

## SPRINT 4

Team ID	PNT2022TMID50941
Project Name	Personal Assistance for seniors who are self-reliant
Date	16 November 2022

## WEBUI :

Node-RED Dashboard — Mozilla Firefox

Node-RED Dashboard x PNT2022TMID50622 - V x IBM Cloud x +

https://node-red-fsaqd-2022-11-05.us-east.mybluemix.net/ui/#/?socketid=TeXX7RurGxD5MdoTAAAP

Import bookmarks... IBM Node-RED on IBM Clo... IBM Cloud Wokwi - Online Arduin...

Add Medicine

Default

Medicine Name\*  
Anaprox

Time\*  
09:32 pm

Date\*  
11/11/2022

SUBMIT CANCEL

## CLOUDANT DATA BASE :

The screenshot displays the Cloudant Dashboard interface in a web browser. The browser's address bar shows the URL: <https://ec42a5b1-ed17-4ba2-92f3-5ca75f68b1e1-bluemix.cloudant.com/dashboard.html#database/medicine/2022-11-11-21-32>. The dashboard header shows the database name 'medicine' and the document key '2022-11-11 21:32'. Below the header, there are buttons for 'Save Changes', 'Cancel', 'Upload Attachment', 'Clone Document', and 'Delete'. The main content area displays the document's JSON data:

```
1 {
2   "_id": "2022-11-11 21:32",
3   "_rev": "1-f7d405cac4d38f76fef5de1f5c096e92",
4   "name": "Anaprox"
5 }
```

The left sidebar contains various navigation icons, and the bottom left corner has a 'Log Out' button.

## BEFORE SIMULATION :

The screenshot shows the Wokwi online simulator interface in a Mozilla Firefox browser. The address bar displays the URL <https://wokwi.com/projects/347684368042426962>. The page title is "PNT2022TMID50622 - Wokwi Arduino and ESP32 Simulator". The interface includes a top navigation bar with "SAVE" and "SHARE" buttons, and a "Docs" link. Below the navigation bar, there are tabs for "PNT2022TMID50622.ino", "diagram.json", "libraries.txt", and "Library Manager". The main area is split into two panels: a code editor on the left and a simulation window on the right. The code editor shows the following code:

```
1 #include <WiFi.h> //library for wifi
2 #include <PubSubClient.h> //library for MQTT
3 #include <LiquidCrystal_I2C.h>
4 #include "DHT.h" // Library for dht11
5 #define DHTPIN 15 // what pin we're connected to
6 #define DHTTYPE DHT11 // define type of sensor DHT 11
7 #define LED 2
8 DHT dht (DHTPIN, DHTTYPE); // creating the instance by passing pin and t
9 void callback(char* subscribetopic, byte* payload, unsigned int payload
10
11
12 //-----credentials of IBM Accounts-----
13
14 #define ORG "1l6lvq" //IBM ORGANITION ID
15 #define DEVICE_TYPE "nodeMCU" //Device type mentioned in ibm watson IOT
16 #define DEVICE_ID "12345" //Device ID mentioned in ibm watson IOT Platf
17 #define TOKEN "?nUW@lkyOgIhHt)i6" //Token
18 String data3="";
19
20
21 //----- Customise the above values -----
22 char server[] = ORG ".messaging.internetofthings.ibmcloud.com"; // Serve
23 char publishTopic[] = "iot-2/evt/Data/fmt/json"; // topic name and type
24 char subscribetopic[] = "iot-2/cmd/command/fmt/String"; // cmd REPRESENT
25 char authMethod[] = "use-token-auth"; // authentication method
26 char token[] = TOKEN;
27 char clientId[] = "d:" ORG ":" DEVICE_TYPE ":" DEVICE_ID; //client id
```

The simulation window on the right shows a 3D model of an ESP32 microcontroller board connected to a DHT11 temperature and humidity sensor. The sensor is connected to the ESP32 via a breadboard. The ESP32 is also connected to a USB cable. The simulation window includes a "Simulation" tab and a "Bounce keys" notification that says "Bounce keys are disabled".

## AFTER SIMULATION :

WOKWI

PNT2022TMID50622 - Wokwi Arduino and ESP32 Simulator — Mozilla Firefox

Node-RED Dashboard x PNT2022TMID50622 - V... x Service Details - IBM Clo... x

https://wokwi.com/projects/347684368042426962

Import bookmarks... IBM Node-RED on IBM Clo... IBM Cloud Wokwi - Online Arduin...

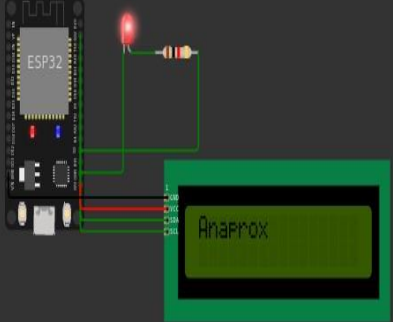
SAVE SHARE PNT2022TMID50622 Docs

PNT2022TMID50622.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 "DHT.h" // Library for dht11
5 #define DHTPIN 15 // what pin we're connected to
6 #define DHTTYPE DHT11 // define type of sensor DHT 11
7 #define LED 2
8 DHT dht (DHTPIN, DHTTYPE); // creating the instance by passing pin and t
9 void callback(char* subscribetopic, byte* payload, unsigned int payload
10
11
12 //-----credentials of IBM Accounts-----
13
14 #define ORG "116lvq" //IBM ORGANITION ID
15 #define DEVICE_TYPE "nodeMCU" //Device type mentioned in ibm watson IOT
16 #define DEVICE_ID "12345" //Device ID mentioned in ibm watson IOT Platfo
17 #define TOKEN "?nUW@lKY0g1hHt)i6" //Token
18 String data3="";
19
20
21 //----- Customise the above values -----
22 char server[] = ORG ".messaging.internetofthings.ibmcloud.com"; // Serve
23 char publishTopic[] = "iot-2/evt/Data/fmt/json"; // topic name and type
24 char subscribetopic[] = "iot-2/cmd/command/fmt/String"; // cmd REPRESENT
25 char authMethod[] = "use-token-auth"; // authentication method
26 char token[] = TOKEN;
27 char clientId[] = "d:" ORG ":" DEVICE_TYPE ":" DEVICE_ID; //client id
```

Simulation

00:05.066 45%



10.10.0.2  
Reconnecting client to 116lvq.messaging.internetofthings.ibmcloud.com  
iot-2/cmd/command/fmt/String  
subscribe to cmd OK  
callback invoked for topic: iot-2/cmd/command/fmt/String  
Medicine Name: Anaprox

## JIRA :

