Nov 17, 2022 10:32 AM

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
status1	{"type":"Buffer","data":[45,50,57,57,123,34,76,...	json	a few seconds ago
status1	{"type":"Buffer","data":[45,50,57,57,123,34,76,...	json	a few seconds ago
status1	{"type":"Buffer","data":[45,51,48,48,123,34,76,...	json	a few seconds ago
status1	{"type":"Buffer","data":[45,50,57,57,123,34,76,...	json	a few seconds ago
status1	{"type":"Buffer","data":[45,50,57,57,123,34,76,...	json	a few seconds ago

### BIN 3:

WOKWI SAVE SHARE esp32-dht22.ino copy Docs

esp32-dht22.ino diagram.json libraries.txt Library Manager Simulation

```

1 #include <WiFi.h>
2 #include <PubSubClient.h>
3 #include <ArduinoJson.h>
4 WiFiClient wificlient;
5 #define ORG "nafgr4"
6 #define DEVICE_TYPE "bin3"
7 #define DEVICE_ID "kallakurichi"
8 #define TOKEN "K12345678"
9 #define speed 0.034
10 char server[] = ORG ".messaging.internetofthings.ibmcloud.com";
11 char publishTopic[] = "iot-2/evt/status1/fmt/json";
12 char topic[] = "iot-2/cmd/home/fmt/String";
13 char authMethod[] = "use-token-auth";
14 char token[] = TOKEN;
15 char clientId[] = "d:" ORG ":" DEVICE_TYPE ":" DEVICE_ID;
16 PubSubClient client(server, 1883, wificlient);
17 void publishData();
18 const int trigpin=5;
19 const int echopin=19;
20 String command;
21 String data="";
22 String latitude="11.7348";
23 String longitude="78.9639";
24 String icon="";
25 long duration;
26 int dist;
27 void setup()
28 {
29   Serial.begin(115200);
30   pinMode(trigpin, OUTPUT);
31   pinMode(echopin, INPUT);
32   wificlient.connect();
33   mqttconnect();

```

subscribe to cmd OK

Sending payload:  
{"Latitude":"11.7348","Longitude":"78.9639","Distance":27,"Status":"Bin is not full"}

Publish OK

IBM Watson IoT Platform ID: nafgr4

Browse Action Device Types Interfaces Add Device

Kallakurichi Disconnected Bin3 Device Nov 17, 2022 10:32 AM

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
status1	{"Latitude":"11.7348","Longitude":"78.9639","Di...	json	a few seconds ago
status1	{"Latitude":"11.7348","Longitude":"78.9639","Di...	json	a few seconds ago

> ☐ Tiruvallur ☐ Disconnected Bin1 Device Nov 17, 2022 10:29 AM

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