**LISTING PROGRAM**

#include <Wire.h>

#include <LiquidCrystal\_I2C.h>

LiquidCrystal\_I2C lcd(0x27, 16, 2);

#include <deprecated.h>

#include <MFRC522.h>

#include <MFRC522Extended.h>

#include <require\_cpp11.h>

#define SS\_PIN 10

#define RST\_PIN 9

MFRC522 rfid(SS\_PIN, RST\_PIN);

MFRC522::MIFARE\_Key key;

int gula=3;

int tombol1 = A0; int tombol2 = A1; int tombol3 = A2;

int data1, data2, data3;

int r =0;

//===========================================================================================================================================================================================

void setup() {

Serial.begin(9600);

lcd.begin();

lcd.backlight();

lcd.setCursor(0, 0);

lcd.print("Fathoni Hidayah");

lcd.setCursor(0, 1);

lcd.print(" ");

pinMode(tombol1, INPUT); pinMode(tombol2, INPUT); pinMode(tombol3, INPUT);

pinMode(gula, OUTPUT);

 SPI.begin();

 rfid.PCD\_Init();

 Serial.println("I am waiting for card...");

 delay(1000);

 lcd.clear();

lcd.setCursor(0, 0);

lcd.print("Silahkan Scan");

lcd.setCursor(0, 1);

lcd.print("Kartu Anda");

}

//===========================================================================================================================================================================================

void loop() {

//lcd.clear();

data1=digitalRead(tombol1); data2=digitalRead(tombol2); data3=digitalRead(tombol3);

RFID();

if(r==1){

 pilih();

}

if(r==2){

jenis();

}

}

//===========================================================================================================================================================================================

void RFID(){

if (!rfid.PICC\_IsNewCardPresent() || !rfid.PICC\_ReadCardSerial())

return;

MFRC522::PICC\_Type piccType = rfid.PICC\_GetType(rfid.uid.sak);

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;

 }

String strID = "";

for (byte i = 0; i < 4; i++) {

 strID +=

 (rfid.uid.uidByte[i] < 0x10 ? "0" : "") +

 String(rfid.uid.uidByte[i], HEX) +

 (i != 3 ? ":" : "");

 }

strID.toUpperCase();

 Serial.print("Tap card key: ");

 Serial.println(strID);

 delay(1000);

if (strID.indexOf("24:14:38:2B") >= 0) {

 benar();

}

/\*

return;

}

else {

lcd.clear();

lcd.setCursor(0, 0);

lcd.print("Kartu Anda");

lcd.setCursor(0, 1);

lcd.print("Tidak Terdaftar!!");

digitalWrite(gula, 0);

 delay(3000);

 lcd.clear();

 return;

 }\*/

}

void benar(){

lcd.clear();

lcd.setCursor(0, 0);lcd.print("Kartu Anda");lcd.setCursor(0, 1);lcd.print("Terdaftar !!");

delay(2000);

lcd.clear();

r=r+1;

}

void pilih(){

lcd.clear();

lcd.setCursor(0, 0);lcd.print("Silahkan Pilih");lcd.setCursor(0, 1);lcd.print("Minuman Anda");

delay(2000);

r=r+1;

}

void jenis(){

if(data1==0){

lcd.clear();

lcd.setCursor(0, 0);lcd.print("Minuman Anda");lcd.setCursor(0, 1);lcd.print("Kopi Susu");

digitalWrite(gula, 1);delay(3000);digitalWrite(gula, 0);

r=0;

lcd.setCursor(0, 0);

lcd.print("Silahkan Scan");

lcd.setCursor(0, 1);

lcd.print("Kartu Anda");

}

if(data2==0){

lcd.clear();

lcd.setCursor(0, 0);lcd.print("Minuman Anda");lcd.setCursor(0, 1);lcd.print("Teh Manis");

digitalWrite(gula, 1);delay(3000);digitalWrite(gula, 0);

r=0;

lcd.setCursor(0, 0);

lcd.print("Silahkan Scan");

lcd.setCursor(0, 1);

lcd.print("Kartu Anda");

}

if(data3==0){

lcd.clear();

lcd.setCursor(0, 0);lcd.print("Minuman Anda");lcd.setCursor(0, 1);lcd.print("SoftDrink");

digitalWrite(gula, 1);delay(3000);digitalWrite(gula, 0);

r=0;

lcd.setCursor(0, 0);

lcd.print("Silahkan Scan");

lcd.setCursor(0, 1);

lcd.print("Kartu Anda");

}

}

//=============================================================================================================================================================================================