### Kod yapısı:

#include <AvrI2c\_Greiman.h>

#include <LiquidCrystal\_I2C\_AvrI2C.h>

#include <Wire.h>

#include <SPI.h>

#include <Keypad.h>

#include <MFRC522.h>

#include <Servo.h>

#define sifreUzunlugu 8

const int MFRC522\_RST\_PIN = 9;

const int MFRC522\_SS\_PIN = 10;

byte validKey1[4] = { 0x84, 0xE4, 0x5A, 0x1E };

byte validKey2[4] = { 0x59, 0xA0, 0x44, 0x73 };

char alinanSifre[sifreUzunlugu];

char istenilenSifre[sifreUzunlugu] = "2452018";

byte alinanSayac = 0, istenilenSayac = 0;

char customKey;

bool girisKabul = false;

// Keypad iÃ§in

const byte keySatir = 4;

const byte keySutun = 4;

char hexaKeys[keySatir][keySutun] = {

{'1', '2', '3', 'A'},

{'4', '5', '6', 'B'},

{'7', '8', '9', 'C'},

{'\*', '0', '#', 'D'}

};

byte satirPinleri[keySatir] = {9, 8, 7, 6};

byte sutunPinleri[keySutun] = {5, 4, 3, 2};

LiquidCrystal\_I2C\_AvrI2C lcd(0x27, 16, 2);

Keypad customKeypad = Keypad(makeKeymap(hexaKeys), satirPinleri, sutunPinleri, keySatir, keySutun);

MFRC522 mfrc522(MFRC522\_SS\_PIN, MFRC522\_RST\_PIN);

Servo kapiServo;

int servoPozisyon = 0;

/\*

\* arrayA ile arrayB' yi karÅŸÄ±latÄ±rÄ±r, aynÄ± ise true deÄŸeri dÃ¶ner,

\* farklÄ± ise false deÄŸeri dÃ¶ner.

\*/

bool isEqualArray(byte\* arrayA, byte\* arrayB, int length)

{

for (int index = 0; index < length; index++)

{

if (arrayA[index] == arrayB[index])

{

}

else

return false;

}

return true;

}

/\*

\*

\* Keypad alÄ±nan veri deÄŸerini siler.

\*

\*/

void clearData()

{

while(alinanSayac !=0){

alinanSifre[alinanSayac--] = 0;

}

return;

}

void setup(){

lcd.begin();

lcd.backlight();

Serial.begin(9600);

SPI.begin();

mfrc522.PCD\_Init();

kapiServo.attach(A3);

}

void loop(){

if(!girisKabul)

{

lcd.setCursor(0,0);

lcd.print("SifreGirKartOkut");

customKey = customKeypad.getKey();

if (customKey){

alinanSifre[alinanSayac] = customKey;

lcd.setCursor(alinanSayac,1);

lcd.print(alinanSifre[alinanSayac]);

alinanSayac++;

}

if(alinanSayac == sifreUzunlugu-1){

lcd.clear();

if(!strcmp(alinanSifre, istenilenSifre)){

girisKabul = true;

}

else{

girisKabul = false;

}

clearData();

}

if (mfrc522.PICC\_IsNewCardPresent())

{

if (mfrc522.PICC\_ReadCardSerial())

{

if (isEqualArray(mfrc522.uid.uidByte, validKey1, 4) || isEqualArray(mfrc522.uid.uidByte, validKey2, 4))

girisKabul = true;

else

girisKabul = false;

mfrc522.PICC\_HaltA();

}

}

}

else

{

lcd.clear();

lcd.setCursor(0,0);

lcd.print("Giris kabul.");

lcd.setCursor(0,1);

lcd.print("Hosgeldiniz...");

kapiServo.write(10);

delay(4000);

kapiServo.write(90);

delay(100);

clearData();

girisKabul = false;

lcd.clear();

}

}