

Project name

Real time river water quality management control system

Assignment

4

Wowki link: <https://wokwi.com/projects/345395196387656275>

WOKWI

SAVE SHARE

sketch.ino diagram.json libraries.txt Library Manager

```
1 #include <WiFi.h> //library for wifi
2 #include <PubSubClient.h> //library for MQTT
3 #include "DHT.h" // Library for dht11
4 #define DHTPIN 15 // what pin we're connected to
5 #define DHTTYPE DHT22 // define type of sensor DHT 11
6 #define LED 2
7
8 DHT dht (DHTPIN, DHTTYPE); // creating the instance by passing pin and type of
9
10 void callback(char* subscribetopic, byte* payload, unsigned int payloadLength)
11
12 //-----credentials of IBM Accounts-----
13
14 #define ORG "k0jy6c" //IBM ORGANITION ID
15 #define DEVICE_TYPE "abcd" //Device type mentioned in ibm watson IOT Platform
16 #define DEVICE_ID "12345" //Device ID mentioned in ibm watson IOT Platform
17 #define TOKEN "12345678" //Token
18 String data3;
19 float h, t;
20
21
22 //----- Customise the above values -----
23 char server[] = ORG ".messaging.internetofthings.ibmcloud.com"; // Server Name
24 char publishTopic[] = "iot-2/evt/Data/fmt/json"; // topic name and type of event
25 char subscribetopic[] = "iot-2/cmd/command/fmt/String"; // cmd REPRESENT comma
26 char authMethod[] = "use-token-auth"; // authentication method
27 char token[] = TOKEN;
28 char clientId[] = "d:" ORG ":" DEVICE_TYPE ":" DEVICE_ID; //client id
29
30
```

Simulation

00:40.871 85%

ESP32

DHT22

Publish ok  
temp:24.00  
Humid:40.00  
Sending payload: {"temp":24.00,"Humid":40.00}  
Publish ok  
Reconnecting client to k0jy6c.messaging.internetofthings.ibmcloud.com  
...

IBM Watson IoT Platform

manishkumargt.one@gmail.com  
ID: k0jy6c

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     |
|-------|------------------------|--------|-------------------|
| Data  | {"temp":24,"Humid":40} | json   | a few seconds ago |
| Data  | {"temp":24,"Humid":40} | json   | a few seconds ago |
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