#include <ESP8266WiFi.h>

#include "Adafruit\_MQTT.h"

#include "Adafruit\_MQTT\_Client.h"

#define Led1 D0

#define Led2 D1

#define Led3 D2

#define Led4 D3

#define WLAN\_SSID "\*\*\*\*\*" // Your SSID

#define WLAN\_PASS "\*\*\*\*\*" // Your password

#define AIO\_SERVER "io.adafruit.com"

#define AIO\_SERVERPORT 1883 // use 8883 for SSL

#define AIO\_USERNAME "\*\*\*\*\*"

#define AIO\_KEY "9e6984e43a0146a1bae070ecb1c622ad"

WiFiClient client;

Adafruit\_MQTT\_Client mqtt(&client, AIO\_SERVER, AIO\_SERVERPORT, AIO\_USERNAME, AIO\_KEY);

// Setup a feed called 'onoff' for subscribing to changes.

Adafruit\_MQTT\_Subscribe Light1 = Adafruit\_MQTT\_Subscribe(&mqtt, AIO\_USERNAME"/feeds/Led1"); // FeedName

Adafruit\_MQTT\_Subscribe Light2 = Adafruit\_MQTT\_Subscribe(&mqtt, AIO\_USERNAME "/feeds/Led2");

Adafruit\_MQTT\_Subscribe Light3 = Adafruit\_MQTT\_Subscribe(&mqtt, AIO\_USERNAME "/feeds/Led3");

Adafruit\_MQTT\_Subscribe Light4 = Adafruit\_MQTT\_Subscribe(&mqtt, AIO\_USERNAME "/feeds/Led4");

void MQTT\_connect();

void setup() {

Serial.begin(115200);

pinMode(Led1, OUTPUT);

pinMode(Led2, OUTPUT);

pinMode(Led3, OUTPUT);

pinMode(Led4, OUTPUT);

// Connect to WiFi access point.

Serial.println(); Serial.println();

Serial.print("Connecting to ");

Serial.println(WLAN\_SSID);

WiFi.begin(WLAN\_SSID, WLAN\_PASS);

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

delay(500);

Serial.print(".");

}

Serial.println();

Serial.println("WiFi connected");

Serial.println("IP address: ");

Serial.println(WiFi.localIP());

// Setup MQTT subscription for onoff feed.

mqtt.subscribe(&Light1);

mqtt.subscribe(&Light3);

mqtt.subscribe(&Light2);

mqtt.subscribe(&Light4);

}

void loop() {

MQTT\_connect();

Adafruit\_MQTT\_Subscribe \*subscription;

while ((subscription = mqtt.readSubscription(20000))) {

if (subscription == &Light1) {

Serial.print(F("Got: "));

Serial.println((char \*)Light1.lastread);

int Light1\_State = atoi((char \*)Light1.lastread);

digitalWrite(Led1, Light1\_State);

}

if (subscription == &Light2) {

Serial.print(F("Got: "));

Serial.println((char \*)Light2.lastread);

int Light2\_State = atoi((char \*)Light2.lastread);

digitalWrite(Led2, Light2\_State);

}

if (subscription == &Light3) {

Serial.print(F("Got: "));

Serial.println((char \*)Light3.lastread);

int Light3\_State = atoi((char \*)Light3.lastread);

digitalWrite(Led3, Light3\_State);

}

if (subscription == &Light4) {

Serial.print(F("Got: "));

Serial.println((char \*)Light4.lastread);

int Light4\_State = atoi((char \*)Light4.lastread);

digitalWrite(Led4, Light4\_State);

}

}

}

void MQTT\_connect() {

int8\_t ret;

// Stop if already connected.

if (mqtt.connected()) {

return;

}

Serial.print("Connecting to MQTT... ");

uint8\_t retries = 3;

while ((ret = mqtt.connect()) != 0) { // connect will return 0 for connected

Serial.println(mqtt.connectErrorString(ret));

Serial.println("Retrying MQTT connection in 5 seconds...");

mqtt.disconnect();

delay(5000); // wait 5 seconds

retries--;

if (retries == 0) {

// basically die and wait for WDT to reset me

while (1);

}

}

Serial.println("MQTT Connected!");

}