L A M P I R A N

LIST PROGRAM SISTEM PAJAK TOL OTOMATIS DENGAN *RFID* DAN INFORMASI BERBASIS ANDROID

```
#include<Wire.h>
#include<LCD.h>
#include<LiquidCrystal_I2C.h>
#include <SPI.h>
#include <MFRC522.h>
#define esp Serial3
#define SIM900 Serial

#define SS_PIN 53
#define RST_PIN 5

String ssid = "Andromax-M3Y-3CC6";
String password = "31703398";
String data;
String server = "nanishd.000webhostapp.com"; // www.example.com
String uri = "/updatesaldo.php";// our example is /esppost.php
MFRC522 rfid(SS_PIN, RST_PIN); // Instance of the class
MFRC522::MIFARE_Key key;
// Init array that will store new NUID
byte nuidPICC[4];
String id_kartu="";

//0x27 atau 0x3f
#define I2C_ADDR 0x3f
```

```
#define BACKLIGHT_PIN 3
#define En_pin 2
#define Rw_pin 1
#define Rs_pin 0
#define D4_pin 4
#define D5_pin 5
#define D6_pin 6
#define D7_pin 7

LiquidCrystal_I2C lcd(I2C_ADDR, En_pin, Rw_pin, Rs_pin, D4_pin, D5_pin, D6_pin, D7_pin);

#define pintu 12
#define trigger 28
#define echo 29
#define buka 150
#define tutup 65

#include <Servo.h>

Servo sPintu;
long durasi, cm;

void setup() {
  // put your setup code here, to run once:
  Serial.begin(9600);
  //SIM900.begin(9600);
  sPintu.attach(pintu);
```

```
sPintu.write(tutup);

pinMode(trigger, OUTPUT);
pinMode(echo, INPUT);
lcd.begin(16, 2);
lcd.setBacklightPin(BACKLIGHT_PIN, POSITIVE);
lcd.setBacklight(HIGH);
lcd.home();// go home

lcd.print("PLEASE WAIT");
//setting_sim900();

lcd.home();// go home
lcd.print("WELCOME       ");  //jika tidak bisa 9600 , pake 115200
esp.begin(115200);
reset();

connectWifi();
SPI.begin(); // Init SPI bus
rfid.PCD_Init(); // Init MFRC522
for (byte i = 0; i < 6; i++) {
  key.keyByte[i] = 0xFF;
}

Serial.println(F("This code scan the MIFARE Classsic NUID."));
Serial.print(F("Using the following key:"));
printHex(key.keyByte, MFRC522::MF_KEY_SIZE);
```

```
  //switch on the backlight

}

void loop() {
  // Look for new cards
  if ( ! rfid.PICC_IsNewCardPresent())
    return;

  // Verify if the NUID has been readed
  if ( ! rfid.PICC_ReadCardSerial())
    return;

  Serial.print(F("PICC type: "));
  MFRC522::PICC_Type piccType = rfid.PICC_GetType(rfid.uid.sak);
  Serial.println(rfid.PICC_GetTypeName(piccType));

  // Check is the PICC of Classic MIFARE type
  if (piccType != MFRC522::PICC_TYPE_MIFARE_MINI &&
    piccType != MFRC522::PICC_TYPE_MIFARE_1K &&
    piccType != MFRC522::PICC_TYPE_MIFARE_4K) {
    Serial.println(F("Your tag is not of type MIFARE Classic."));
    return;
  }

//  if (rfid.uid.uidByte[0] != nuidPICC[0] ||
```

```
//    rfid.uid.uidByte[1] != nuidPICC[1] ||
//    rfid.uid.uidByte[2] != nuidPICC[2] ||
//    rfid.uid.uidByte[3] != nuidPICC[3] ) {
//    Serial.println(F("A new card has been detected."));

    // Store NUID into nuidPICC array
//    for (byte i = 0; i < 4; i++) {
//      nuidPICC[i] = rfid.uid.uidByte[i];
//    }

    Serial.println(F("The NUID tag is:"));
    Serial.print(F("In hex: "));
    printHex(rfid.uid.uidByte, rfid.uid.size);
    Serial.println();
    Serial.print(F("In dec: "));
    id_kartu="";
    printDec(rfid.uid.uidByte, rfid.uid.size);
    Serial.println();
    Serial.print("id_kartu = ");Serial.println(id_kartu );
    lcd.clear();
    lcd.home();
    lcd.print("id:");lcd.print(id_kartu);lcd.print("     ");
    //SubmitHttpRequest(id_kartu);
    httppost();

//  }
//  else Serial.println(F("Card read previously."));
```

```
  // Halt PICC
  rfid.PICC_HaltA();

  // Stop encryption on PCD
  rfid.PCD_StopCrypto1();

}

void buka_tol(){
   // put your main code here, to run repeatedly:
  lcd.setCursor(0,1);
  //lcd.print("SILAHKAN MASUK");
  sPintu.write(buka);
  hitung_jarak();
  while (cm > 10) {
    hitung_jarak();
  }
  while (cm < 10) {
    hitung_jarak();
  }


  delay(1000);
  //lcd.setCursor(0,1);
  //lcd.print("PINTU TERTUTUP");
  sPintu.write(tutup);
```

```
  delay(2000);

}

void hitung_jarak() {
  digitalWrite(trigger, LOW);
  delayMicroseconds(2);
  digitalWrite(trigger, HIGH);
  delayMicroseconds(5);
  digitalWrite(trigger, LOW);

  // The same pin is used to read the signal from the PING))): a HIGH
  // pulse whose duration is the time (in microseconds) from the sending
  // of the ping to the reception of its echo off of an object.
  durasi = pulseIn(echo, HIGH);

  // convert the time into a distance
  cm = microsecondsToCentimeters(durasi);

  Serial.print(cm);
  Serial.print("cm");
  Serial.println();

}
long microsecondsToCentimeters(long microseconds)
{
  // The speed of sound is 340 m/s or 29 microseconds per centimeter.
```

```
  // The ping travels out and back, so to find the distance of the
  // object we take half of the distance travelled.
  return microseconds / 29 / 2;
}


/**
 * Helper routine to dump a byte array as hex values to Serial.
 */
void printHex(byte *buffer, byte bufferSize) {
  for (byte i = 0; i < bufferSize; i++) {
    Serial.print(buffer[i] < 0x10 ? " 0" : " ");
    Serial.print(buffer[i], HEX);
  }
}

/**
 * Helper routine to dump a byte array as dec values to Serial.
 */
void printDec(byte *buffer, byte bufferSize) {
  for (byte i = 0; i < bufferSize; i++) {
    Serial.print(buffer[i] < 0x10 ? " 0" : " ");
    Serial.print(buffer[i], DEC);
    id_kartu += String(buffer[i]);

  }
}
```

```
void setting_sim900(){
  SIM900.println("AT+CSQ"); // Signal quality check

  delay(100);

  ShowSerialData();// this code is to show the data from gprs shield, in order to easily see the process of how the gprs shield submit a http request, and the following is for this purpose too.
  //delay(5000);
  SIM900.println("AT+SAPBR=1,1");//setting the SAPBR
  delay(500);
  ShowSerialData();
}

void SubmitHttpRequest(String id)
{

  setting_sim900();

  ShowSerialData();

  SIM900.println("AT+HTTPINIT"); //init the HTTP request

  delay(1000);
  ShowSerialData();
  SIM900.println("AT+HTTPPARA=\"CID\",1"); //init the HTTP request
  delay(500);
```

```
  ShowSerialData();


SIM900.print("AT+HTTPPARA=\"URL\",\"http://nanishd.000webhostapp.com/updatesaldo.php?id=");// setting the httppara, the second parameter is the website you want to access

  SIM900.print(id);// setting the httppara, the second parameter is the website you want to access

  SIM900.println("\"");// setting the httppara, the second parameter is the website you want to access

  delay(1000);


  ShowSerialData();


  SIM900.println("AT+HTTPACTION=0");//submit the request

  //delay(5000);//the delay is very important, the delay time is base on the return from the website, if the return datas are very large, the time required longer.

  //while(!SIM900.available());

  //while(!SIM900.find("+HTTPACTION"));

  String masuk = "";

// String RedState = content.substring();

 //SIM900.find("AT+HTTPREAD");

 while(1){

  if(SIM900.available())

   {


     //Serial.write(SIM900.read());

     //char a = (char)SIM900.read();

     masuk = masuk + char (SIM900.read());
```

```
    if (masuk.indexOf("OK")!=-1){
      break;
    }
  }
}
Serial.println(masuk);
masuk="";
 //ShowSerialData();
 long waktu = millis();
while(1){
 if(SIM900.available())
  {

    //Serial.write(SIM900.read());
    //char a = (char)SIM900.read();
    masuk = masuk + char (SIM900.read());
    if (masuk.indexOf("+HTTPACTION")!=-1){
      break;
    }
    if (millis() > waktu + 10000)break;
  }
}
Serial.println(masuk);

 SIM900.println("AT+HTTPREAD");// read the data from the website you access
 delay(1000);
 cek_data();
```

```
  //ShowSerialData();
  SIM900.println("");
  delay(100);
  SIM900.println("AT+HTTPTERM"); //init the HTTP request

  delay(1000);
  ShowSerialData();
}

void cek_data()
{
 String content = "";
// String RedState = content.substring();
 //SIM900.find("AT+HTTPREAD");
 while(SIM900.available())
 {

    //Serial.write(SIM900.read());
    //char a = (char)SIM900.read();
    content = content + char (SIM900.read());

 }
    Serial.println(content);

 content = getValue(content,'|',1);

    if (content.length()==0){
```

```
    lcd.clear();

    lcd.setCursor(0,0);
    lcd.print("GAGAL AKSES SERVER");
    delay(1000);
  }else if (getValue(content,',',0).toInt()!= 1 ){
    lcd.clear();
    lcd.setCursor(0,0);
    lcd.print(getValue(content,',',1));
    lcd.setCursor(0,1);
    lcd.print("SALDO TIDAK CUKUP");
        delay(1000);
  }else{
    lcd.clear();
    lcd.setCursor(0,0);
    lcd.print(getValue(content,',',1));
    lcd.setCursor(0,1);
    lcd.print(getValue(content,',',2));
    buka_tol();
//    int a = content.toInt();
//    a = map(a,0,100,180,0);
//    Serial.println(a);
//    myservo.write(a);

  }
  lcd.clear();
  lcd.home();// go home
```

```
    lcd.print("WELCOME       ");
 content = "";
}

void ShowSerialData()
{
  while(SIM900.available())
    Serial.write(char (SIM900.read()));
}

String getValue(String data, char separator, int index)
{
  int found = 0;
  int strIndex[] = {0, -1};
  int maxIndex = data.length()-1;

  for(int i=0; i<=maxIndex && found<=index; i++){
    if(data.charAt(i)==separator || i==maxIndex){
        found++;
        strIndex[0] = strIndex[1]+1;
        strIndex[1] = (i == maxIndex) ? i+1 : i;
    }
  }

  return found>index ? data.substring(strIndex[0], strIndex[1]) : "";
}
```

```
void reset() {
  esp.println("AT+RST");
  delay(1000);
  if (esp.find("OK") ) Serial.println("Module Reset");
}

//connect to your wifi network
void connectWifi() {
  String cmd = "AT+CWJAP=\"" + ssid + "\",\"" + password + "\"";
  esp.println(cmd);
  delay(4000);
  if (esp.find("OK")) {
    Serial.println("Connected!");
  }
  else {
    Serial.println("Cannot connect to wifi");
    connectWifi();
  }

}

void httppost () {
  data = "id=" + id_kartu ;// data sent must be under this form //name1=value1&name2=value2.

  esp.println("AT+CIPSTART=\"TCP\",\"" + server + "\",80");//start a TCP connection.
  delay(1000);
```

```
  if ( esp.find("OK")) {
    Serial.println("TCP connection ready");
  } delay(500);
  String postRequest =
    "POST " + uri + " HTTP/1.0\r\n" +
    "Host: " + server + "\r\n" +
    "Accept: *" + "/" + "*\r\n" +
    "Content-Length: " + data.length() + "\r\n" +
    "Content-Type: application/x-www-form-urlencoded\r\n" +
    "\r\n" + data;
    //Serial.println(postRequest);
  String sendCmd = "AT+CIPSEND=";//determine the number of caracters to be sent.
  esp.print(sendCmd);
  esp.println(postRequest.length() );
  delay(1000);

  if (esp.find(">")) {
    Serial.println("Sending.."); esp.print(postRequest);
    if ( esp.find("SEND OK")) {
      Serial.println("Packet sent");
      int i = 0;
      String tmpResp ="";
      while(!esp.available());
      while (esp.available()) {
        //Serial.println(tmpResp);Serial.println(i++);
        tmpResp = esp.readString();
        Serial.println(tmpResp);//Serial.println(i++);
```

```
    }
   String content = tmpResp;
     content = getValue(content,'|',1);

   if (content.length()==0){
    lcd.clear();

    lcd.setCursor(0,0);
    lcd.print("GAGAL AKSES SERVER");
    delay(1000);
   }else if (getValue(content,',',0).toInt()!= 1 ){
    lcd.clear();
    lcd.setCursor(0,0);
    lcd.print(getValue(content,',',1));
    lcd.setCursor(0,1);
    lcd.print("SALDO TIDAK CUKUP");
        delay(1000);
   }else{
    lcd.clear();
    lcd.setCursor(0,0);
    lcd.print(getValue(content,',',1));
    lcd.setCursor(0,1);
    lcd.print(getValue(content,',',2));
    buka_tol();
//    int a = content.toInt();
//    a = map(a,0,100,180,0);
```

```
//      Serial.println(a);
//      myservo.write(a);


    }
    lcd.clear();
    lcd.home();// go home
    lcd.print("WELCOME       ");
    content = "";
      // close the connection
      esp.println("AT+CIPCLOSE");
    }
  }
}
apply plugin: 'com.android.application'

android {
compileSdkVersion 25
buildToolsVersion"25.0.1"
useLibrary'org.apache.http.legacy'
defaultConfig {
applicationId"cyborg.e_tol"
minSdkVersion 22
targetSdkVersion 25
versionCode 1
versionName"1.0"
testInstrumentationRunner"android.support.test.runner.AndroidJUnitRunner
"
}
buildTypes {
```

```
        release {
minifyEnabledfalse
proguardFilesgetDefaultProguardFile('proguard-android.txt'), 'proguard-rules.pro'
}
    }
}

dependencies {
    compile fileTree(dir: 'libs', include: ['*.jar'])
    androidTestCompile('com.android.support.test.espresso:espresso-core:2.2.2', {
        exclude group: 'com.android.support', module: 'support-annotations'
})
    compile 'com.android.support:appcompat-v7:25.3.1'
testCompile'junit:junit:4.12'
compile 'com.android.support:design:25.0.1'
compile 'com.jakewharton:butterknife:7.0.1'
compile 'com.google.http-client:google-http-client-android:+'

compile 'com.google.api-client:google-api-client-android:+'

compile 'com.google.api-client:google-api-client-gson:+'

}

package cyborg.e_tol;

import android.content.Intent;
import android.os.Bundle;
import android.support.v7.app.AppCompatActivity;
```

```
import android.support.v7.widget.Toolbar;
import android.view.View;
import android.widget.Button;
import android.widget.TextView;

import java.text.DecimalFormat;
import java.text.DecimalFormatSymbols;
import java.text.NumberFormat;

public class ProfileActivityextends AppCompatActivity {
   Button btnKeluar;
public static String nama;
public static String email;
public static String password;
public static String saldo;
public static String id;
public static String nohp;
public static String alamat;

   @Override
protected void onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_profile);
      Toolbar toolbar = (Toolbar) findViewById(R.id.toolbar);
setSupportActionBar(toolbar);
btnKeluar= (Button)findViewById(R.id.btnKeluar);
btnKeluar.setOnClickListener(new View.OnClickListener() {
         @Override
public void onClick(View view) {
startActivity(new Intent(ProfileActivity.this,LoginActivity.class));
```

```
            finish();
        }
    });
NumberFormat format = NumberFormat.getCurrencyInstance();

DecimalFormatkursIndonesia = (DecimalFormat)
DecimalFormat.getCurrencyInstance();
DecimalFormatSymbolsformatRp = new DecimalFormatSymbols();

formatRp.setCurrencySymbol("Rp. ");
formatRp.setMonetaryDecimalSeparator(',');
formatRp.setGroupingSeparator('.');

kursIndonesia.setDecimalFormatSymbols(formatRp);
    ((TextView)
findViewById(R.id.tvSaldo)).setText(kursIndonesia.format(Integer.parseInt(sald
o)));
    ((TextView) findViewById(R.id.tvEmail)).setText(email);
    ((TextView) findViewById(R.id.tvSaldo)).setText(saldo);
    ((TextView) findViewById(R.id.tvAlamat)).setText(alamat);
    ((TextView) findViewById(R.id.tvNama)).setText(nama);
//System.out.printf("Harga Rupiah: %s %n", kursIndonesia.format(harga));

}

//  @Override
//  public booleanonCreateOptionsMenu(Menu menu) {
//      // Inflate the menu; this adds items to the action bar if it is present.
//      getMenuInflater().inflate(R.menu.menu_profile, menu);
//      return true;
```

```
//    }

//    @Override
//    public booleanonOptionsItemSelected(MenuItem item) {
//        // Handle action bar item clicks here. The action bar will
//        // automatically handle clicks on the Home/Up button, so long
//        // as you specify a parent activity in AndroidManifest.xml.
//        int id = item.getItemId();
//
//        //noinspectionSimplifiableIfStatement
//        if (id == R.id.action_settings) {
//            return true;
//        }
//
//        return super.onOptionsItemSelected(item);
//    }
}

<resources>

<!-- Base application theme. -->
<style name="AppTheme"
parent="Theme.AppCompat.Light.DarkActionBar">
<!-- Customize your theme here. -->
</style>

<style name="AppTheme.Dark"
parent="Theme.AppCompat.NoActionBar">
<item name="colorPrimary">@color/primary</item>
<item name="colorPrimaryDark">@color/primary_dark</item>
<item name="colorAccent">@color/accent</item>
```

```
<item name="android:windowBackground">@color/primary</item>

<item name="colorControlNormal">@color/iron</item>
<item name="colorControlActivated">@color/white</item>
<item name="colorControlHighlight">@color/white</item>
<item name="android:textColorHint">@color/iron</item>

<item name="colorButtonNormal">@color/primary_darker</item>
<item name="android:colorButtonNormal">@color/primary_darker</item>
</style>

<style name="AppTheme.Dark.Dialog"
parent="Theme.AppCompat.Dialog">
<item name="colorAccent">@color/white</item>
<item name="android:textColorPrimary">@color/iron</item>
<item name="android:background">@color/primary</item>
</style>

<style name="AppTheme.NoActionBar">
<item name="windowActionBar">false</item>
<item name="windowNoTitle">true</item>
</style>

<style name="AppTheme.AppBarOverlay"
parent="ThemeOverlay.AppCompat.Dark.ActionBar" />

<style name="AppTheme.PopupOverlay"
parent="ThemeOverlay.AppCompat.Light" />
```

```
</resources>

<?xml version="1.0" encoding="utf-8"?>
<android.support.v4.widget.NestedScrollView
xmlns:android="http://schemas.android.com/apk/res/android"
   xmlns:app="http://schemas.android.com/apk/res-auto"
   xmlns:tools="http://schemas.android.com/tools"
   android:layout_width="match_parent"
   android:layout_height="match_parent"
   android:layout_marginTop="@dimen/activity_horizontal_margin"
   android:padding="@dimen/activity_horizontal_margin"
   app:layout_behavior="@string/appbar_scrolling_view_behavior"
   tools:showIn="@layout/activity_profile">

<LinearLayout
      android:layout_width="match_parent"
      android:layout_height="wrap_content"
      android:orientation="vertical">

<RelativeLayout
         android:layout_width="match_parent"
         android:layout_height="wrap_content"
         android:background="?attr/selectableItemBackground"
         android:clickable="true"
         android:padding="@dimen/activity_horizontal_margin">

<ImageView
            android:id="@+id/ivContactItem1"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
```

```
            android:layout_centerVertical="true"
            android:layout_marginEnd="@dimen/activity_horizontal_margin"
            android:src="@drawable/ic_favorite_border_black" />

    <TextView
            android:id="@+id/tvNama"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_alignParentTop="true"
            android:layout_marginStart="12dp"
            android:layout_toEndOf="@+id/ivContactItem1"
            android:text="POLSRI"

    android:textAppearance="@style/TextAppearance.AppCompat.Medium"
            android:textColor="#212121"
            tools:text="POLSRI" />

    </RelativeLayout>

    <RelativeLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:background="?attr/selectableItemBackground"
        android:clickable="true"
        android:padding="@dimen/activity_horizontal_margin">

    <ImageView
            android:id="@+id/ivContactItem4"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
```

```
            android:layout_centerVertical="true"
            android:layout_marginEnd="@dimen/activity_horizontal_margin"
            android:src="@drawable/ic_email_black"
            android:visibility="visible" />

    <TextView
            android:id="@+id/tvEmail"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_alignParentTop="true"

    android:layout_marginStart="@dimen/activity_horizontal_margin"
            android:layout_toEndOf="@+id/ivContactItem4"
            android:ellipsize="end"
            android:maxLines="1"
            android:text="nanisyahida@gmail.com"

    android:textAppearance="@style/TextAppearance.AppCompat.Medium"
            android:textColor="#212121" />

    </RelativeLayout>

    <RelativeLayout
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:background="?attr/selectableItemBackground"
            android:clickable="true"
            android:padding="@dimen/activity_horizontal_margin">

    <ImageView
```

```
            android:id="@+id/gmbrALamat"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_centerVertical="true"
            android:layout_marginEnd="@dimen/activity_horizontal_margin"
            android:src="@drawable/ic_location_on_black"
            android:visibility="visible" />

<TextView
            android:id="@+id/tvAlamat"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_alignParentTop="true"

android:layout_marginStart="@dimen/activity_horizontal_margin"
            android:layout_toEndOf="@+id/gmbrALamat"
            android:ellipsize="end"
            android:maxLines="1"
            android:text="Jl. Srijaya Negara, Bukit Besar, iLIR bArat.1, Kota
Palembang"

android:textAppearance="@style/TextAppearance.AppCompat.Medium"
            android:textColor="#212121"
            tools:text="Jl. Srijaya Negara, Bukit Besar, iLIR bArat.1, Kota
Palembang" />

</RelativeLayout>

<RelativeLayout
        android:layout_width="match_parent"
```

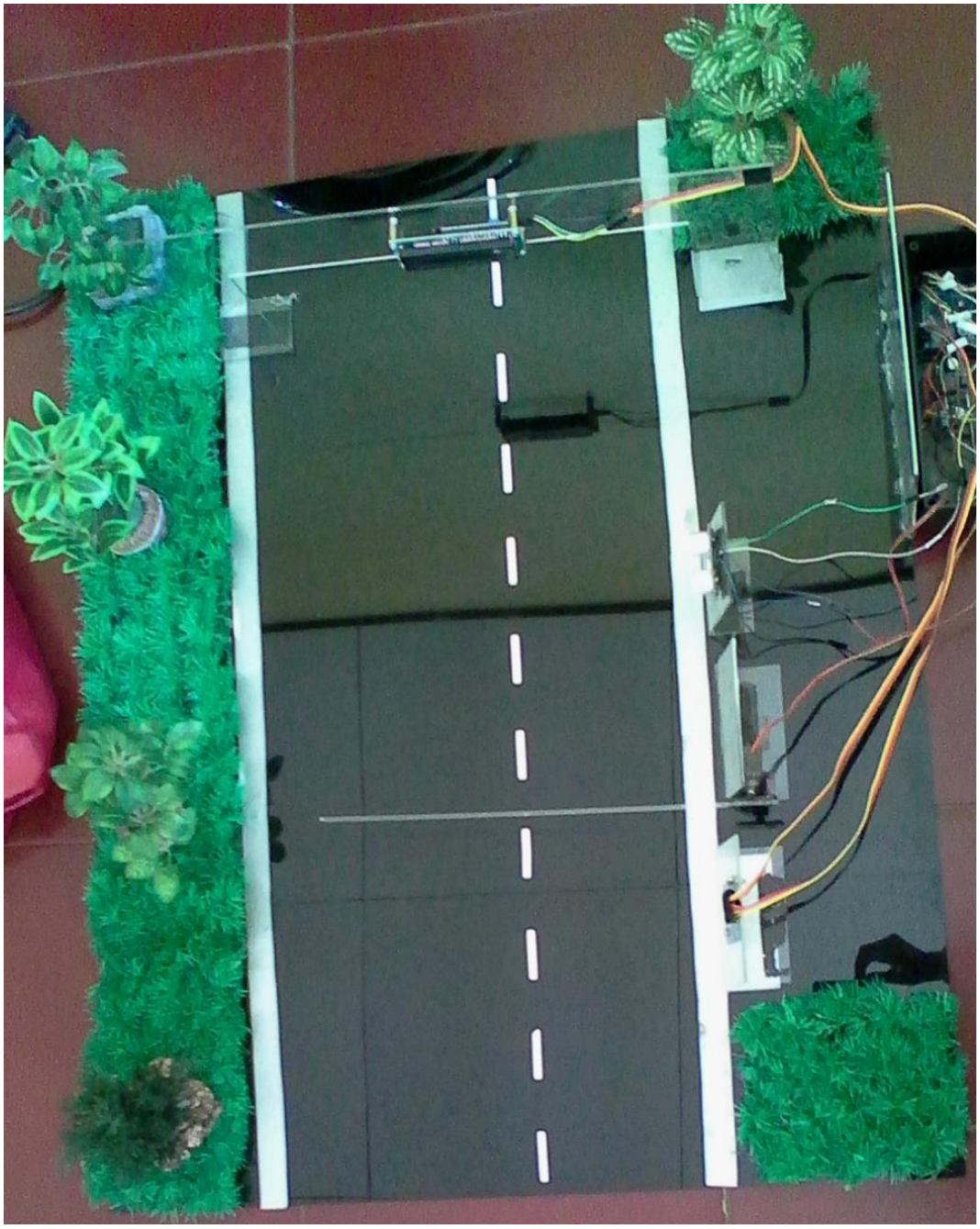
```
        android:layout_height="wrap_content"
        android:background="?attr/selectableItemBackground"
        android:clickable="true"
        android:padding="@dimen/activity_horizontal_margin">

    <ImageView
            android:id="@+id/car"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_centerVertical="true"
            android:layout_marginEnd="@dimen/activity_horizontal_margin"
            android:src="@drawable/ic_car"
            android:visibility="visible" />

    <TextView
            android:id="@+id/tvSaldo"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_alignParentTop="true"
            android:layout_marginStart="12dp"
            android:layout_toEndOf="@+id/car"
            android:contentDescription="@string/hello_world"
            android:ellipsize="end"
            android:maxLines="1"
            android:text="80000"

    android:textAppearance="@style/TextAppearance.AppCompat.Medium"
            android:textColor="#212121"
            tools:text="80000" />
```

```
</RelativeLayout>

<include layout="@layout/item_divider" />

<android.support.v7.widget.AppCompatButton
        android:id="@+id/btnKeluar"
        android:layout_width="fill_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="24dp"
        android:layout_marginBottom="24dp"
        android:padding="12dp"
        android:text="Keluar"
        android:background="@color/primary_darker"/>
</LinearLayout>
</android.support.v4.widget.NestedScrollView>

<?xml version="1.0" encoding="utf-8"?>
<ScrollViewxmlns:android="http://schemas.android.com/apk/res/android"
xmlns:app="http://schemas.android.com/apk/res-auto"
android:layout_width="fill_parent"
android:layout_height="fill_parent"
android:fitsSystemWindows="true">

<LinearLayout
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:orientation="vertical"
android:paddingLeft="24dp"
android:paddingRight="24dp"
android:paddingTop="56dp"
android:weightSum="1">
```

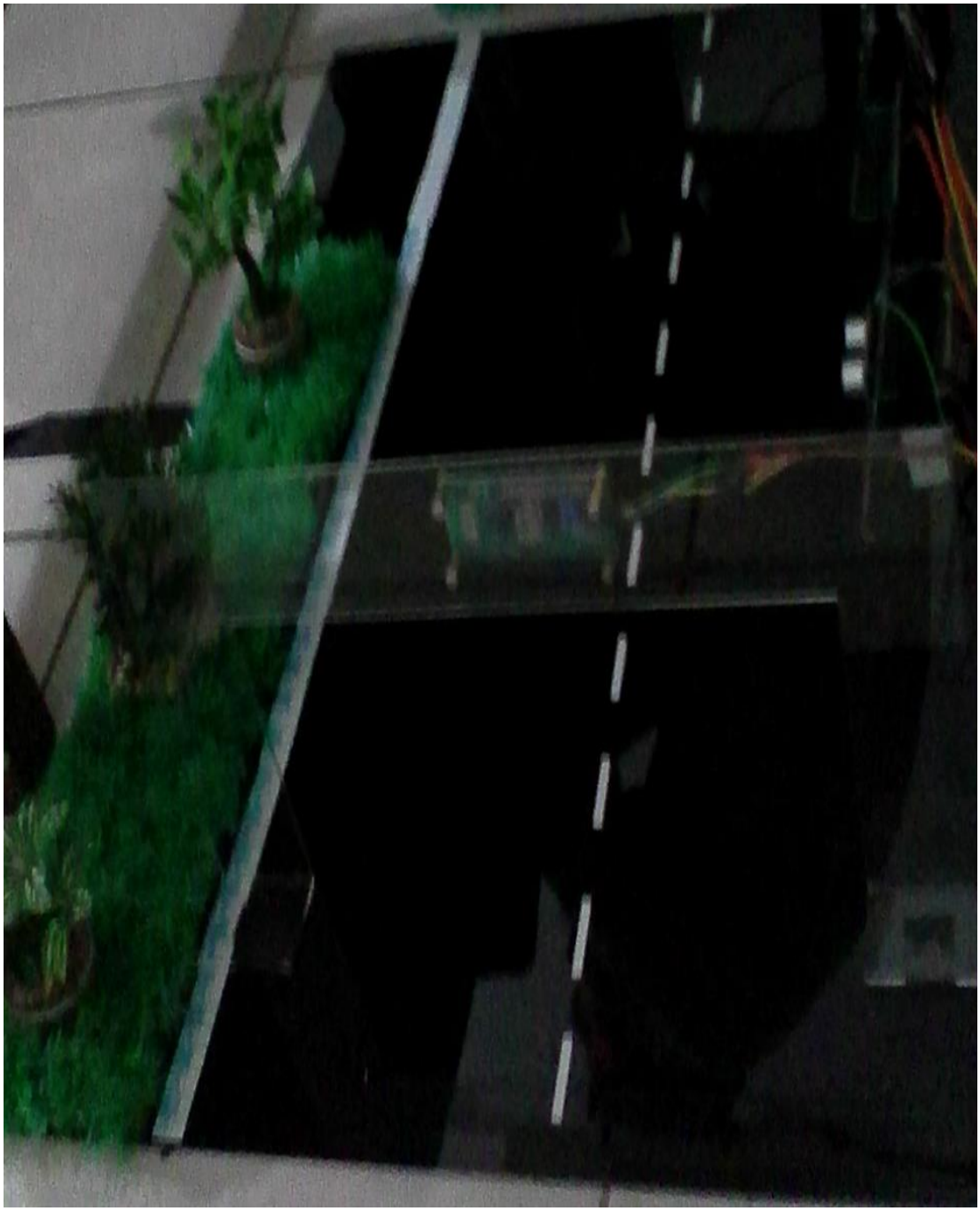
```
<ImageView
android:layout_width="166dp"
android:layout_height="68dp"
android:layout_gravity="center_horizontal"
android:layout_marginBottom="24dp"
android:src="@drawable/polsrifix"
app:srcCompat="@drawable/polsrifix" />

<!-- Email Label -->
<android.support.design.widget.TextInputLayout
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:layout_marginBottom="8dp"
android:layout_marginTop="8dp">

<EditText
android:id="@+id/input_email"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:hint="Email"
android:inputType="textEmailAddress" />
</android.support.design.widget.TextInputLayout>
<!-- Password Label -->
<android.support.design.widget.TextInputLayout
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:layout_marginBottom="8dp"
android:layout_marginTop="8dp">
```

```
<EditText
android:id="@+id/input_password"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:hint="Password"
android:inputType="textPassword" />
</android.support.design.widget.TextInputLayout>

<android.support.v7.widget.AppCompatButton
android:id="@+id/btn_login"
android:layout_width="fill_parent"
android:layout_height="wrap_content"
android:layout_marginBottom="24dp"
android:layout_marginTop="24dp"
android:background="@color/iron"
android:backgroundTint="?attr/colorButtonNormal"
android:padding="12dp"
android:text="Login" />
>
</LinearLayout>
</ScrollView>
```

Tampilan Rancang Bangun Dari Sistem Pajak Tol Otomatis Dengan RFID Dan Informasi Berbasis Android



Pengambilan Gambar Dari Atas

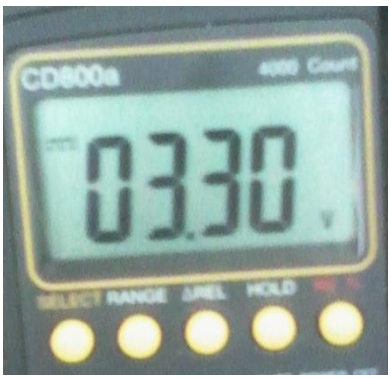
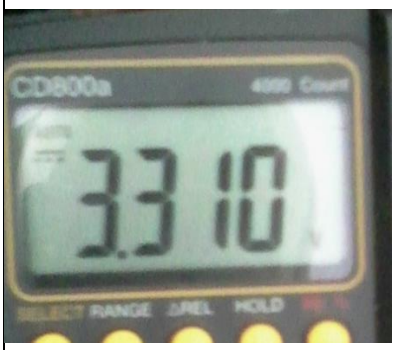


Pengambilan Gambar Dari Samping

Tampilan Tampilan Gambar Data Hasil Pengukuran Dengan Menggunakan Multimeter

No	Titikpengukuranpada RFID	Gambarpengukuran	Hasilpengukuran (volt)
1	Input (+, -)		3.3 V
2	Output (SDA) Pin 53		2.9 V

No	Titikpengukuranpada LCD	Gambarpengukuran	Hasilpengukuran
1	Input (+, -)		5.07 V
2	Output 1 (SCL) Pin 21		5.06 V
3	Output 2 (SDA) Pin 20		5.06 V

No	Titikpengukuranpadamodulwi-fiESP8266	Gambarpengukuran	Hasilpengukuran
1	Input (+,-)		3.30 V
2	Output 1 (RX3) Pin 15		3.310 V
3	Output 2 (TX3) Pin 14		5.07 V