#include <ESP8266WiFi.h>

#include <BlynkSimpleEsp8266.h>

// Replace with your network credentials

char auth[] = "YOUR\_BLYNK\_AUTH\_TOKEN";

char ssid[] = "YOUR\_WIFI\_SSID";

char pass[] = "YOUR\_WIFI\_PASSWORD";

// Pin assignments

const int ledPin = D1; // Digital pin for the LED

const int motorPin1 = D5; // Motor driver input 1

const int motorPin2 = D6; // Motor driver input 2

const int motorSpeedPin = D9; // Motor driver speed control (PWM)

BlynkTimer timer;

void setup() {

Serial.begin(115200);

Blynk.begin(auth, ssid, pass);

pinMode(ledPin, OUTPUT);

pinMode(motorPin1, OUTPUT);

pinMode(motorPin2, OUTPUT);

pinMode(motorSpeedPin, OUTPUT);

// Setup a timed function to keep Blynk running smoothly

timer.setInterval(1000L, keepBlynkAlive);

}

void loop() {

Blynk.run();

timer.run();

}

// Function to keep Blynk connection alive

void keepBlynkAlive() {

Blynk.virtualWrite(V0, millis() / 1000);

}

// Blynk app callback for LED control

BLYNK\_WRITE(V1) {

int ledState = param.asInt();

digitalWrite(ledPin, ledState);

}

// Blynk app callback for motor control

BLYNK\_WRITE(V2) {

int motorSpeed = param.asInt();

analogWrite(motorSpeedPin, motorSpeed);

}

// Blynk app callback for motor direction control

BLYNK\_WRITE(V3) {

int motorDirection = param.asInt();

if (motorDirection == 1) {

digitalWrite(motorPin1, HIGH);

digitalWrite(motorPin2, LOW);

} else if (motorDirection == 2) {

digitalWrite(motorPin1, LOW);

digitalWrite(motorPin2, HIGH);

} else {

digitalWrite(motorPin1, LOW);

digitalWrite(motorPin2, LOW);

}

}