Air quality monitoring

Coding(python)

#define BLYNK\_TEMPLATE\_ID "TMPLwToQUqRw"

#define BLYNK\_TEMPLATE\_NAME "Air Quality Monitoring"

#define BLYNK\_AUTH\_TOKEN "C8Y7T0Fr54QF8pdfQ5dZsdfhhSdiQBFLj8mYe"

#define BLYNK\_PRINT Serial

#include <WiFi.h>

#include <BlynkSimpleEsp32.h>

#include <DHT.h>

#include <LiquidCrystal\_I2C.h>

LiquidCrystal\_I2C lcd(0x27, 16, 2);

byte degree\_symbol[8] =

{

0b00111,

0b00101,

0b00111,

0b00000,

0b00000,

0b00000,

0b00000,

0b00000

};

char auth[] = BLYNK\_AUTH\_TOKEN;

char ssid[] = "WiFi Username";

char pass[] = "WiFi Password";

BlynkTimer timer;

int gas = 32;

int sensorThreshold = 100;

#define DHTPIN 2

#define DHTTYPE DHT11

DHT dht(DHTPIN, DHTTYPE);

void sendSensor()

{

float h = dht.readHumidity();

float t = dht.readTemperature();

if (isnan(h) || isnan(t)) {

Serial.println("Failed to read from DHT sensor!");

return;

}

int analogSensor = analogRead(gas);

Blynk.virtualWrite(V2, analogSensor);

Serial.print("Gas Value: ");

Serial.println(analogSensor);

Blynk.virtualWrite(V0, t);

Blynk.virtualWrite(V1, h);

Serial.print("Temperature : ");

Serial.print(t);

Serial.print(" Humidity : ");

Serial.println(h);

}

void setup()

{

Serial.begin(115200);

Blynk.begin(auth, ssid, pass);

dht.begin();

timer.setInterval(30000L, sendSensor);

lcd.begin(16,2);

lcd.setCursor(3,0);

lcd.print("Air Quality");

lcd.setCursor(3,1);

lcd.print("Monitoring");

delay(2000);

lcd.clear();

}

LIBRARY FILE

# Wokwi Library List

# See https://docs.wokwi.com/guides/libraries

# Automatically added based on includes:

DHT sensor library

LiquidCrystal I2C

Blynk

OUTPUT

