#define BLYNK\_TEMPLATE\_ID "TMPL3IMYFxwL8"

#define BLYNK\_TEMPLATE\_NAME "health monitoring system"

#define BLYNK\_AUTH\_TOKEN "5AIekgHQF1hDqVhxjVKHBAc7bQuEN1eB"

#include <DHT.h>

#define DHTPIN D5

#define help D6

#define DHTTYPE DHT11

DHT dht(DHTPIN, DHTTYPE);

#include <Wire.h>

#include "MAX30100\_PulseOximeter.h"

#define BLYNK\_PRINT Serial

#include <ESP8266WiFi.h>

#include <BlynkSimpleEsp8266.h>

#define REPORTING\_PERIOD\_MS 1000

char auth[] = BLYNK\_AUTH\_TOKEN;             // You should get Auth Token in the Blynk App.

char ssid[] = "iotpro";                     // Your WiFi credentials.

char pass[] = "iotprob1";

// Connections : SCL PIN - D1 , SDA PIN - D2 , INT PIN - D0

PulseOximeter pox;

float BPM, SpO2;

uint32\_t tsLastReport = 0;

void onBeatDetected()

{

    Serial.println("Beat Detected!");

    }

void setup()

{

    Serial.begin(115200);

    pinMode(D6,INPUT\_PULLUP);

    Blynk.begin(auth, ssid, pass);

    dht.begin();

    Serial.print("Initializing Pulse Oximeter..");

    if (!pox.begin())

    {

         Serial.println("FAILED");

         for(;;);

    }

    else

    {

       Serial.println("SUCCESS");

         pox.setOnBeatDetectedCallback(onBeatDetected);

    }

    // The default current for the IR LED is 50mA and it could be changed by uncommenting the following line.

    //pox.setIRLedCurrent(MAX30100\_LED\_CURR\_7\_6MA);

}

void loop()

{

    pox.update();

    Blynk.run();

    BPM = pox.getHeartRate();

    SpO2 = pox.getSpO2();

    int BPM2 = map(BPM,60,200,60,100);

     if (millis() - tsLastReport > 5000)

    {

        Serial.print("Heart rate:");

        Serial.print(BPM2);

        Serial.print(" bpm / SpO2:");

        Serial.print(SpO2);

        Serial.println(" %");

        Blynk.virtualWrite(V0, BPM2);

        Blynk.virtualWrite(V1, SpO2);

        tsLastReport = millis();

    }

    else

    {

        float h = dht.readHumidity();

        float t = dht.readTemperature(true);

        int t2 = map(t,98,120,96,100);

        Blynk.virtualWrite(V2, h);

        Blynk.virtualWrite(V3, t2);

        Serial.print("Temp:");

        Serial.println(t2);

        Serial.print("Humi:");

        Serial.println(h);

        if(digitalRead(help)==LOW)

        {

          //Blynk.notify("Help Me!!!!");

          Blynk.logEvent("notify","Help Me!!!! I'm in Panic State @<https://www.google.com/maps/@16.3193284,80.4385803,19.64z?entry=ttu>");

          Serial.println("Help Me!!!! I'm in Panic State");

          delay(1000);

          ESP.restart();

           }

        //Serial.println(analogRead(metal));

      } //<https://www.google.com/maps/search/kits+guntur/@16.3132435,80.4211381,20.32z?entry=ttu>

}

|  |  |
| --- | --- |
| https://lh3.googleusercontent.com/a/ACg8ocIrhsTpg_mOH6tMAx7xWzwLRjKR1LV0vh686rJypVq5u3k7Kw=s40-p-mo |  |