#include <IOXhop\_FirebaseESP32.h>

#include <WiFi.h>

#include <DHT.h>

#define MQ2PIN 34

#define DHTPIN 15

#define DHTTYPE DHT22

#define SSID "\*\*\*\*"

#define PASSWORD "\*\*\*\*"

#define FIREBASE\_AUTH "W7QHRCntR0Z6NXpFGdMmjwj7pvRhrjnijNuWv2bw"

#define FIREBASE\_HOST "https://airmonitor-9fd3e-default-rtdb.firebaseio.com/"

int sensorValue = 0;

DHT dht(DHTPIN, DHTTYPE);

void setup() {

  Serial.begin(115200);

  Serial.println("DHT TEST");

  dht.begin();

  pinMode(MQ2PIN, INPUT);

  WiFi.begin(SSID, PASSWORD);

  Serial.print("Connecting");

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

    Serial.print(".");

    delay(500);

  }

  Serial.println();

  Serial.println("Connected:");

  Serial.println(WiFi.localIP());

  Firebase.begin(FIREBASE\_HOST, FIREBASE\_AUTH);

}

void loop() {

  delay(500);

  int sensorValue = analogRead(MQ2PIN);

  float h = dht.readHumidity();

  float t = dht.readTemperature();

  if (isnan(h) || isnan(t)) {

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

    return;

  }

  // Print sensor data

  Serial.print("GLP: ");

  Serial.println(sensorValue);

  Serial.print("Humidity: ");

  Serial.print(h);

  Serial.print(" %\t");

  Serial.print("Temperature: ");

  Serial.print(t);

  Serial.println(" °C");

  // Send data to Firebase

  Firebase.setFloat("Humidity:", h);

  if (Firebase.failed()) {

    Serial.print("Setting humidity failed:");

    Serial.println(Firebase.error());

    return;

  }

  Firebase.setFloat("Temperature:", t);

  if (Firebase.failed()) {

    Serial.print("Setting temperature failed:");

    Serial.println(Firebase.error());

    return;

  }

  Firebase.setInt("GLP:", sensorValue);

  if (Firebase.failed()) {

    Serial.print("Setting GLP failed:");

    Serial.println(Firebase.error());

    return;

  }

  Serial.println("Data Sent Successfully");

  delay(500);

}