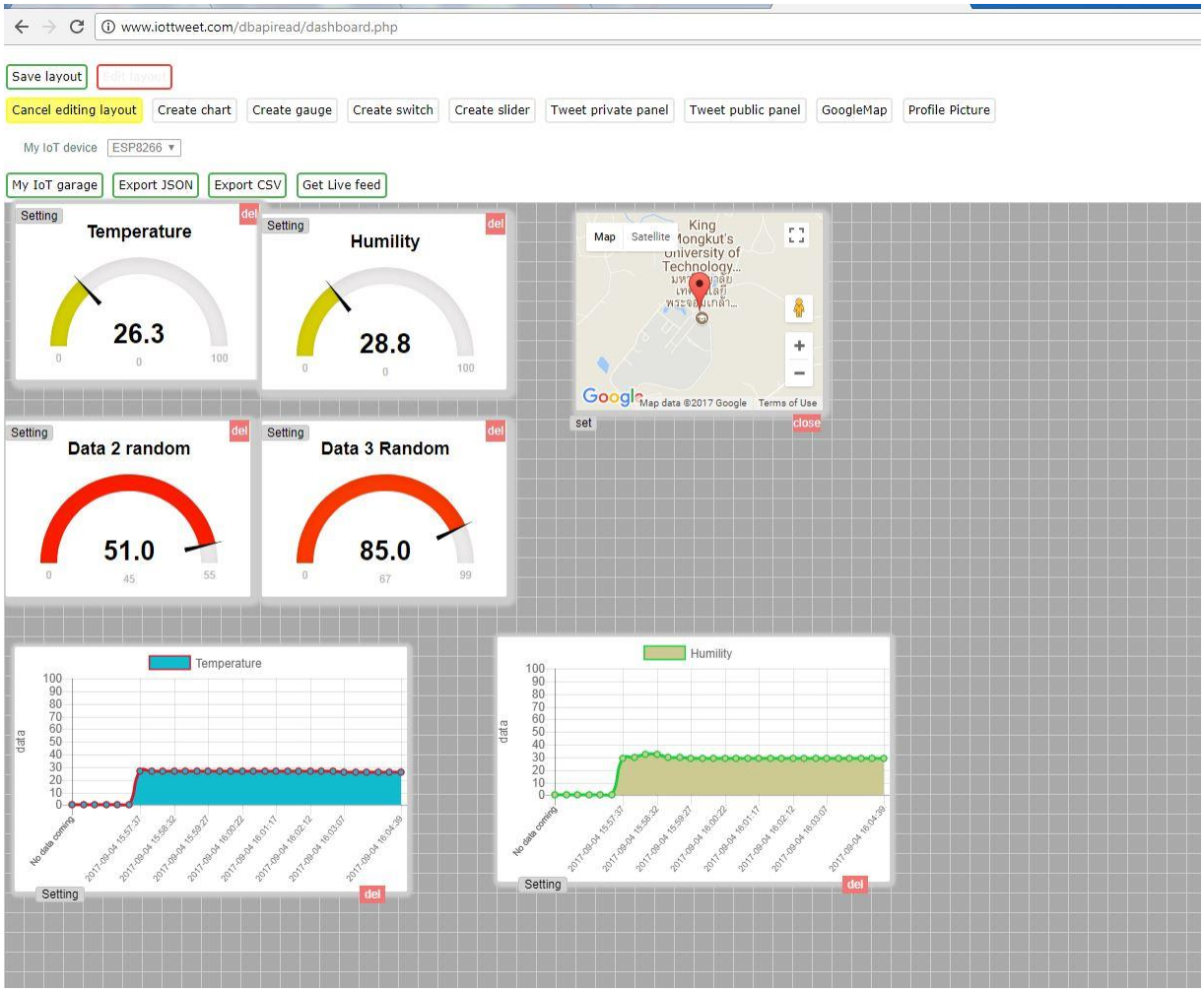
นายภานุรุจ จามะรีย์ 5706021632103 IT-3RC



DHT_Unified_Sensor

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

#define DHTPIN            2         // Pin which is connected to the DHT sensor. ให้ขา data เข้า pin 2

// 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 = "000993";            //IoTtweet account user ID (6 digits, included zero pre-fix)
const char *key = "acta55m222d6";     //IoTtweet registered device key in "MY IOT Garage"
const char *ssid = "itfitm";                    //Your-WiFi-router-SSID
const char *password = "";            //Your-WiFi-password

float data0, data1, data2, data3;                       //Your sending data variable.
String private_tweet = "สำสัดีครับ";                   //Your private tweet meassage to dashboard  กดเลือก Tweet privaet 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); //ให้เริ่มแสดงที่จอเราเอง
  // 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(67,99);

  //Send data from your iot to Dashboard
  String response = myiot.WriteDashboard(userid,key,data0,data1,data2,data3,private_tweet,public_tweet);
  Serial.println(response);   //Show response JSON from www.iottweet.com

  //Waiting storage data on IoTtweet cloud 15 sec.
  delay(15000);

}
```