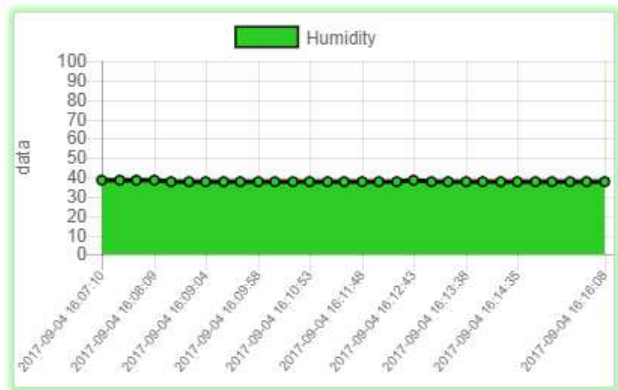
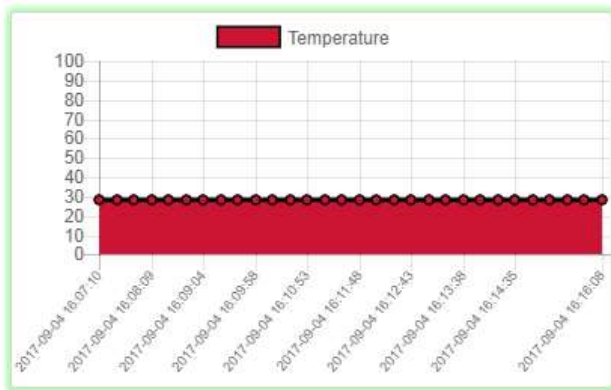


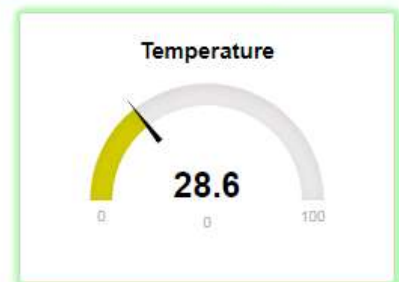
ชื่อ ธนพงศ์ นามสกุล รอดทิม รหัส 5706021632031 IT_4RC

หน้าจอ IoTtweet



IoT Smart Farm 4.0

สวัสดีครับ



Code

```
// DHT Temperature & Humidity Sensor
```

```
// Unified Sensor Library Example
```

```
// Written by Tony DiCola for Adafruit Industries
```

```
// Released under an MIT license.
```

```
// Depends on the following Arduino libraries:
```

```
// - Adafruit Unified Sensor Library:
```

```
https://github.com/adafruit/Adafruit\_Sensor
```

```
// - DHT Sensor Library: https://github.com/adafruit/DHT-sensor-library
```

```
#include <Adafruit_Sensor.h>
```

```
#include <DHT.h>
```

```
#include <DHT_U.h>
```

```
#define DHTPIN      2      // Pin which is connected to the DHT  
sensor.
```

```
// Uncomment the type of sensor in use:
```

```
//#define DHTTYPE      DHT11    // DHT 11

#define DHTTYPE      DHT22    // DHT 22 (AM2302)

//#define DHTTYPE      DHT21    // DHT 21 (AM2301)


// See guide for details on sensor wiring and usage:

//  https://learn.adafruit.com/dht/overview


DHT_Unified dht(DHTPIN, DHTTYPE);


uint32_t delayMS;


#include <ESP8266WiFi.h>

#include <IoTtweet.h>


const char *userid = "000989";          //IoTtweet account user ID (6 digits,
included zero pre-fix)

const char *key = "dl8iis1hbap6";      //IoTtweet registered device key in
"MY IOT Garage"

const char *ssid = "FITM WiFi";          //Your-WiFi-router-SSID
```

```
const char *password = "";          //Your-WiFi-password
```

```
float data0, data1, data2, data3;    //Your sending data  
variable.
```

```
String private_tweet = "สวัสดีครับ"; //Your private tweet  
message to dashboard กดเลือก Tweet private panel
```

```
String public_tweet = "IoT Smart Farm 4.0"; //Your public tweet  
message to dashboard กดเลือก Tweet public panel
```

```
IoTtweet myiot; //naming your devices
```

```
void setup() {
```

```
    Serial.begin(9600);
```

```
    // Initialize device.
```

```
    dht.begin();
```

```
    Serial.println("DHTxx Unified Sensor Example");
```

```
    // Print temperature sensor details.
```

```
sensor_t sensor;

dht.temperature().getSensor(&sensor);

Serial.println("-----");

Serial.println("Temperature");

Serial.print ("Sensor:   "); Serial.println(sensor.name);

Serial.print ("Driver Ver: "); Serial.println(sensor.version);

Serial.print ("Unique ID:  "); Serial.println(sensor.sensor_id);

Serial.print ("Max Value:  "); Serial.print(sensor.max_value);
Serial.println(" *C");

Serial.print ("Min Value:  "); Serial.print(sensor.min_value);
Serial.println(" *C");

Serial.print ("Resolution: "); Serial.print(sensor.resolution); Serial.println("
*C");

Serial.println("-----");

// Print humidity sensor details.

dht.humidity().getSensor(&sensor);

Serial.println("-----");

Serial.println("Humidity");

Serial.print ("Sensor:   "); Serial.println(sensor.name);

Serial.print ("Driver Ver: "); Serial.println(sensor.version);
```

```

Serial.print ("Unique ID:  "); Serial.println(sensor.sensor_id);

Serial.print ("Max Value:  "); Serial.print(sensor.max_value);
Serial.println("%");

Serial.print ("Min Value:  "); Serial.print(sensor.min_value);
Serial.println("%");

Serial.print ("Resolution:  "); Serial.print(sensor.resolution);
Serial.println("%");

Serial.println("-----");

// Set delay between sensor readings based on sensor details.

delayMS = sensor.min_delay / 1000;


String libvers = myiot.getVersion();

Serial.println("IoTtweet Library vesion : " + String(libvers));


//Connect WiFi

Serial.println("\nConnect wifi...");

bool conn = myiot.begin(ssid,password);

if(!conn)

{

```

```
        Serial.println("WiFi connection failed.");

    }else

    {

        Serial.println("WiFi connected !");

    }

}


void loop() {

    // Delay between measurements.

    delay(delayMS);

    // Get temperature event and print its value.

    sensors_event_t event;

    dht.temperature().getEvent(&event);

    if (isnan(event.temperature)) {

        Serial.println("Error reading temperature!");

    }

}
```

```
}  
  
else {  
  
    Serial.print("Temperature: ");  
  
    Serial.print(event.temperature);  
  
    Serial.println(" *C");  
  
    data0 = event.temperature ;  
  
}  
  
// Get humidity event and print its value.  
  
dht.humidity().getEvent(&event);  
  
if (isnan(event.relative_humidity)) {  
  
    Serial.println("Error reading humidity!");  
  
}  
  
else {  
  
    Serial.print("Humidity: ");  
  
    Serial.print(event.relative_humidity);  
  
    Serial.println("%");  
  
    data1 = event.relative_humidity;  
  
}
```



```
//Example data generating

data2 = random(45,55);

data3 = random(60,70);


//Send data from your iot to Dashboard

String response =
myiot.WriteDashboard(userid,key,data0,data1,data2,data3,private_tweet,pu
blic_tweet);

Serial.println(response); //Show response JSON from www.iottweet.com


//Waiting storage data on IoTtweet cloud 15 sec.

delay(15000);

}
```

