#include <ESP8266WiFi.h>

const char\* ssid = "………."; // Your WiFi SSID

const char\* password = "………."; // Your WiFi password

#define RELAY1 0 // Relay 1 connected to GPIO0

#define RELAY2 2 // Relay 2 connected to GPIO2

WiFiServer server(80);

void setup()

{

Serial.begin(115200);

pinMode(RELAY1, OUTPUT);

pinMode(RELAY2, OUTPUT);

digitalWrite(RELAY1, HIGH); // Initialize Relay 1 to OFF

digitalWrite(RELAY2, HIGH); // Initialize Relay 2 to OFF

// Connect to WiFi network

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");

// Start the server

server.begin();

Serial.println("Server started");

// Print the IP address

Serial.print("Use this URL to connect: ");

Serial.print(WiFi.localIP());

Serial.println("/");

}

void loop()

{

// Check if a client has connected

WiFiClient client = server.available();

if (!client)

{

return;

}

// Wait until the client sends some data

Serial.println("New client connected");

while (!client.available())

{

delay(1);

}

// Read the first line of the request

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

Serial.println(request);

client.flush();

// Match the request for Relay 1 ON

if (request.indexOf("/RELAY1=ON") != -1)

{

Serial.println("RELAY1=ON");

digitalWrite(RELAY1, LOW); // Turn Relay 1 ON

}

// Match the request for Relay 1 OFF

if (request.indexOf("/RELAY1=OFF") != -1)

{

Serial.println("RELAY1=OFF");

digitalWrite(RELAY1, HIGH); // Turn Relay 1 OFF

}

// Match the request for Relay 2 ON

if (request.indexOf("/RELAY2=ON") != -1)

{

Serial.println("RELAY2=ON");

digitalWrite(RELAY2, LOW); // Turn Relay 2 ON

}

// Match the request for Relay 2 OFF

if (request.indexOf("/RELAY2=OFF") != -1)

{

Serial.println("RELAY2=OFF");

digitalWrite(RELAY2, HIGH); // Turn Relay 2 OFF

}

// Return the response

client.println("HTTP/1.1 200 OK");

client.println("Content-Type: text/html");

client.println(""); // this is a must

client.println("<!DOCTYPE HTML>");

client.println("<html>");

client.println("<head>");

client.println("<title>ESP8266 Relay Control</title>");

client.println("<style>");

client.println("body { font-family: Arial, sans-serif; text-align: center; margin-top: 50px; }");

client.println(".button { padding: 16px 24px; font-size: 18px; margin: 10px; cursor: pointer; }");

client.println(".on { background-color: #4CAF50; color: white; }");

client.println(".off { background-color: #f44336; color: white; }");

client.println("</style>");

client.println("</head>");

client.println("<body>");

client.println("<h1>ESP8266 Relay Control</h1>");

client.println("<h2>Relay 1</h2>");

client.println("<a href=\"/RELAY1=ON\"><button class=\"button on\">Turn ON</button></a>");

client.println("<a href=\"/RELAY1=OFF\"><button class=\"button off\">Turn OFF</button></a>");

client.println("<h2>Relay 2</h2>");

client.println("<a href=\"/RELAY2=ON\"><button class=\"button on\">Turn ON</button></a>");

client.println("<a href=\"/RELAY2=OFF\"><button class=\"button off\">Turn OFF</button></a>");

client.println("</body>");

client.println("</html>");

delay(1);

Serial.println("Client disconnected");

Serial.println("");

}