

LAMPIRAN

Lampiran 1. Kode Premrograman Arduino

```
#define m1 8
#include <Wire.h>
#include <HCMotor.h>
#include <SoftwareSerial.h>
#include <DHT.h>
DHT dht(5, DHT11); //Pin, Jenis DHT
#include <LiquidCrystal_I2C.h>
SoftwareSerial HC05module(3,4); //pin RX, TX
LiquidCrystal_I2C lcd(0x3f, 16, 2);
#define pwm1 9
HCMotor HCMotor;
int analogInPin = A0;
int pwm = 0;
char data;
int state = 0;
int sensor = 0;
int outputValue = 0;
void setup() {
    // put your setup code here, to run once:
    pinMode(m1,OUTPUT);
    pinMode(pwm1,OUTPUT);
    //dht.begin();
    //lcd.begin(0,0);
    Serial.begin(9600);
    HCMotor.Init();
    HCMotor.attach(0, DCMOTOR,pwm1);
    HCMotor.DutyCycle(0, 255);
    HC05module.begin(9600); // inisialisasi modul bluetooth
    Serial.println("Kendali Motor DC");
    Serial.println("=====");
    lcd.init();           // initialize the lcd
    lcd.init();
}

void loop()
{

    float kelembaban = dht.readHumidity();
    float suhu = dht.readTemperature();

    lcd.backlight();
    lcd.setCursor(0,1);
```

```

lcd.print("H:  *%");
lcd.setCursor(2,1);
lcd.print(kelembaban);
lcd.setCursor(8,1);
lcd.print("T:  *C");
lcd.setCursor(10,1);
lcd.print(suhu);
//delay(300);
if(HC05module.available())
{
state = HC05module.read();
Serial.print("Hasil baca dari Bluetooth: ");
Serial.println(state);
if(state == '8')
{
delay(200);
pwm = 225;
lcd.backlight();
lcd.clear();
lcd.setCursor(0,0);
lcd.print("Speed:");
lcd.setCursor(7,0);
lcd.print("5(26rpm)");
// Serial.println(pwm);
}
if(state == '7')
{
delay(200);
pwm = 200;
lcd.backlight();
lcd.clear();
lcd.setCursor(0,0);
lcd.print("Speed:");
lcd.setCursor(7,0);
lcd.print("4(20rpm)");
// Serial.println(pwm);
}
if(state == '6')
{
delay(200);
pwm = 150;
lcd.backlight();
lcd.clear();
lcd.setCursor(0,0);
lcd.print("Speed:");
lcd.setCursor(7,0);

```

```

    lcd.print("3(16rpm)");
    Serial.println(pwm);
  }
  if(state == '5')
  {
    delay(200);
    pwm = 100;
    lcd.backlight();
    lcd.clear();
    lcd.setCursor(0,0);
    lcd.print("Speed:");
    lcd.setCursor(7,0);
    lcd.print("2(10rpm)");
    Serial.println(pwm);
  }
  if(state == '4')
  {
    delay(200);
    pwm = 50;
    lcd.backlight();
    lcd.clear();
    lcd.setCursor(0,0);
    lcd.print("Speed:");
    lcd.setCursor(7,0);
    lcd.print("1(4rpm)");
    Serial.println(pwm);
  }

  Serial.println(pwm);
}
if(state == '3')
{
  delay(200);
  pwm = 0;
  lcd.backlight();
  lcd.clear();
  lcd.setCursor(0,0);
  lcd.print("level Speed:");
  lcd.setCursor(13,0);
  lcd.print('0');
}
if(state == '1')
{
  delay(200);
  pwm = pwm+10;
  if(pwm>=78)

```

```

    {pwm=78;
    }
    lcd.backlight();
    lcd.setCursor(0,0);
    lcd.print("level Speed:");
    lcd.setCursor(13,0);
    lcd.print("MAX");
    Serial.println(pwm);
    }
    else if(state == '2')
    {
        delay(200);
        pwm = pwm-10;
        if(pwm<=28)
        {pwm=0;}
        lcd.backlight();
        lcd.setCursor(0,0);
        lcd.print("Speed:");
        lcd.setCursor(7,0);
        lcd.print("STOP");
        Serial.println(pwm);
    }
    //Program Motor
    HCMotor.OnTime(0, pwm);
    Serial.println(pwm);
    }

```

Lampiran 2. Kode Pemrograman Android.

Viewer

```

when ListPicker1 >> BeforePicking
do
  set ListPicker1 >> Elements to BluetoothClient1 >> AddressesAndNames

when ListPicker1 >> AfterPicking
do
  set ListPicker1 >> Selection to call BluetoothClient1 >> Connect
  address ListPicker1 >> Selection
  then
    if BluetoothClient1 >> isConnected
    then
      set ListPicker1 >> Visible to true
      set Button1 >> Visible to true
      set Button5 >> Visible to true
    else
      set ListPicker1 >> Visible to false
      set Button1 >> Visible to false
      set Button5 >> Visible to false

when Button6 >> Click
do
  set VerticalArrangement1 >> Visible to true
  set HorizontalArrangement2 >> Visible to false
  call BluetoothClient1 >> SendText
  text "- 3 -"
  set HorizontalScrollArrangement >> Visible to false

when Button10 >> Click
do
  call BluetoothClient1 >> SendText
  text "- 7 -"

when Button1 >> Click
do
  set VerticalArrangement1 >> Visible to false
  set HorizontalArrangement2 >> Visible to true
  call BluetoothClient1 >> SendText
  text "- 3 -"
  set HorizontalScrollArrangement >> Visible to true

when Button2 >> Click
do
  call BluetoothClient1 >> SendText
  text "- 3 -"
  close application

when Button5 >> Click
do
  call BluetoothClient1 >> Disconnect
  set ListPicker1 >> Visible to true
  set Button1 >> Visible to false
  set Button5 >> Visible to false

when Button11 >> Click
do
  call BluetoothClient1 >> SendText
  text "- 8 -"

when Button4 >> Click
do
  call BluetoothClient1 >> SendText
  text "- 2 -"

when Button7 >> Click
do
  call BluetoothClient1 >> SendText
  text "- 4 -"

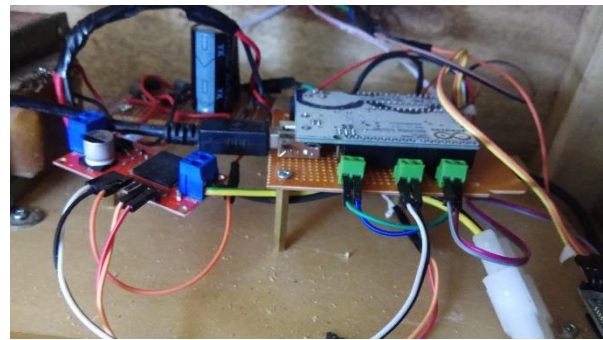
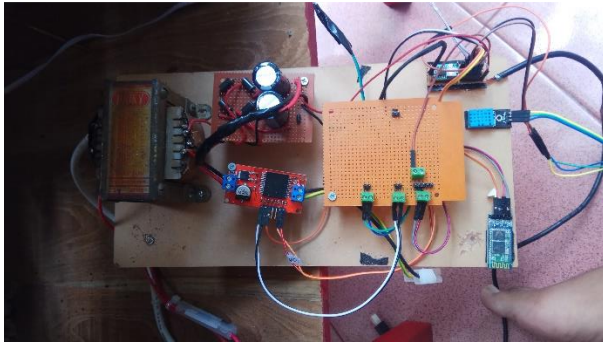
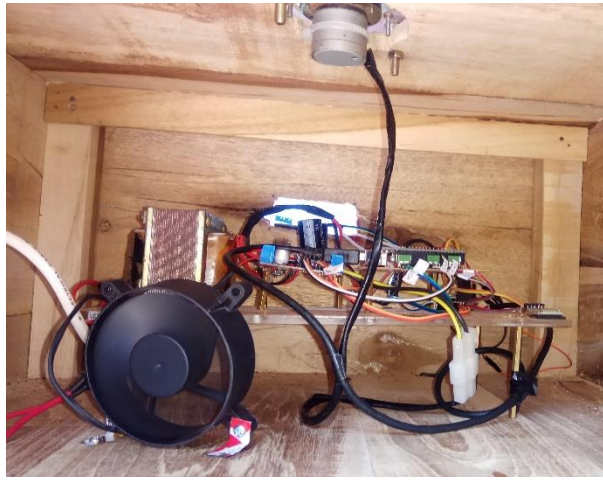
when Button8 >> Click
do
  call BluetoothClient1 >> SendText
  text "- 3 -"

when Button9 >> Click
do
  call BluetoothClient1 >> SendText
  text "- 6 -"
  
```

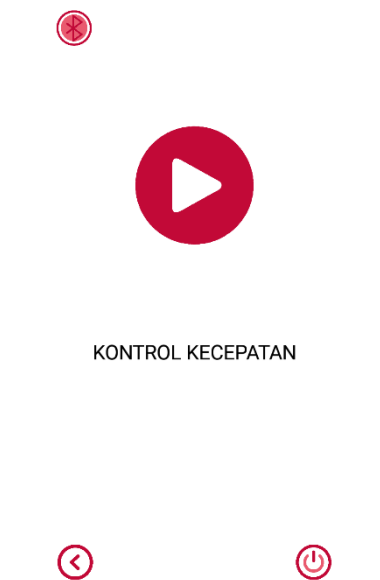
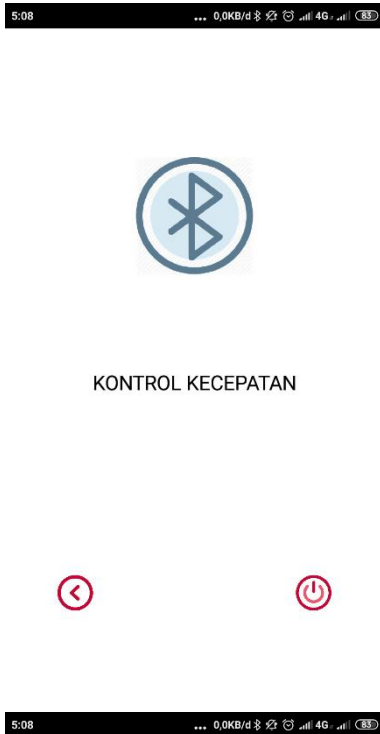
Show Warnings

Navigation icons: Search, Zoom In, Zoom Out, Home

Lampiran 3. Foto unit dan rangkaian.



Lampiran 4. Tampilan aplikasi.



Lampiran 5. Foto - foto.



