**Programming NodeMCU for getting GPS data**

#include <ESP8266HTTPClient.h>

#include <ArduinoJson.h>

#include "ESP8266WiFi.h"

// your network SSID (name) & network password

char myssid[] = "ClementRegi4";

char mypass[] = "44448888";

// unwiredlabs Hostname & Geolocation Endpoint url

const char\* Host = "www.unwiredlabs.com";

String endpoint = "/v2/process.php";

// UnwiredLabs API\_Token. Signup here to get a free token https://unwiredlabs.com/trial

String token = "ee5dbe6ded8a53";

String jsonString = "{\n";

// Variables to store unwiredlabs response

double latitude = 0.0;

double longitude = 0.0;

double accuracy = 0.0;

void setup(){

Serial.begin(115200);

// Set WiFi to station mode and disconnect from an AP if it was previously connected

WiFi.mode(WIFI\_STA);

WiFi.disconnect();

Serial.println("Setup done");

// We start by connecting to a WiFi network

Serial.print("Connecting to ");

Serial.println(myssid);

WiFi.begin(myssid, mypass);

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

delay(500);

Serial.print(".");

}

Serial.println(".");

}

void loop() {

char bssid[6];

DynamicJsonBuffer jsonBuffer;

// WiFi.scanNetworks will return the number of networks found

int n = WiFi.scanNetworks();

Serial.println("scan done");

if (n == 0 ) {

Serial.println("No networks available");

} else {

Serial.print(n);

Serial.println(" networks found");

}

// now build the jsonString...

jsonString = "{\n";

jsonString += "\"token\" : \"";

jsonString += token;

jsonString += "\",\n";

jsonString += "\"id\" : \"saikirandevice01\",\n";

jsonString += "\"wifi\": [\n";

for (int j = 0; j < n; ++j) {

jsonString += "{\n";

jsonString += "\"bssid\" : \"";

jsonString += (WiFi.BSSIDstr(j));

jsonString += "\",\n";

jsonString += "\"signal\": ";

jsonString += WiFi.RSSI(j);

jsonString += "\n";

if (j < n - 1) {

jsonString += "},\n";

} else {

jsonString += "}\n";

}

}

jsonString += ("]\n");

jsonString += ("}\n");

Serial.println(jsonString);

WiFiClientSecure client;

//Connect to the client and make the api call

Serial.println("Requesting URL: https://" + (String)Host + endpoint);

if (client.connect(Host, 443)) {

Serial.println("Connected");

client.println("POST " + endpoint + " HTTP/1.1");

client.println("Host: " + (String)Host);

client.println("Connection: close");

client.println("Content-Type: application/json");

client.println("User-Agent: Arduino/1.0");

client.print("Content-Length: ");

client.println(jsonString.length());

client.println();

client.print(jsonString);

delay(800);

}

//Read and parse all the lines of the reply from server

while (client.available()) {

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

JsonObject& root = jsonBuffer.parseObject(line);

if (root.success()) {

latitude = root["lat"];

longitude = root["lon"];

accuracy = root["accuracy"];

Serial.println();

Serial.print("Latitude = ");

Serial.println(latitude, 6);

Serial.print("Longitude = ");

Serial.println(longitude, 6);

Serial.print("Accuracy = ");

Serial.println(accuracy);

}

}

Serial.println("closing connection");

Serial.println();

client.stop();

delay(3000);

}