

## LAMPIRAN

```
#include "FastLED.h"

#define NUM_LEDS 114
#define DATA_PIN 13
#define CLOCK_PIN 13

CRGB leds[NUM_LEDS];
bool ledsOn = true; // Variabel global untuk status lampu

// Telegram Library
#include <AsyncTelegram2.h>
// Definisi zona waktu
#define MYTZ "CET-1CEST,M3.5.0,M10.5.0/3"
struct tm sysTime;

#include <WiFiClientSecure.h>
WiFiClientSecure client;
#ifdef ESP8266
#include <ESP8266WiFi.h>
Session session;
X509List certificate(telegram_cert);
#endif

AsyncTelegram2 myBot(client);

// variabel untuk menyimpan data pesan telegram
TBMessage msg;

const char* ssid = "WR Elite";
const char* pass = "kamarpenuh";
const char* token = "7029434585:AAHtVbNpoNsnDAqiEZDsJltibBD1qKrMZUM";

int64_t userid = 1380021615; // id user

void setup() {
  // Set console baud rate
  Serial.begin(9600);
  delay(2000);
  FastLED.addLeds<WS2812B, DATA_PIN, GRB>(leds, NUM_LEDS);
  initWifi(); //Inisialisai
```

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    initTelegram(); //Inisialisai Telegram
}

void loop() {
    unsigned long onDuration = 43200; // 5 detik on
    unsigned long offDuration = 43200; // 5 detik off

    static unsigned long previousMillis = 0;
    unsigned long currentMillis = millis();

    if (currentMillis - previousMillis >= (ledsOn ? onDuration : offDuration) * 1000) {
        ledsOn = !ledsOn;
        previousMillis = currentMillis;
        if (ledsOn) {
            //sendMessage("Lampu telah menyala.");
            myBot.sendMessage(msg, "Lampu telah menyala.");
        } else {
            //sendMessage("Lampu telah mati.");
            myBot.sendMessage(msg, "Lampu telah mati.");
        }
    }

    if (!ledsOn) {
        for (int i = 0; i < NUM_LEDS; i++) {
            leds[i] = CRGB(0, 0, 0);
        }
    } else {
        int numBlueLEDs = 4;
        int numRedLEDs = 2;
        int repetitions = NUM_LEDS / (numBlueLEDs + numRedLEDs);

        for (int rep = 0; rep < repetitions; rep++) {
            for (int i = rep * (numBlueLEDs + numRedLEDs); i < rep * (numBlueLEDs +
numRedLEDs) + numBlueLEDs; i++) {
                leds[i] = CRGB(0, 0, 255);
            }

            for (int i = rep * (numBlueLEDs + numRedLEDs) + numBlueLEDs; i < rep *
(numBlueLEDs + numRedLEDs) + numBlueLEDs + numRedLEDs; i++) {
                leds[i] = CRGB(255, 0, 0);
            }
        }
    }

    FastLED.show();
}

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// Handle incoming messages from Telegram
handleTelegramMessages();
}

void initWifi() {
  WiFi.setAutoConnect(true);
  WiFi.mode(WIFI_STA);

  // terhubung ke titik akses
  WiFi.begin(ssid, pass);
  while (WiFi.status() != WL_CONNECTED) {
    Serial.print('.');
    delay(500);
  }
  Serial.println("\nWiFi connected");
  Serial.println(WiFi.localIP());
}

void handleTelegramMessages() {
  // if (bot.getUpdates(bot.last_message_received + 1)) {
  //   String chat_id = String(bot.messages[0].chat_id);
  //   String text = bot.messages[0].text;
  //   //
  //   if (text == "/status") {
  //     // Proses perintah status di sini
  //     String status = (ledsOn) ? "Lampu menyala" : "Lampu mati";
  //     //
  //     // Kirim pesan respons ke bot Telegram
  //     bot.sendMessage(chat_id, status, "");
  //   }
  // }
  // jika ada pesan masuk...
  if (myBot.getNewMessage(msg)) {
    MessageType msgType = msg.messageType;

    // Menerima pesan teks
    if (msgType == MessageType) {
      String msgText = msg.text;
      Serial.print("Text message received: ");
      Serial.println(msgText);

      if (msgText == "/status") {
        //Proses perintah status di sini
        String status = (ledsOn) ? "Lampu menyala" : "Lampu mati";

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        myBot.sendMessage(msg, status);
    }

    if (msgText == "/start") {
        String welcome = "Hello\n";
        welcome += "Ini adalah bot untuk mengetahui kondisi Lampu\n\n";
        welcome += "/status : Mengetahui status lampu\n";
        myBot.sendMessage(msg, welcome);
    }
}
}
}

void initTelegram() {
#ifdef ESP8266
    // Sinkronkan waktu dengan NTP, untuk memeriksa sertifikat Telegram dengan benar
    configTime(MYTZ, "time.google.com", "time.windows.com", "pool.ntp.org");
    //Atur sertifikat, sesi, dan beberapa properti klien dasar lainnya
    client.setSession(&session);
    client.setTrustAnchors(&certificate);
    client.setBufferSizes(1024, 1024);
#elif defined(ESP32)
    // Sinkronkan waktu dengan NTP
    configTzTime(MYTZ, "time.google.com", "time.windows.com", "pool.ntp.org");
    client.setCACert(telegram_cert);
#endif

    // Atur properti bot Telegram
    myBot.setUpdateTime(1000);
    myBot.setTelegramToken(token);

    // Periksa apakah semuanya baik-baik saja
    Serial.print("\nTest Telegram connection... ");
    myBot.begin() ? Serial.println("OK") : Serial.println("NOK");

    // https://core.telegram.org/bots/api#formatting-options
    myBot.setFormattingStyle(AsyncTelegram2::FormatStyle::HTML /*
    MARKDOWN */);

    // Kirim pesan selamat datang ke pengguna jika sudah siap
    char welcome_msg[128];
    snprintf(welcome_msg, sizeof(welcome_msg),
        "BOT @%s online.\n/start for command list.",
        myBot.getBotName());

```

```
// Periksa userid dengan bantuan bot @JsonDumpBot atau @getidsbot (bekerja juga  
dengan grup)  
// https://t.me/JsonDumpBot or https://t.me/getidsbot  
myBot.sendTo(userid, welcome_msg);  
}
```