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SOURCE CODE: https://github.com/glenangelo/UTS_IoT-_trafficLightProject.git

```
#define BLYNK_TEMPLATE_ID "TMPL6JNQh9KcX"
#define BLYNK_TEMPLATE_NAME "ESP8266"
#define BLYNK_AUTH_TOKEN "V01HH6EPST6d_ZRjZou06OzQ1JbUcjuv"
/* Comment this out to disable prints and save space */
#define BLYNK PRINT Serial
#define BLYNK_GREEN "#23C48E"
#define BLYNK RED "#D3435C"
#define BLYNK_YELLOW "#FFBF00"
#define BLYNK_WHITE "#FFFFFF"
#include <ESP8266WiFi.h>
#include <BlynkSimpleEsp8266.h>
// Your WiFi credentials.
// Set password to "" for open networks.
char ssid[] = "1234";
char pass[] = "11223344";
WidgetLCD lcd(V5);
#include "DHT.h"
#define DHTPIN 4 // what pin we're connected to
// Uncomment whatever type you're using!
#define DHTTYPE DHT11 // DHT 11
#define PIN_RED D9
#define PIN GREEN D10
#define PIN BLUE D11
#define buttonPin D2
#define buzzerPin D5
#define BLYNK_GREEN "#00FF00"
#define BLYNK RED "#FF0000"
```

```
int redTime;
int yellowTime;
int greenTime;
int buttonState = 0;
int foul = 0;
WidgetLED led(V7);
DHT dht(DHTPIN, DHTTYPE);
BLYNK_WRITE(V1)
 int pinValue = param.asInt(); // assigning incoming value from pin V1 to a
variable
  redTime = pinValue ;
BLYNK WRITE(V2)
  int pinValue = param.asInt(); // assigning incoming value from pin V2 to a
variable
 yellowTime = pinValue ;
BLYNK_WRITE(V3)
  int pinValue = param.asInt(); // assigning incoming value from pin V3 to a
variable
  greenTime = pinValue ;
BLYNK_WRITE(V8)
  int pinValue = param.asInt(); // assigning incoming value from pin V8 to a
variable
 if (pinValue ==255){
   digitalWrite(buzzerPin, LOW);
   foul++; // Counting foul
  }
void setup() {
 Serial.begin(115200);
 Blynk.begin(BLYNK_AUTH_TOKEN, ssid, pass);
 pinMode(PIN RED, OUTPUT);
```

```
pinMode(PIN_GREEN, OUTPUT);
  pinMode(PIN BLUE, OUTPUT);
  pinMode(buttonPin, INPUT);
 pinMode(buzzerPin, OUTPUT);
 dht.begin();
void loop() {
 Blynk.run();
 float h = dht.readHumidity();
  float t = dht.readTemperature();
 lcd.print(1,0, "Smart TFlight");
 Blynk.virtualWrite(V4, "Suhu :", t, "C");
 Blynk.virtualWrite(V0,"Humidity :", h);
  Serial.print("Suhu: ");
  Serial.print(t);
  Serial.println();
 led.on();
 led.setColor(BLYNK GREEN);
  setColor(255, 0, 0); // Red Color
 Blynk.virtualWrite(V9, "MERAH");
  for (int i = redTime; i >= 0; i--) {
   if (digitalRead(buttonPin) == LOW) {    // Check if the button is pressed
     digitalWrite(buzzerPin, HIGH);
     led.on();
     led.setColor(BLYNK RED);
   if (i<10){
      lcd.print(1,1, "R Counter: 0"+String(i));
      } else{
      lcd.print(1,1, "R Counter: "+String(i));}
   if (digitalRead(buzzerPin)== LOW){
      led.setColor(BLYNK_GREEN);
   Blynk.virtualWrite(V6, "Foul :", foul);
   delay(1000);
    }
```

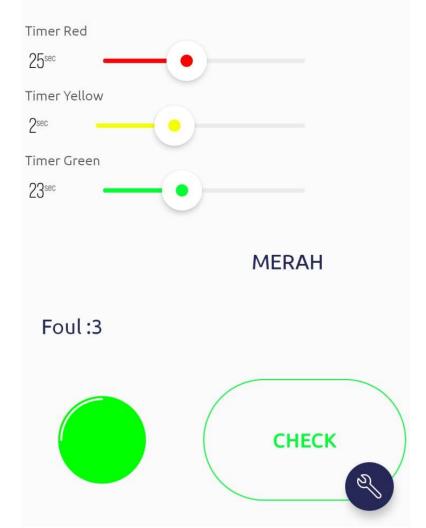
```
setColor(255, 0, 120); // Yellow Color
  Blynk.virtualWrite(V9, "KUNING");
 for (int i = yellowTime; i >= 0; i--) {
   if (i<10){
     lcd.print(1,1, "Y Counter: 0"+String(i));
    } else{
     lcd.print(1,1, "Y Counter: "+String(i));}
   delay(1000);
 setColor(0, 0, 255); // Green Color
  Blynk.virtualWrite(V9,"HIJAU");
 for (int i = greenTime; i >= 0; i--) {
   if (i<10){
     lcd.print(1,1, "G Counter: 0"+String(i));
    } else{
     lcd.print(1,1, "G Counter: "+String(i));}
   delay(1000);
void setColor(int redValue, int greenValue, int blueValue) {
 analogWrite(PIN_RED, redValue);
 analogWrite(PIN GREEN, greenValue);
 analogWrite(PIN_BLUE, blueValue);
```

X ESP8266No1

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Suhu:32.800C Humidity:76.000

Smart TFlight R Counter: 07



X ESP8266No1

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Suhu:32.800C Humidity:76.000

Smart TFlight R Counter: 07

