

## PROJECT DEVELOPMENT PHASE SPRINT 3

<b>Team ID</b>	PNT2022TMID51070
<b>Project Name</b>	Industry-Specific Intelligent Fire Management System

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```

1 #include <WiFi.h> //library for wifi
2 #include <PubSubClient.h> //library for MQTT
3 #include "DHT.h" // Library for dht sensor
4 #define DHTPIN 15 // what pin we're connected to
5 #define DHTTYPE DHT22 // define type of sensor DHT 22
6 #define LED 14
7
8 DHT dht (DHTPIN, DHTTYPE); // creating the instance by passing pin and type of dht connect
9
10 void callback(char* subscribetopic, byte* payload, unsigned int payloadlength);
11
12 //-----credentials of IBM Accounts-----
13
14 #define ORG "68653s" //IBM ORGANIZATION ID
15 #define DEVICE_TYPE "iot_device" //Device type mentioned in ibm watson IOT Platform
16 #define DEVICE_ID "wokwi us" //Device ID mentioned in ibm watson IOT Platform
17 #define TOKEN "1(u1Y40)Mkr9sk(k" //Token
18 String data;
19 float h, t;
20 const float BETA = 3950; // should match the Beta Coefficient of the thermistor
21
22 //----- Customise the above values -----
23
24 char server[] = ORG ".messaging.internetofthings.ibmcloud.com"; // Server Name
25 char publishTopic[] = "iot-2/cvt/Data/fmt/json"; // topic name and type of event perform
26 char subscribetopic[] = "iot-2/cmd/test/int/String"; // cmd REPRESENT command type AND
27 char authMethod[] = "use-token-auth"; // authentication method
28 char token[] = TOKEN;
29 char clientId[] = "d:" ORG ":" DEVICE_TYPE ":" DEVICE_ID; //client id
30
31
32 //-----
33 WiFiClient wifiClient; // creating the instance for wifiClient
34 PubSubClient client(server, 443, callback, wifiClient); //calling the predefined client
35

```

**Simulation**

00:02.999
98%

Alert...!Temperature:36.40

Humidity:46.50

Sending payload: {"Data":{"temperature":36.40,"humidity":46.50}}

Publish ok

If Temperature increased,the alarm and alert light would indicates.

Temperature: 36.40 °C

Alert..!