LAMPIRAN

**Lampiran listing program**

#include <ESP8266WiFi.h>

#include <WiFiClientSecure.h>

#include <UniversalTelegramBot.h>

#include <Wire.h>

#include <SoftwareSerial.h> //memasukan library Software Serial

#include <DFPlayer\_Mini\_Mp3.h> //memasukan library DFPlayermini

SoftwareSerial mySerial(5, 4); //pin RX dan TX

int sensorMQ2 = A0;

#define pompa 15 //atau pada nodeMCU D0

char ssid[] = "nebeng boleh tapi punya malu"; //nama wifi

char password[] = "jintomang"; //password wifi

#define BOTtoken "1075610669:AAGAOwcgr7-gz2QcCzGTXYp6uqUFA2pzW48" //token bot telegram

#define idChat "1074191893" //idbot

WiFiClientSecure client;

UniversalTelegramBot bot(BOTtoken, client);

int Bot\_mtbs = 1000;

long Bot\_lasttime;

bool Start = false;

int LIMIT\_ASAP = 300;

int pompaStatus = 0;

int hold\_key1 = 0;

void setup() {

 client.setInsecure();

 pinMode(pompa, OUTPUT);

 digitalWrite(pompa, HIGH);

 pinMode(sensorMQ2, INPUT);

 Serial.begin(115200);

 mySerial.begin (9600); //baud komunikasi pada 9600

 mp3\_set\_serial (mySerial);

 delay(1);

 mp3\_set\_volume (90);

 Serial.print("Connecting Wifi: ");

 Serial.println(ssid);

 WiFi.mode(WIFI\_STA);

 WiFi.begin(ssid, password);

 while (WiFi.status() != WL\_CONNECTED) {

 Serial.print(".");

 delay(500);

 }

 Serial.println("");

 Serial.println("WiFi connected");

 Serial.print("IP address: ");

 Serial.println(WiFi.localIP());

 delay(5000);

}

 void sensor (){

 sensorMQ2 = analogRead(A0); // PROSES ADC 10 BIT 0 - 1023

 if ( sensorMQ2 >= LIMIT\_ASAP && hold\_key1 != 1){

 Serial.println("ASAP JENUH");

 bot.sendMessage(idChat, "PINTU TERKUNCI (KONDISI ADA YANG MEROKOK)");

 digitalWrite(pompa, LOW);

 mp3\_play (1);

 delay(1000);

 hold\_key1 = 1;

 }

 else if( sensorMQ2 <= LIMIT\_ASAP ){

 Serial.println("ASAP TIDAK JENUH");

 /// digitalWrite(pompa, HIGH);

 hold\_key1 = 0;

 }

 Serial.println(sensorMQ2);

 //delay(100);

}

void loop() {

 sensor ();

 if (millis() > Bot\_lasttime + Bot\_mtbs) {

 int numNewMessages = bot.getUpdates(bot.last\_message\_received + 1);

 while (numNewMessages) {Serial.println("Memeriksa Respon");

 handleNewMessages(numNewMessages);

 numNewMessages = bot.getUpdates(bot.last\_message\_received + 1);

 }

 Bot\_lasttime = millis();

 }

}

void handleNewMessages(int numNewMessages) {

 Serial.println("Pesan baru...");

 Serial.println(String(numNewMessages));

 for (int i = 0; i < numNewMessages; i++) {

 String chat\_id = String(bot.messages[i].chat\_id);

 String text = bot.messages[i].text;

 if (text == "/OPEN") {

 digitalWrite(pompa, HIGH); //

 bot.sendMessage(idChat, "PINTU TERBUKA", "");

 }

 //else if (text == "/OPEN") {

 //digitalWrite(pompa, LOW);

 // bot.sendMessage(idChat, "Pompa dimatikan", "");

 // }

 else if (text == "/start") {

 String welcome = "SELAMAT DATANG.\n\n";

 welcome += "RANCANG BANGUN SISTEM PENDETEKSI ASAP ROKOK SECARA

OTOMATIS BERBASIS IOT\n\n";

 welcome += "OLEH : Andri Putra Saleh\n\n";

 welcome += "SILAHKAN PILIH PERINTAH DI BAWAH INI : \n\n";

 welcome += "/start : Untuk Memulai Program\n";

 welcome += "/OPEN : Untuk Mode BUKA PINTU\n";

 bot.sendMessage(chat\_id, welcome);

 }

 }

}