Assignment-4

Write code and connections in wokwi for Ultrasonic sensor. Whenever distance is less than 100cms send "alert" to ibm cloud and display in devices recent events .

Link in wokwi : https://wokwi.com/projects/347482708446806610

WOKWI   SAVE   SHARE   sketch.ino copy   Docs

sketch.ino   diagram.json   libraries.txt   Library Manager

Simulation   00:27.087   95%

```
49   void wifiConnect() {
50     Serial.print("Connecting to"); Serial.print("Wifi");
51     WiFi.begin("Wokwi-GUEST","",6);
52     while (WiFi.status() != WL_CONNECTED) {
53       delay(500);
54       Serial.print(".");
55     }
56     Serial.print("WiFi connected, IP address:"); Serial.println(WiFi.localIP());
57   }
58
59   void mqttConnect() {
60     if (!client.connected()) {
61       Serial.print("Reconnecting MQTT client to"); Serial.println(server);
62       while (!client.connect(clientId, authMethod, token)) {
63         Serial.print(".");
64         delay(1000);
65       }
66       initManagedDevice();
67       Serial.println();
68     }
69   }
70
71   void initManagedDevice() {
72     if (client.subscribe(topic)) {
73       Serial.println(client.subscribe(topic));
74       Serial.println("subscribe to cmd OK");
75     } else {
76       Serial.println("subscribe to cmd FAILED");
```

HC-SR04

ESP32

Sending payload:{"Distance":14}
Publish FAILED
Reconnecting MQTT client tovd4xhx.messaging.internetofthings.ibmcloud.com
1
subscribe to cmd OK

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IBM Watson IoT Platform   812819106016@smartinternz.com
ID: vd4xhx

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
abcd_1	{"Distance":45}	json	a few seconds ago
abcd_1	{"Distance":20}	json	a few seconds ago

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0 Simulations running

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