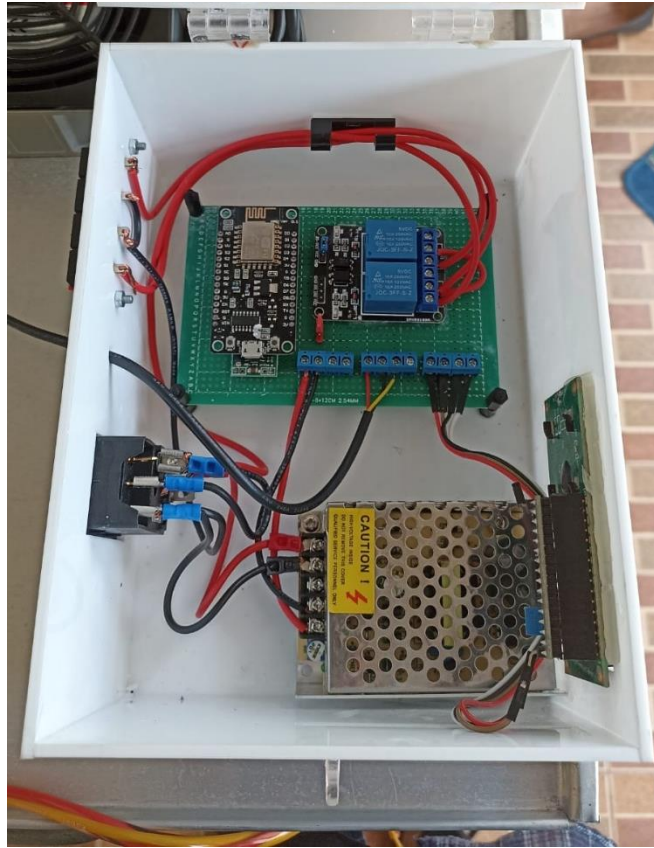




Gambar saat menyambungkan kabel blower



Gambar rangkaian komponen elketronika

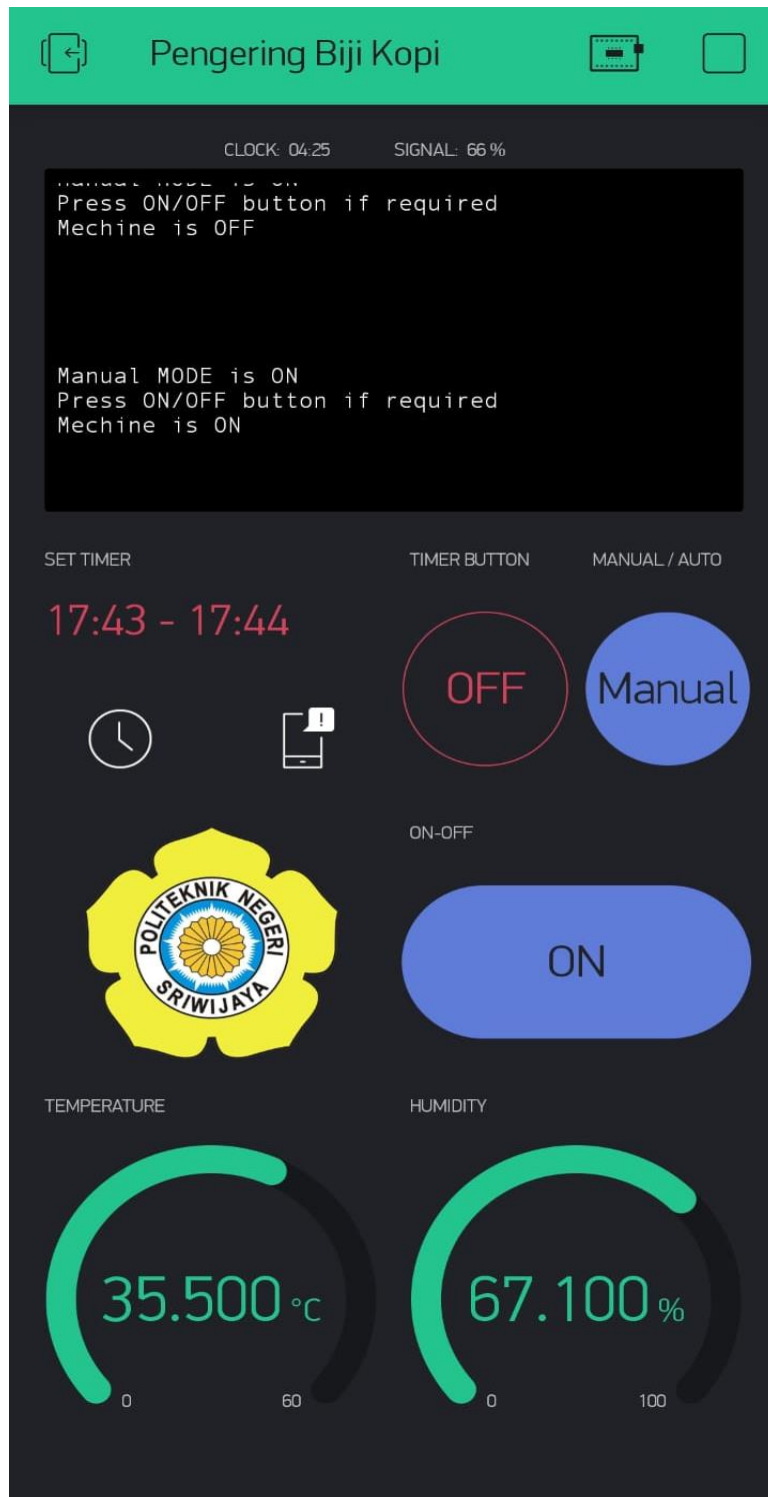


Gambar Letak Sensor DHT21



Pengeringan menggunakan thermometer sebagai pembanding





Tampilan Aplikasi Blynk

```
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KopiIoT
#define BLYNK_PRINT Serial
#include <ESP8266WiFi.h>
#include <BlynkSimpleEsp8266.h>
#include <SimpleTimer.h>
#include <TimeLib.h>
#include <WidgetRTC.h>
#include <Wire.h>
#include <LiquidCrystal_I2C.h>
LiquidCrystal_I2C lcd(0x27, 16, 2);

#include <DHT.h>
#define DHTPIN D3 //what pin we're connected to
#define DHTTYPE DHT21 //DHT 21 (AM2301)
DHT dht(DHTPIN, DHTTYPE);
float hum; //Stores humidity value
float temp; //Stores temperature value

int set = 0;

SimpleTimer timer;

WidgetRTC rtc;
WidgetTerminal terminal(V3);

#define server "iot.serangkota.go.id" // or "blynk.cloud-com" for Blynk's cloud server
#define TestLED D0 // on board LED pin assignment
#define BLOWER D5
#define FAN D6
char Date[16];

1
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Arduino Uno
```

```
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KopiIoT
#define FAN D6
char Date[16];
char Time[16];

char auth[] = "YqkArAtv_hFllDKrHAPi2p9W9e6e10"; //Test1
char ssid[] = "MONITAA"; //Nama Wifi atau Hotspot
char pass[] = "monita645"; //Password Wifi atau Hotspot

long startseconds; // weekday start time in seconds
long stopseconds; // weekday stop time in seconds
long nowseconds; // time now in seconds
bool isFirstConnect = true;

String displaycurrenttimepluswifi;
int wifiSignal;
int manual=0;
int oldstatus;

int mondayFriday;
int saturdaySunday;
int allDays;
int uptoyou;

void setup()
{
  pinMode(BLOWER, OUTPUT);
  pinMode(FAN, OUTPUT);
}

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```

```
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KopiIoT

void setup()
{
  pinMode(BLOWER, OUTPUT);
  pinMode(FAN, OUTPUT);
  pinMode(TEMPLED, OUTPUT);
  digitalWrite(TEMPLED, HIGH); // set Blower OFF
  digitalWrite(BLOWER, HIGH);
  digitalWrite(FAN, HIGH);
  Serial.begin(115200);

  Wire.begin(D2, D1);
  lcd.begin();
  lcd.backlight();
  lcd.clear();
  lcd.setCursor(0,0);
  lcd.print("---TUGAS ARMIR---");
  lcd.setCursor(0,1);
  lcd.print("--PENGERING KOPI--");

  Blynk.begin(auth, ssid, pass, server, 8080);
  lcd.clear();
  int mytimeout = millis() / 1000;
  rtc.begin();
  dht.begin();
  timer.setInterval(10000L, activetoday); // check every 10 SECONDS if schedule should run today
  timer.setInterval(5000L, clockvalue); // check value for time
  timer.setInterval(5000L, sendWifi); // WI-Fi singal
}

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```

```
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KopiIoT

BLYNK_CONNECTED() {
  if (!isFirstConnect) {
    Blynk.syncAll();
    Blynk.notify("TIMER STARTING!!!!");
    isFirstConnect = false;
  }
}

void sendWifi() {
  wifiSignal = map(WiFi.RSSI(), -105, -40, 0, 100);
}

void clockvalue() // Digital clock display of the time
{
  int gmthour = hour();
  if (gmthour == 24) {
    gmthour = 0;
  }
  String displayhour = String(gmthour, DEC);
  int hourdigits = displayhour.length();
  if (hourdigits == 1) {
    displayhour = "0" + displayhour;
  }
  String displayminute = String(minute(), DEC);
  int minutedigits = displayminute.length();
  if (minutedigits == 1) {
    displayminute = "0" + displayminute;
  }
}

Updates available for some of your boards and libraries
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KopiIoT
}
String displayminute = String(minute(), DEC);
int minutedigits = displayminute.length();
if(minutedigits == 1){
  displayminute = "0" + displayminute;
}

displaycurrenttimepluswifi = "          Clock: " + displayhour + ":" + displayminute + "          Signal: " + wifisignal + " ";
Blynk.setProperty(V3, "label", displaycurrenttimepluswifi);
}

void activetoday() { // check if schedule should run today
  if(year() != 1970) {
    if (alldays==1) {
      Blynk.syncVirtual(V4); // sync timeinput widget
    }
  }
}

void checklastbuttonpressed () {
  if((mondayfriday==1)&&(saturday==0)) { oldstatus=1; }
  if((mondayfriday==0)&&(saturday==1)) { oldstatus=2; }
  if((mondayfriday==1)&&(saturday==1)) { oldstatus=3; }
  if(alldays==1) { oldstatus=4; }
  if(uptoyou==1) { oldstatus=5; }
  if((mondayfriday==0)&&(saturday==0)&&(alldays==0)&&(uptoyou==0)) { oldstatus=6; }
}

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```
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KopiIoT

void restorelastbuttonpressed () {
  if(oldstatus==4) { alldays=1; Blynk.virtualWrite(V9, 1); }
  if(oldstatus==1) {
    alldays=0;
    Blynk.virtualWrite(V9, 0);
  }
}

BLYNK_WRITE(V1) // Manual/Auto selection
{
  if (param.asInt() == 1) {
    manual=1;
    terminal.println();
    terminal.println();
    terminal.println();
    terminal.println("Manual MODE is ON");
    terminal.println("Press ON/OFF button if required");
    terminal.println();
    terminal.println();
    terminal.println();
    terminal.flush();

    checklastbuttonpressed ();

    alldays=0;
    Blynk.virtualWrite(V9, 0);
  }
}

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```

```
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KopiIoT

} else {
  restoreLastButtonPressed ();
  manual=0;
  terminal.println();
  terminal.println();
  terminal.println();
  terminal.println("Manual MODE is OFF");
  terminal.println("Auto MODE restored from last status");
  terminal.println("Wait for update (10 seconds as maximum)");
  terminal.println();
  terminal.println();
  terminal.flush();
}
}

void resetTerminal()
{
  terminal.println();
  terminal.println();
  terminal.println();
  terminal.println("New MODE has been selected");
  terminal.println("Wait for update (10 seconds as maximum)");
  terminal.println();
  terminal.println();
  terminal.println();
  terminal.flush();
}

void resetManual()

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```
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KopiIoT

led.print("PENGINGINAN OFF ");

  digitalWrite(FAN, HIGH);
  digitalWrite(BLOWER, HIGH);
}
}
timer.run();
}

void sensorDHT() {
  hum = dht.readHumidity();
  temp= dht.readTemperature();
}

void rules() {
  if (temp < 70) { //70
    digitalWrite(BLOWER, LOW);
  }
  else if (temp >= 70) {
    digitalWrite(BLOWER, HIGH);
  }

  if (hum > 12) { //20
    digitalWrite(FAN, LOW);
  }
  else if (hum <= 12) {
    digitalWrite(FAN, HIGH);
  }
}

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```




Biji kopi Ketika basah



Biji Kopi Ketika Kering