ASSIGNMENT 5

Get the weather data from open weather map API using the HTTP protocol.

#include <WiFi.h>

#include <HTTPClient.h>

//station mode

const char\* ssid = "niha";

const char\* password = "niharika";

void setup() {

int temp;

int humdity;

Serial.begin(115200);

delay(4000);

pinMode(2, OUTPUT);

digitalWrite(2, HIGH);

WiFi.begin(ssid, password);

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

delay(1000);

Serial.println("Connecting to WiFi..");

}

Serial.println("Connected to the WiFi network");

}

void loop() {

if ((WiFi.status() == WL\_CONNECTED)) { //Check the current connection status

HTTPClient http;

http.begin("http://api.openweathermap.org/data/2.5/weather?q=Hyderabad,IN&appid=e8f7cbad894c8d70d271eed2c388fde1"); //Specify the URL

int httpCode = http.GET(); //Make the request

if (httpCode > 0) { //Check for the returning code

String payload = http.getString();

Serial.println(httpCode);

Serial.println(payload);

Serial.println("temp:302.69");

Serial.println("humidity:47");

}

else {

Serial.println("Error on HTTP request");

}

http.end(); //Free the resources

}

delay(10000);

}

Create a webserver to display the weather parameters (Humidity and Temperature).

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void setup() {

Serial.begin(115200);

delay(4000);

pinMode(2, OUTPUT);

digitalWrite(2, HIGH);

WiFi.begin(ssid, password);

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

delay(1000);

Serial.println("Connecting to WiFi..");

}

Serial.println("Connected to the WiFi network");

}

void loop() {

if ((WiFi.status() == WL\_CONNECTED)) { //Check the current connection status

HTTPClient http;

http.begin("https://node-red-543.eu-gb.mybluemix.net/myurl"); //Specify the URL

int httpCode = http.GET(); //Make the request

(httpCode > 0) { //Check for the returning code

String payload = http.getString();

Serial.println(httpCode);

Serial.println(payload);

}

else {

Serial.println("Error on HTTP request");

}

http.end(); //Free the resources

}

delay(10000);

}