#include <ESP8266WiFi.h>

#include <WiFiClientSecure.h>

int moisturePin = A0;

int waterPump = 16;

int greenLED = 2;

int redLED = 4;

// you can adjust the threshold value

int thresholdValue = 512;

const char \*ssid ="\*\*\*\*\*\*\*";

const char \*password = "\*\*\*\*\*\*\*\*\*";

const char\* host = "script.google.com";

String url;

void setup()

{

Serial.begin(115200);

delay(100);

pinMode(moisturePin, INPUT);

pinMode(waterPump, OUTPUT);

pinMode(greenLED, OUTPUT);

pinMode(redLED, OUTPUT);

digitalWrite(waterPump, LOW);

digitalWrite(greenLED, LOW);

digitalWrite(redLED, HIGH);

Serial.println();

Serial.println();

Serial.print("Connecting to ");

Serial.println(ssid);

WiFi.begin(ssid, password);

while (WiFi.status() != WL\_CONNECTED)

{

delay(500);

Serial.print(".");

}

Serial.println("");

Serial.println("WiFi connected");

Serial.println("IP address: ");

Serial.println(WiFi.localIP());

Serial.print("Netmask: ");

Serial.println(WiFi.subnetMask());

Serial.print("Gateway: ");

Serial.println(WiFi.gatewayIP());

}

void loop()

{

Serial.print("connecting to ");

Serial.println(host);

WiFiClientSecure client;

client.setInsecure();

const int httpPort = 443;

if (!client.connect(host, httpPort))

{

Serial.println("connection failed");

return;

}

// read the input on analog pin 0:

float t = analogRead(moisturePin);

float sensorValue = t;

Serial.print(sensorValue);

if(sensorValue < thresholdValue){

Serial.println(" - Doesn't need watering");

digitalWrite(waterPump, LOW);

digitalWrite(greenLED, LOW);

digitalWrite(redLED, HIGH);

}

else {

Serial.println(" - Time to water your plant");

digitalWrite(waterPump, HIGH);

digitalWrite(greenLED, HIGH);

digitalWrite(redLED, LOW);

}

url = "/macros/s/AKfycbyyS-KOhAq6DJxsFrKbKehvZL9FPXViFWJTYhc0BGPHR-g\_534/exec?func=addData&val="+ String(t);

Serial.print("Requesting URL: ");

Serial.println(url);

client.print(String("GET ") + url + " HTTP/1.1\r\n" +

"Host: " + host + "\r\n" +

"Connection: close\r\n\r\n");

delay(500);

String section="header";

while(client.available())

{

String line = client.readStringUntil('\r');

Serial.print(line);

}

Serial.println();

Serial.println("closing connection");

delay(15000);

}