

Project Development Phase Sprint IV

Date	19 November 2022
Team ID	PNT2022TMID35906
Project Name	Signs with Smart Connectivity for better road safety

Wokwi Simulation: <https://wokwi.com/projects/347494122536305235>

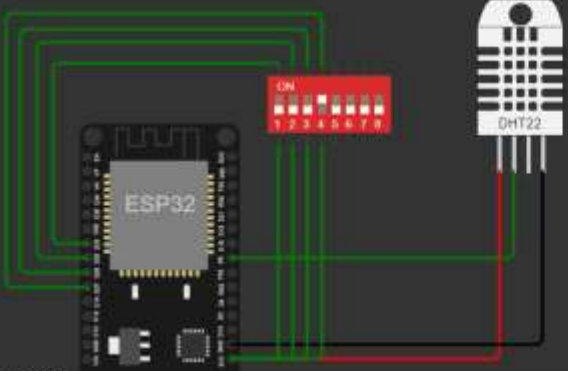
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Final_iot.ino
Docs

```

1 #include <WiFi.h> // library for wifi
2 #include <PubSubClient.h> // library for MQTT
3 #include "DHT.h" // library for DHT11
4 #define DHTPIN 5 // what pin we're connected to
5 #define DHTTYPE DHT22 // define type of sensor DHT 11
6
7 DHT dht (DHTPIN, DHTTYPE); // creating the instance by passing pin and type
8
9 void callback(char* topic, byte* payload, unsigned int payloadLength) {
10
11 //----- credentials of IBM Account -----
12
13 #define ORG "ps4p4py" // IBM ORGANIZATION ID
14 #define DEVICE_TYPE "alert-device" // Device type mentioned in the wat
15 #define DEVICE_ID "4571" // Device ID mentioned in the Watson IoT Plat
16 #define TOKEN "12345678" // Token
17 String data3;
18 float h, t;
19
20 //----- Customise the above values -----
21
22 char server[] = ORG ".messaging.internetofthings.ibmcloud.com"; // Se
23 char publishTopic[] = "iot-2/evt/data/fmt/json"; // topic name and ty
24 char subscribeTopic[] = "iot-2/cmd/command/fmt/string"; // cmd
25 char authMethod[] = "use-token-auth"; // authentication method
26 char token[] = TOKEN;
27 char clientId[] = "d:" ORG ":" DEVICE_TYPE ":" DEVICE_ID; // client ID
28
29 //-----
30
31 WiFiClient wifiClient; // creating the instance for WiFiClient
32 PubSubClient client(server, 3883, callback, wifiClient); // calling
33
34

```

Simulation

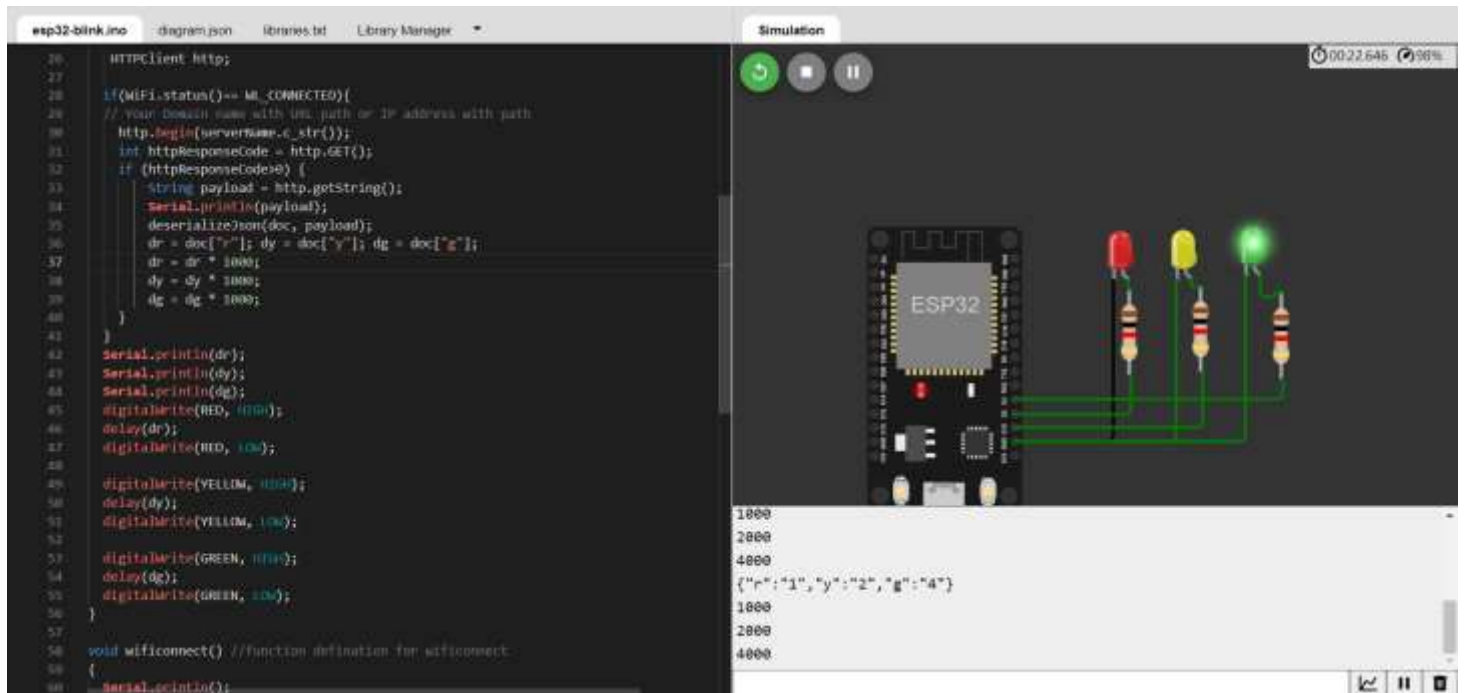


```

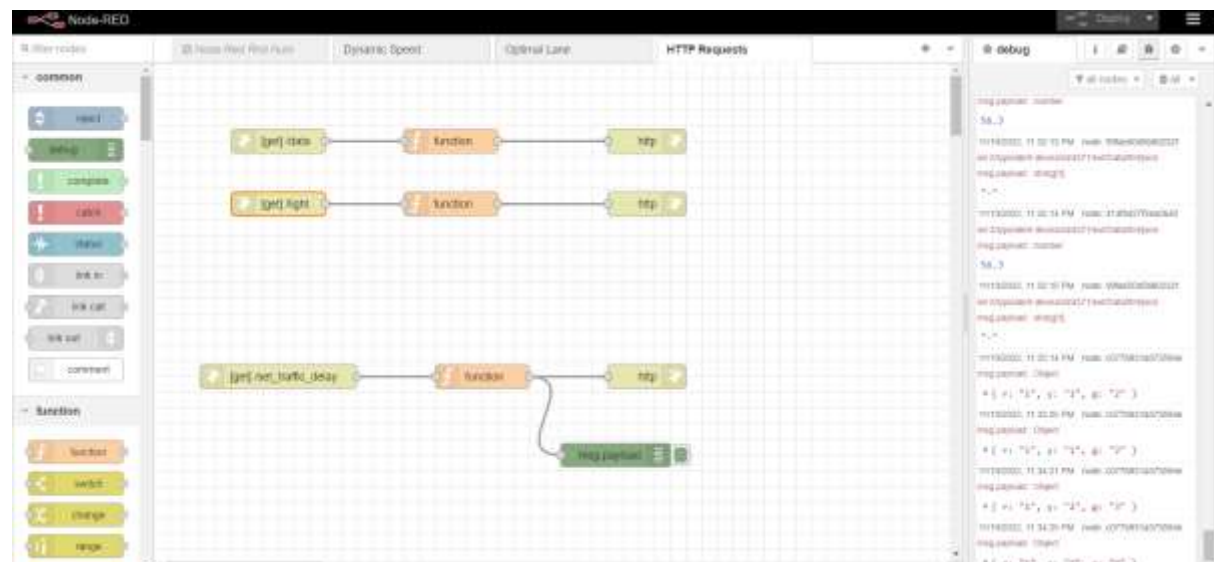
humidity:63.00
Sending payload: {"temp":12.30,"humidity":63.00,"North":0,"South":0,"East":0,"West":1}
Publish ok
temp:12.30
humidity:63.00
Sending payload: {"temp":12.30,"humidity":63.00,"North":0,"South":0,"East":0,"West":1}
Publish ok

```

<https://wokwi.com/projects/348774600326251090>



Node Red



MIT App Inventor

