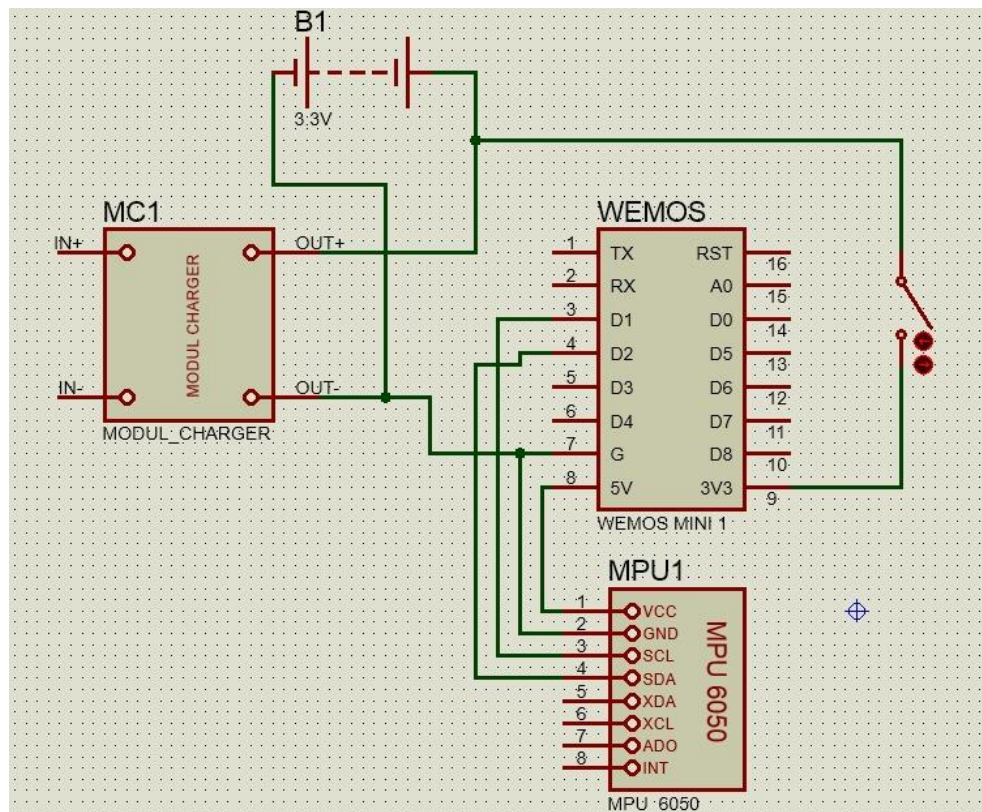


LAMPIRAN

1. RANGKAIAN KESELURUHAN



2. RUMUS DAN PERHITUNGAN

a. Rumus Kecepatan

$$\{\text{Jumlah Langkah} \times \text{Panjang Langkah User (meter)}\} \div 60 \text{ detik}$$

b. Penentuan Nilai MET

- 53,5 meter / menit = MET 2,5
- 67 meter / menit = MET 3
- 80,3 meter / menit = MET 3,5
- 93,8 meter / menit = MET 4
- 120,6 meter / menit = MET 4,5
- 134 meter / menit = MET 8
- 139,3 meter / menit = MET 9

- 160,8 meter / menit = MET 10
- 179,6 meter / menit = MET 11
- 187,6 meter / menit = MET 11,5
- 201,16 meter / menit = MET 12,5
- 214,5 meter / menit = MET 13,5
- 230,66 meter / menit = MET 14
- 241,33 meter / menit = MET 15
- 268,16 meter / menit = MET 16
- 292,33 meter / menit = MET 18

c. Rumus Nilai Kalori

$$\text{Kalori} = \{ \text{MET} \times 0,0175 \times \text{BB}(\text{kg}) \} \times \text{waktu tempuh}$$

3. TAMPILAN APLIKASI



```

#include <MPU6050.h>
#include<Wire.h>
#include<CountUpDownTime
r.h>
#include <ESP8266WiFi.h>
#include <WiFiClient.h>
#include
<ESP8266WebServer.h>
const char* ssid =
"HILOLA"; // Nama
SSID AP/Hotspot
const char* password =
"0987654321"; //
Password Wifi
IPAddress
ip(192,168,11,4); //
arbitrary IP address
(doesn't conflict w/
local network)
IPAddress
gateway(192,168,11,4);
IPAddress
subnet(255,255,255,0);
ESP8266WebServer
server(80);
CountUpDownTimer T(UP,
HIGH);
int count = 0;
int flag = 0;
int a = 1;
int b=0;
float val;
String langkah = "";
const int MPU_addr=0x68;
int16_t AcY;
void wifi(){
  WiFi.softAP(ssid,
password);

```

```

Serial.print("IP Address
: \n");
  Serial.println(ip);
} void handleRoot(){
  server.send(200,
"text/plain", langkah);
}
void rest(){
  b=2;
  server.send(200,
"text/plain", langkah);
  T.ResetTimer();
}
void mulai(){
  b=1;
  server.send(200,
"text/plain", langkah);
}
void berhenti(){
  b=0;
  server.send(200,
"text/plain", langkah);
  T.ResetTimer();
}
void setup(){
  Serial.begin(115200);
  delay(10);
  Wire.begin();
  Wire.beginTransmission(M
PU_addr)
  Wire.write(0x6B);
  Wire.write(0);
  Wire.endTransmission(tru
e);

```

```

pinMode(D6, OUTPUT);
  pinMode(D4, OUTPUT);
  digitalWrite(D6,
HIGH);
  digitalWrite(D4,
HIGH);
  T.SetStopTime(0,0,3);
  T.StartTimer();
  WiFi.mode(WIFI_AP);
  wifi();
  server.on("/",
handleRoot);
  server.on("/RESET",
rest);
  server.on("/MULAI",
mulai);
  server.on("/BERHENTI",
berhenti);
  server.begin();}
void loop(){

if(b==1){digitalWrite(D4
,HIGH);}

if(b==0){digitalWrite(D4
,LOW);}

  if(b==2){count=0;}

  if(digitalRead(D4 ==
HIGH)){
Wire.beginTransmission(M
PU_addr);
Wire.write(0x3B);

Wire.endTransmission(fal
se);

Wire.requestFrom(MPU_add
r,14,true);

```

```

  if(temp=='+')
    pinMode(D4,HIGH);
  if(temp=='-')
    pinMode(D4,LOW);}
//Perhitungan Langkah
  if(val > 9.99 && flag
== 0 && digitalRead(D6)
== HIGH &&
digitalRead(D4) ==
HIGH){
  count+=1;
  delay(30);
  flag = 1;
  delay(35);
  digitalWrite(D6,
LOW);
  delay(70); }
  if (val < 5.00 &&
flag == 1 &&
digitalRead(D6) == LOW
&& digitalRead(D4) ==
HIGH){
  flag = 0;
  delay(35);
  digitalWrite(D6,
HIGH);
  delay(70); }
if(digitalRead(D4)==HIGH
){
  timer();}
  langkah = count;
  server.handleClient();}
void timer(){
  if(val == 6.00 || val
== 7.00 || val == 8.00
|| val == 9.00 || val ==

```

```

initialize global (PanjangLangkah) to 0
initialize global (WaktuAwal) to 0
initialize global (MET) to 0
initialize global (KEC) to 0
initialize global (kalori) to 0
initialize global (JumlahJarak) to 0
initialize global (JumlahLangkah) to 0

initialize global (back) to 0
initialize global (duras) to 0
initialize global (jam) to 0
initialize global (menit) to 0
initialize global (detik) to 0
initialize global (JumlahWaktu) to 0
initialize global (BeratBadan) to 0

when Connect .LongClick
do
  set HorizontalArrangement19 .Visible to false
  set HorizontalArrangement27 .Visible to false
  call TinyDB1 .StoreValue
    tag "espadres"
    valueToStore join "http://"
    "192.168.11.4"
    "/"
  set AlamatIP .Text to TextBox2 .Text
  set AlamatIP .TextColor to 
  set Label1 .TextColor to 
  set Label8 .Text to TextBox1 .Text
  set Label8 .TextColor to 
  set Label8 .TextColor to 
  call TextBox1 .HideKeyboard
  call TextBox2 .HideKeyboard
  call Notifier1 .ShowAlert
    notice " untuk memulai tekan dan tahan tombol mulai "
  set LayoutUtama .Visible to true
  set Connect .Text to "DISCONNECT"
  set global back to 0
  set global BeratBadan to TextBox1 .Text
  set global PanjangLangkah to TextBox2 .Text

```

```

when Connect .Click
do
  set HorizontalArrangement19 .Visible to true
  set HorizontalArrangement27 .Visible to true
  set LayoutUtama .Visible to false
  set MULAI .BackgroundColor to 
  set AlamatIP .TextColor to 
  set Connect .Text to "CONNECT"
  set global back to 0
  set Angka .Text to "0"
  set MULAI .Text to "MULAI"
  set timer .TimerEnabled to false
  set Label1 .TextColor to 

```

```

when MULAI .LongClick
do
  call TinyDB1 .StoreValue
    tag " espadres "
    valueToStore join " http://"
                  " 192.168.11.4 "
                  " /MULAI "
  set global WaktuAwal to call timer2 .Now
  set MULAI .BackgroundColor to 
  call Notifier1 .ShowAlert
    notice " Mulai "
  set MULAI .Text to " STOP "
  set timer .TimerEnabled to true
  set timer2 .TimerEnabled to true

when Web1 .GoText
  url responseCode responseType responseContent
do
  set Label12 .Text to get responseContent
  set Angka .Text to floor Label12 .Text
  set global JumlahLangkah to Angka .Text

when MainScreen .ErrorOccurred
  component functionName errorNumber message
do
  if get errorNumber = 1101
  then

when MainScreen .BackPressed
do
  set global back to get global back + 1
  call Notifier1 .ShowAlert
    notice " tekan sekali lagi untuk keluar "
  if get global back = 2
  then close application

when timer .Timer
do
  call WebView1 .GoToUrl
    url Web1 .Url
  set Web1 .Url to call TinyDB1 .GetValue
    tag " espadres "
    valueIfTagNotThere " "
  call Web1 .Get

```

```

when MULAI .Click
do
  call TinyDB1 .StoreValue
    tag " espadres "
    valueToStore join " http://"
                  " 192.168.11.4 "
                  " /BERHENTI "
  set MULAI . BackgroundColor to 
  set MULAI . Text to " MULAI "
  set timer . TimerEnabled to false
  set timer2 . TimerEnabled to false

```

```

when Reset .Click
do
  call TinyDB1 .StoreValue
    tag " espadres "
    valueToStore join " http://"
                  " 192.168.11.4 "
                  " /RESET "
  set Angka . Text to " 0 "
  set Label17 . Text to " 0 "
  set Label5 . Text to " 0 "
  set global jam to 0
  set global menit to 0
  set global detik to 0
  set global durasi to 0
  set global kalori to 0
  set global JumlahJarak to 0
  set Label11 . Text to join get global jam
                          " : "
                          get global menit
                          " : "
                          get global detik
  set timer2 . TimerEnabled to false

```