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1  #include <ESP8266WiFi.h>
2  #include <PubSubClient.h>
3  const char* ssid = "FITM WiFi";
4  const char* password = "";
5  const char* mqtt_server = "m11.cloudmqtt.com";
6  #define mqtt_port 11915
7  #define mqtt_user "upnkpelr"
8  #define mqtt_password "GHZ0Xc72wZx-"
9
10 float oldTemp = 0.0;
11 char msg[50]; // message for reciever
12
13 WiFiClient espClient;
14 PubSubClient client(espClient);
15 void setup(){
16     Serial.begin(115200);
17     pinMode(D1, INPUT);
18     pinMode(D2, OUTPUT);
19     setup_wifi();
20     client.setServer(mqtt_server, mqtt_port); //port in mqtt
21     client.setCallback(callback);
22 }
23
24 void setup_wifi() {
25     delay(10);
26     // We start by connecting to a WiFi network
27     Serial.println();
28     Serial.print("Connecting to ");
29     Serial.println(ssid);
30     WiFi.begin(ssid, password);
31     while (WiFi.status() != WL_CONNECTED) {
32         delay(500);
33         Serial.print(".");
34     }
35     Serial.println("");
36     Serial.println("WiFi connected");
37     Serial.println("IP address: ");
38     Serial.println(WiFi.localIP());
39 }
40
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42 void reconnect() {
43     // Loop until we're reconnected
44     while (!client.connected()) {
45         Serial.print("Attempting MQTT connection...");
46         // Attempt to connect
47         if (client.connect("pir", mqtt_user, mqtt_password)) { //
            • topic, username, password
48             Serial.println("connected");
49         } else {
50             Serial.print("failed, rc=");
51             Serial.print(client.state());
52             Serial.println(" try again in 5 seconds");
53             // Wait 5 seconds before retrying
54             delay(5000);
55         }
56     }
57 }
58
59 void loop() {
60     int value= digitalRead(D1);
61     if (!client.connected()) {
62         reconnect();
63     }
64     client.loop();
65     delay(1000);
66     if (value == HIGH)
67     {
68         client.publish("/checkPIR", "1");
69         Serial.println("yes");
70     }
71     else
72     {
73         client.publish("/checkPIR", "0");
74         Serial.println("no");
75     }
76 }
77
78
79
80
81

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81
82 void callback(char* topic, byte* payload, unsigned int length) {
83     String msg = "";
84     String to = "";
85     int i = 0;
86     while (i < length) msg += (char)payload[i++];
87     to = topic;
88     if (to == "/checkPIR") {
89         Serial.println(msg);
90         if (msg.toFloat() == 1) {
91             digitalWrite(D2, HIGH);
92         } else {
93             digitalWrite(D2, LOW);
94         }
95     }
96 }
97
```