

SPRINT 4

Date	11 NOV 2022
Team ID	PNT2022TMID50622
Project	Personal Assistance for Seniors who Are Self-Reliant

WEBUI :

The screenshot shows a web browser window with the title 'Node-RED Dashboard — Mozilla Firefox'. The address bar displays the URL: <https://node-red-fsqd-2022-11-05-us-east.mybluemix.net/ui/#/0?socketid=TexX7RurGxD5MdoTAAAP>. The browser tabs include 'Node-RED Dashboard', 'PNT2022TMID50622 - W', 'IBM Cloud', and 'Wokwi - Online Arduino...'. The main content area has a blue header bar with the text 'Add Medicine'. Below this, a 'Default' form is displayed with the following fields: 'Medicine Name' with the value 'Anaprox', 'Time' with the value '09:32 pm', and 'Date' with the value '11/11/2022'. At the bottom of the form are two buttons: 'SUBMIT' and '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 indicates the database is 'medicine' and the document is '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 shows a JSON document with the following fields:

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

On the left side of the dashboard, there is a vertical sidebar with various icons for navigation, including a 'Log Out' button at the bottom.

BEFORE SIMULATION :

WOKWI

PNT2022TMID50622 - Wokwi Arduino and ESP32 Simulator — Mozilla Firefox

Node-RED: node-red-fs: x PNT2022TMID50622 - V x IBM Cloud x +

https://wokwi.com/projects/347684368042426962

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

SAVE SHARE PNT2022TMID50622 Docs

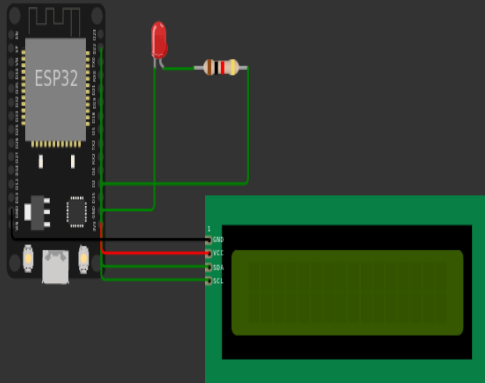
PNT2022TMID50622.ino diagram.json libraries.txt Library Manager Simulation

```
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 Platfo
17 #define TOKEN "?nUW@lkY)OglHt)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

ESP32

Bounce keys
Bounce keys are disabled



The screenshot shows the Wokwi online Arduino and ESP32 simulator. The left pane displays the code for 'PNT2022TMID50622.ino', which includes libraries for WiFi, MQTT, DHT11, and LiquidCrystal_I2C. It defines pins for DHT11 (15) and an LED (2). The code sets up an ESP32 board with specific IBM IoT credentials (ORG, DEVICE_ID, TOKEN) and topics for publishing and subscribing. The right pane shows a simulation of the hardware: an ESP32 board connected to a DHT11 temperature and humidity sensor and an I2C LCD display. A 'Bounce keys' notification is visible in the top right corner.

AFTER SIMULATION :

WOKWI

PNT2022TMID50622 - Wokwi Arduino and ESP32 Simulator — Mozilla Firefox

Node-RED Dashboard x PNT2022TMID50622 - W x Service Details - IBM Clo x +

https://wokwi.com/projects/347684368042426962

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

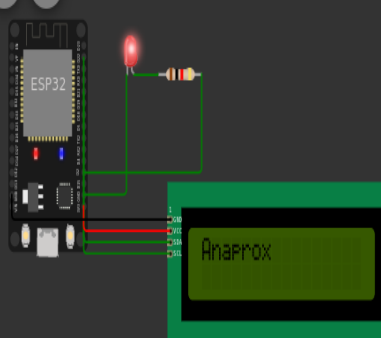
SAVE SHARE PNT2022TMID50622 Docs

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 "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 Platfo
17 #define TOKEN "?nUw@lky)OglhHti6" //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 1l6lvq.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 :

	NOV	NOV	NOV
	3	4	5
Sprints	PAFSCII Sprint 1, P...	PAFSCII Sprint 3, PAFSCII Pri...	
> PAFSCII-8 Sprint 1			
> PAFSCII-9 Sprint 2			
> PAFSCII-10 Sprint 3			
▼ PAFSCII-11 Sprint 4			
PAFSCII-13 create a no...	DONE	JOSHUA...	