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//Libraires
#include<stdlib.h>
#include <DHT.h>

/*-----DHTSENSOR-----*/
#define DHTPIN 2          // DHT data pin connected to Arduino pin 2
#define DHTTYPE DHT11      // DHT 22 (or AM2302)
DHT dht(DHTPIN, DHTTYPE); // Initialize the DHT sensor
/*-----*/

/*-----ESP8266SerialWiFiModule-----*/
#define SSID "Vodafone-33498108"    // "SSID-WiFiname"
#define PASS "v12z5liskvbik18"     // "password"
#define IP "192.168.1.7" // localhost http://192.168.1.4:4445
String msg = ""; //change it with your key...
/*-----*/

//Variables
float temp;
String hum;
String tempC;
String tempF;
int error;
void setup()
{
  Serial.begin(115200); //or use default 115200.

  Serial.println("AT");
  delay(5000);
  if(Serial.find("OK")){
    connectWiFi();
  }
}

void loop(){
  //Read temperature and humidity values from DHT sensor:

  error=0;
  char buffer[10];

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temp = dht.readHumidity();
hum = dtostrf(temp, 4, 1, buffer); // convert a float to a char array

temp = dht.readTemperature();
tempC = dtostrf(temp, 4, 1, buffer); // convert a float to a char
array

temp = dht.readTemperature(true);
tempF= dtostrf(temp, 4, 1, buffer); // convert a float to a char
array

updateTemp();
//Resend if transmission is not completed
if (!error){
    delay(2000); //Update every 2 second
}
}

voidupdateTemp(){
String cmd = "AT+CIPSTART=\"TCP\", \"";
cmd += IP;
cmd += "\",4446";
Serial.println(cmd);
delay(2000);
if(Serial.find("Error")){
    return;
}
msg = "" ;
msg += hum;
msg += "\t"+tempC;
msg += "\t"+tempF;
msg += "\r\n";
Serial.print("AT+CIPSEND=");
Serial.println(msg.length());
if(Serial.find(">")){
    Serial.print(msg);
}
else{

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Serial.println("AT+CIPCLOSE");  
    //Resend...  
    error=1;  
}  
}
```

```
booleanconnectWiFi() {  
    Serial.println("AT+CWMODE=1");  
    delay(2000);  
    String cmd="AT+CWJAP=\"";  
    cmd+=SSID;  
    cmd+="\", \"";  
    cmd+=PASS;  
    cmd+="\"";  
    Serial.println(cmd);  
    delay(5000);  
    if(Serial.find("OK")) {  
        return true;  
    }else{  
        return false;  
    }  
}
```