

Control Electronics Equipment Using Telegram Bot and PHP Webhook

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<https://iot.ciwaruga.com>

Misalnya dalam contoh kita akan membuat Rangkaian 3 Buah LED, dimana LED tersebut nantinya dapat dinyalakan ataupun dimatikan via telegram.

Pertama Anda Buat Bot Telegram dulu, Kemudian Nanti kalau sudah memiliki token, baru masukan kedalam program webhook berikut:

Contoh Sederhana Webhook yang dibuat

Index.php

```
<?php
$content = file_get_contents("php://input");
if($content){
    $token = 'masukantokendisini'; //ivoga_boot
    $apiLink = "https://api.telegram.org/bot$token/";
    echo '<pre>content = '; print_r($content); echo '</pre>';
    $update = json_decode($content, true);
    if(!@$update["message"]) $val = $update['callback_query'];
    else $val = $update;

    $chat_id = $val['message']['chat']['id'];
    $text = $val['message']['text'];
    $update_id = $val['update_id'];
    $sender = $val['message']['from'];
    ?>
    <b>There is a message :</b>
```

```

<br /><br />
<b>Username : </b> <?php echo $sender['username']; ?> <br />
<b>Sender's Name : </b> <?php echo $sender['first_name']. ' '.$sender['last_name']; ?> <br />
<b>Text Message : </b> <?php echo $text; ?> <br /><br />
<?php
    $text=strtolower($text);
    $host="192.168.1.41"; //webserver nodemcu
    $url="$host$text";
    $ch = curl_init();
    curl_setopt($ch, CURLOPT_URL,$url);
    curl_setopt($ch, CURLOPT_RETURNTRANSFER, 1);
    $output = curl_exec($ch);
    curl_close($ch);

    if($text=="/start")
    {
        $text="Selamat Datang di IVOGA IOT Web Server \n  /ON1 /ON2 /ON3  /OFF1 /OFF2 /OFF3";
    }
    file_get_contents($apiLink . "sendmessage?chat_id=$chat_id&text=You just sent ".$text);
} else echo 'Only telegram can access this url.';
?>

```

Sketch Program NodeMCU

```

// Implementasi Komunikasi Webserver NodeMCU ESP 8266 dengan Web Client dan Telegram
// Apache, PHP, MYSQL
// Kontrol Lampu Dengan Telegram Bot
// dengan method POST dan GET
// Taryanarx@gmail.com
//
#include <ESP8266WiFi.h>
#include <ESP8266WebServer.h>
#include <Wire.h> // Library komunikasi I2C
#include <LiquidCrystal_I2C.h> // Library modul I2C LCD

// default address 0x27
// tipe LCD 16x2 (16,2)
LiquidCrystal_I2C lcd = LiquidCrystal_I2C(0x27, 16, 2);

const char* ssid = "ibu"; // Nama SSID AP/Hotspot
const char* password = "51ngsabar"; // Password Wifi

ESP8266WebServer server(80); //Menyatakan Webserver pada port 80
const int lampu1 = D5;
const int lampu2 = D6;

```

```

const int lampu3 = D7;
void set_LCD()
{
  lcd.init();
  lcd.backlight();
  lcd.clear();
  lcd.print("Allisakost");
  lcd.setCursor(0, 1);
  lcd.print("www.ciwaruga.com");
}

void setPIN()
{
  pinMode(lampu1, OUTPUT);
  pinMode(lampu2, OUTPUT);
  pinMode(lampu3, OUTPUT);
}

void konek_WIFI()
{
  Serial.begin(115200);
  delay(10);
  // Connect to WiFi network -----
  Serial.println();
  Serial.println();
  Serial.print("Connecting to ");
  Serial.println(ssid);

  // Mengatur WiFi -----
  WiFi.mode(WIFI_STA);          // Mode Station
  WiFi.begin(ssid, password);    // Mencocokkan SSID dan Password

  while (WiFi.status() != WL_CONNECTED) {
    delay(500);
    Serial.print(".");
  }

  // Print status Connect -----
  Serial.println("");
  Serial.println("WiFi connected");
  Serial.println("IP address: ");
  Serial.println(WiFi.localIP());
  lcd.clear();
  lcd.print("Ip-Address");
  lcd.setCursor(0, 1);
  lcd.print(WiFi.localIP());
}

/**end wifi **

```

```

void setup() {
  set_LCD();
  konek_WIFI();
  setPIN();

  // Membuat tampilan Webpage -----
  server.on("/", []() {
    server.send(200, "text/plain", "SELAMAT DATANG IVOGA BOT ");
  });

  server.on("/on1", []() {
    server.send(200, "text/plain", "Lampu1 On");
    digitalWrite(lampu1, HIGH); // turn on the led1
  });

  server.on("/on2", []() {
    server.send(200, "text/plain", "lampu2");
    digitalWrite(lampu2, HIGH); // turn on the led2
  });

  server.on("/on3", []() {
    server.send(200, "text/plain", "lampu3");
    digitalWrite(lampu3, HIGH); // turn on the led3
  });

  server.on("/off1", []() {
    server.send(200, "text/plain", "Lampu1 Off");
    digitalWrite(lampu1, LOW); // turn off the led1
  });

  server.on("/off2", []() {
    server.send(200, "text/plain", "Lampu2 off");
    digitalWrite(lampu2, LOW); // turn off the led2
  });

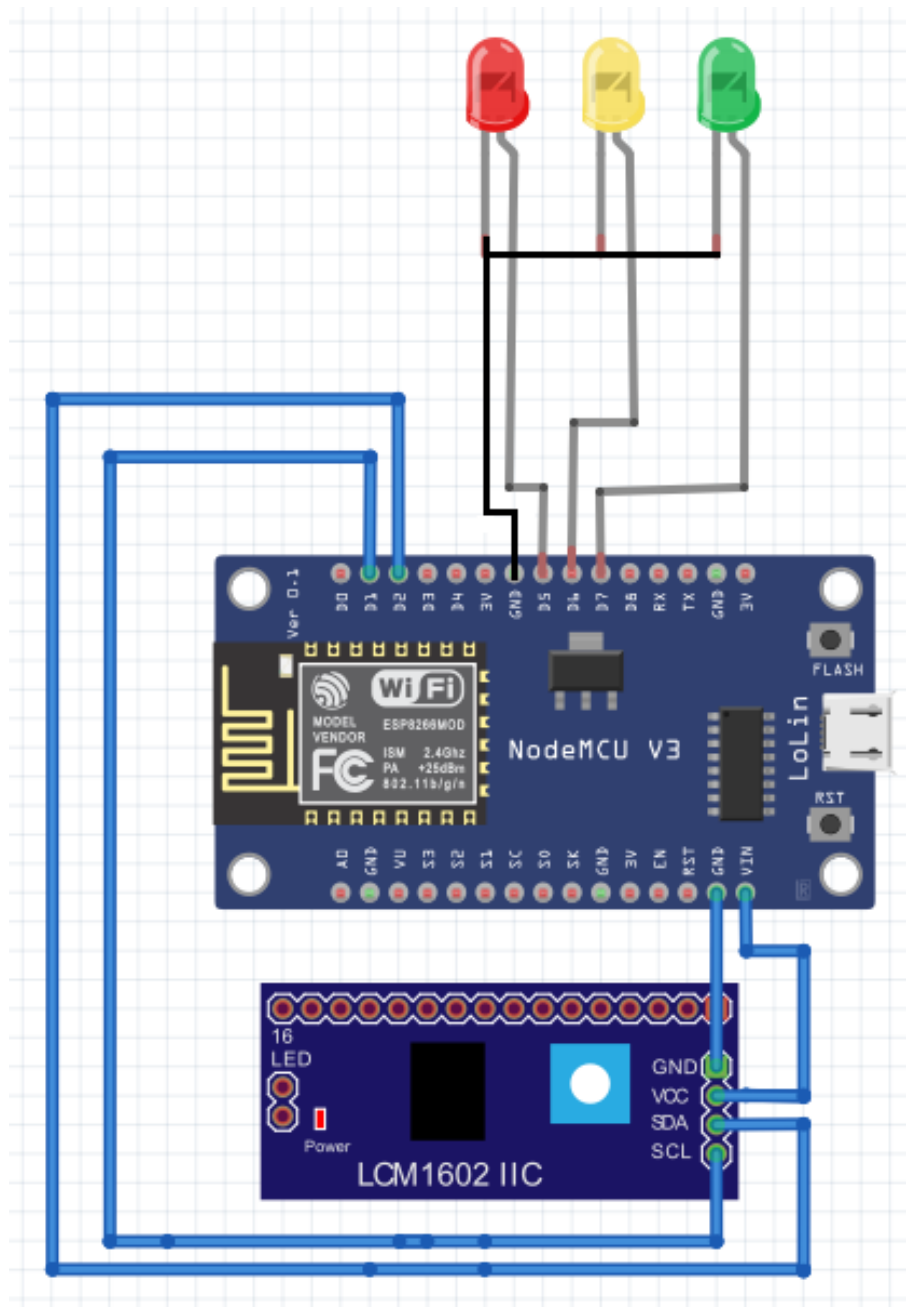
  server.on("/off3", []() {
    server.send(200, "text/plain", "Lampu3 off");
    digitalWrite(lampu3, LOW); // turn off the led3
  });

  server.begin();
  Serial.println("Webserver dijalankan");
}

void loop() {
  server.handleClient();
}

```

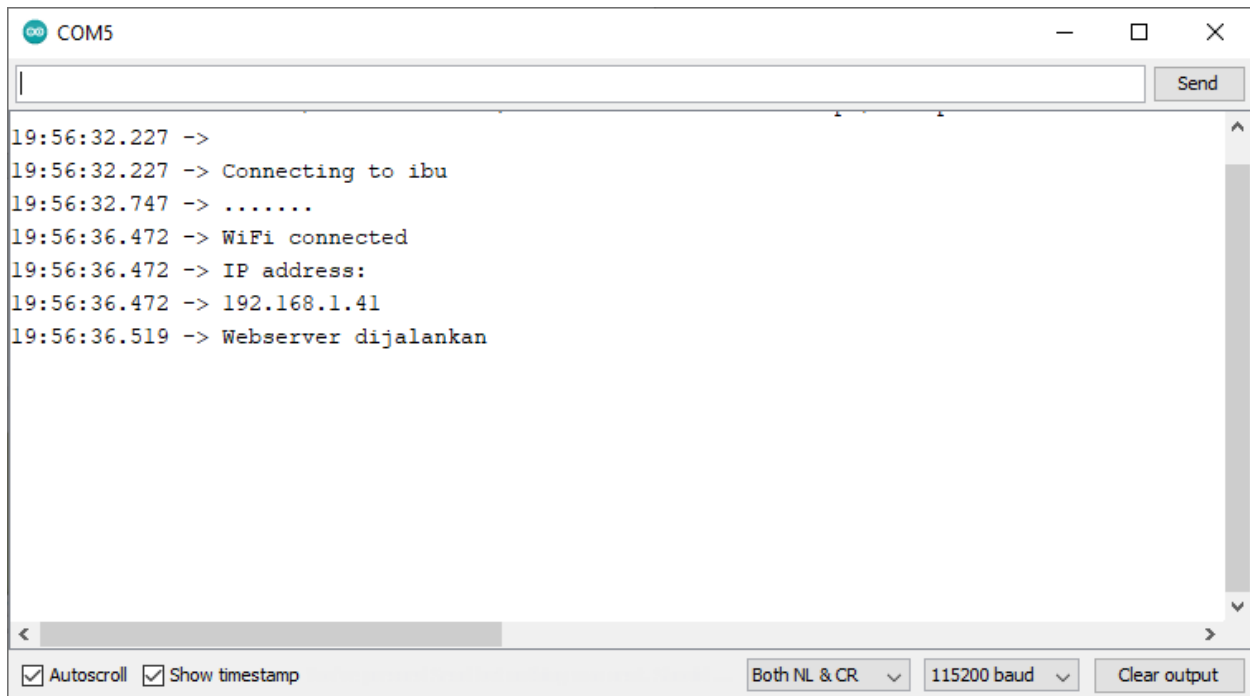
}



Gambar Skema Rangkaian NodeMCU dan LED

Menjalankan Program

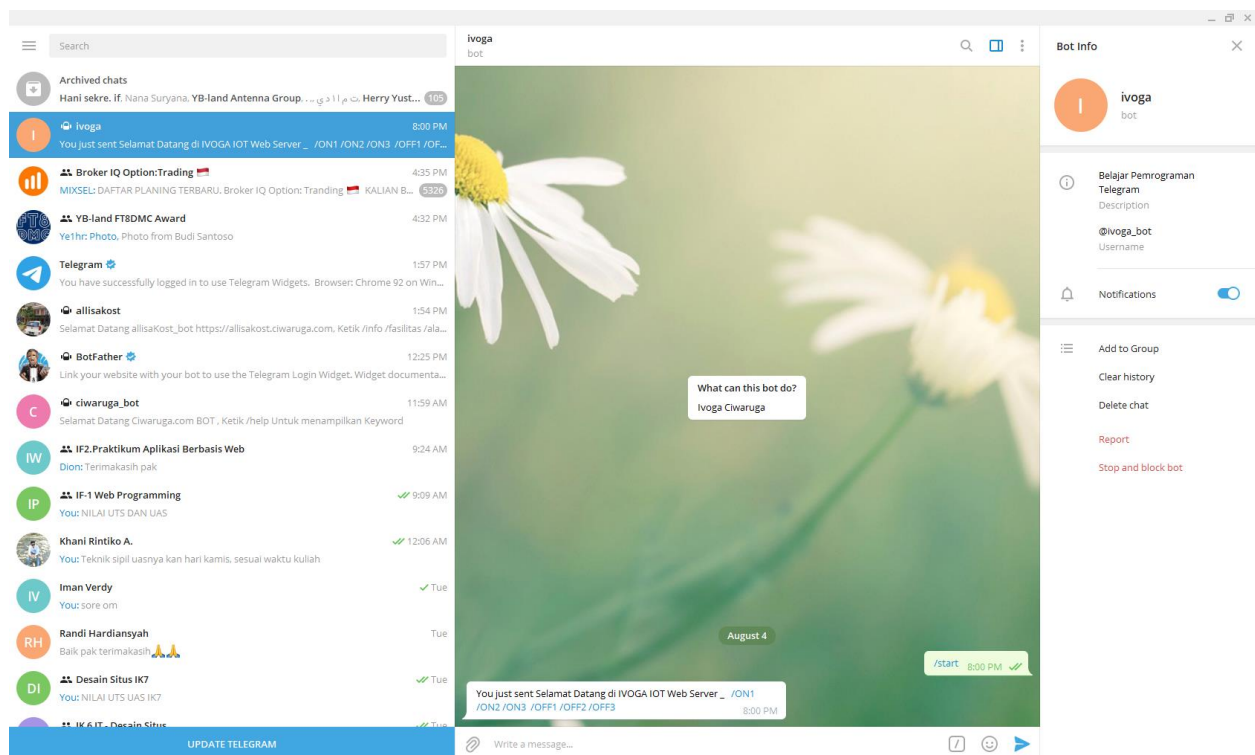
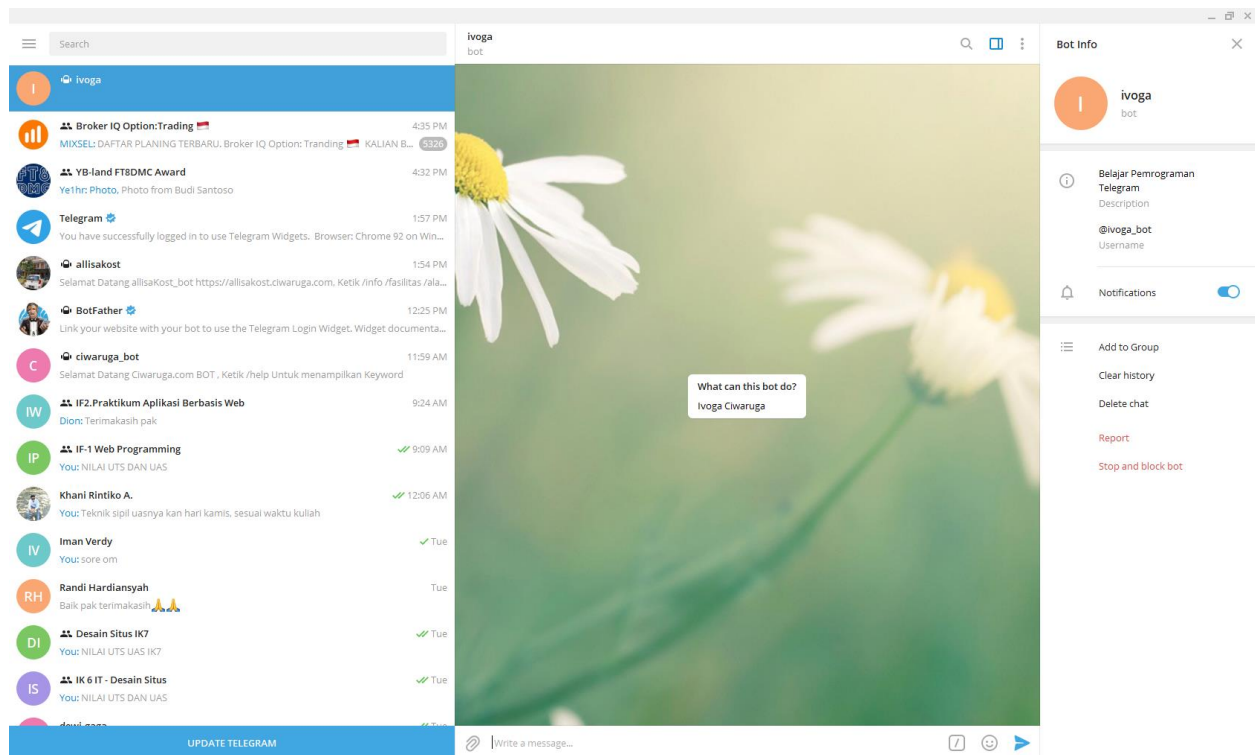
Upload Sketch Program diatas, setelah berhasil kemudian lihat di toos-seriaImonitor



```
COM5
19:56:32.227 ->
19:56:32.227 -> Connecting to ibu
19:56:32.747 -> .....
19:56:36.472 -> WiFi connected
19:56:36.472 -> IP address:
19:56:36.472 -> 192.168.1.41
19:56:36.519 -> Webserver dijalankan
```

Webserver Aktif dengan IP-Address yang diperoleh dari dhcp

Jalankan Telegram Bot Anda, Contoh disini saya menggunakan IVOGA_BOT



Beri perintah Pertama /START pada telegram bot anda, akan ditampilkan beberapa perintah yang diawali dengan tanda /, jika ingin menyalakan lampu pertama cukup tulis /ON1 kemudian enter, maka Lampu Led1 akan menyala, begitu juga jika ingin mematikan cukup ketik perintah /OFF1 enter, Maka lampu Led1 akan Mati

Search

Archived chats

Hani sekre. IF. Nana Suryana: YB-land Antenna Group... ١١ م ١١ م Herry Yust... 105

ivoga

You just sent /off1 8:04 PM

Broker IQ Option:Trading

MIXSEL: DAFTAR PLANING TERBARU. Broker IQ Option: Trading KALIAN B... 3320

4:35 PM

YB-land FTBDMC Award

ye1hr: Photo. Photo from Budi Santoso

4:32 PM

Telegram

You have successfully logged in to use Telegram Widgets. Browser: Chrome 92 on Win...

1:57 PM

allisakost

Selamat Datang allisakost_bot https://allisakost.ciwaruga.com, Ketik /info /fasilitas /ala...

1:54 PM

BotFather

Link your website with your bot to use the Telegram Login Widget. Widget documenta...

12:25 PM

ciwaruga_bot

Selamat Datang Ciwaruga.com BOT. Ketik /help Untuk menampilkan Keyword

11:59 AM

IF2.Praktikum Aplikasi Berbasis Web

Dion: Terimakasih pak

9:24 AM

IF-1 Web Programming

You: NILAI UTS DAN UAS

9:09 AM

Khani Rintiko A.

You: Teknik sipil uasnya kan hari kamis, sesuai waktu kuliah

12:06 AM

Iman Verdy

You: sore om

Tue

Randi Hardiansyah

Baik pak terimakasih 🙏🙏🙏

Tue

Desain Situs IK7

You: NILAI UTS UAS IK7

Tue

IK7 IT... Desain Situs

Tue

UPDATE TELEGRAM

ivoga

bot

What can this bot do?

Ivoga Ciwaruga

August 4

You just sent Selamat Datang di IVOGA IOT Web Server _ /ON1 /ON2 /ON3 /OFF1 /OFF2 /OFF3 8:00 PM

You just sent /on1 8:02 PM

You just sent /on3 8:03 PM

You just sent /off3 8:04 PM

You just sent /off1 8:04 PM

/start 8:00 PM ✓

/ON1 8:02 PM ✓

/ON3 8:03 PM ✓

/OFF3 8:03 PM ✓

/OFF1 8:04 PM ✓

Write a message...

Bot info

ivoga

bot

Belajar Pemrograman Telegram

Description

@ivoga_bot

Username

Notifications

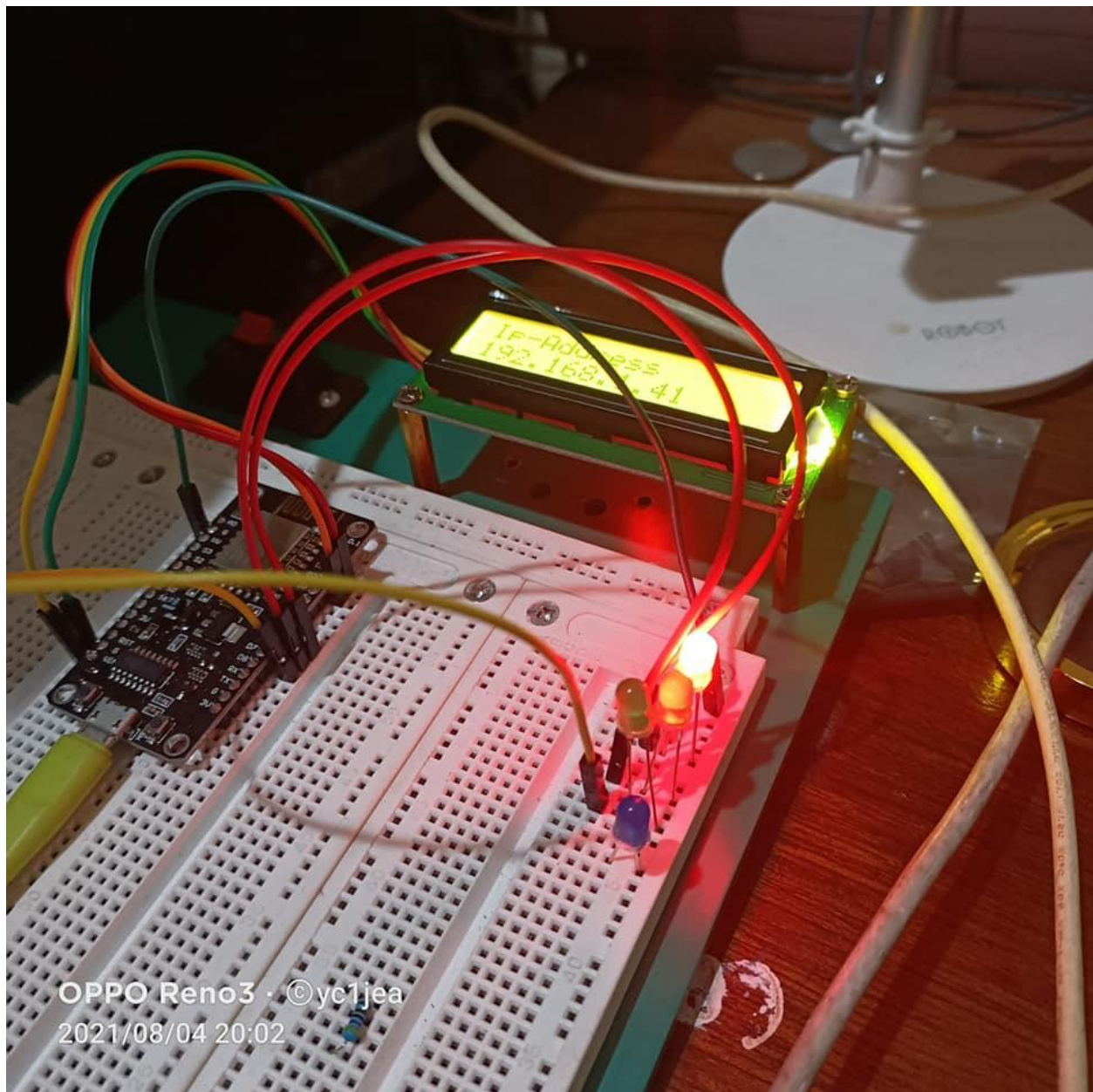
Add to Group

Clear history

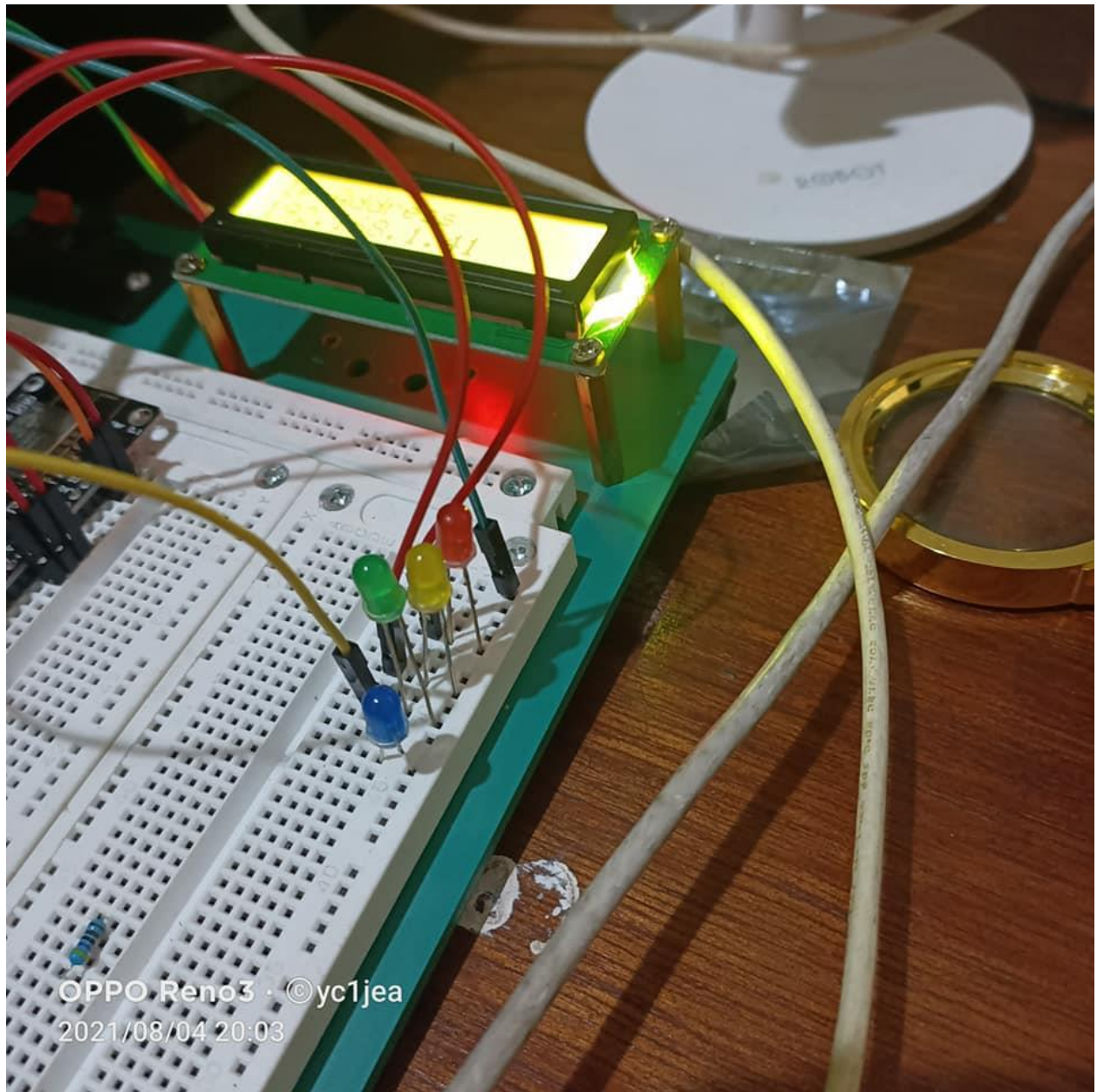
Delete chat

Report

Stop and block bot



Lampu LED1 ON



Lampu LED1 OFF

Daftar Pustaka

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2. <https://repository.unikom.ac.id/68698/1/Mengirim%20Data%20Hasil%20Pengukuran%20Humidity%20dan%20Temperature%20Sensor%20DHT11%20dengan%20Arduino%20UNO%20WiFi%20R3%20ATmega328P%20ESP8266.pdf>
3. <https://repository.unikom.ac.id/68699/1/Menghidupkan%20Lampu%20Dengan%20Menggunakan%20Sensor%20PhotoSensitive%20pada%20NODEMCU%20ESP8266-taryana.pdf>
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