#include <SPI.h>

#include <MFRC522.h>

#include <Servo.h>

#define SS\_PIN 10

#define RST\_PIN 9

#define SERVO\_PIN 3

Servo myservo;

#define ACCESS\_DELAY 2000

#define DENIED\_DELAY 1000

MFRC522 mfrc522(SS\_PIN, RST\_PIN); // Create MFRC522 instance.

void setup()

{

Serial.begin(9600); // Initiate a serial communication

SPI.begin(); // Initiate SPI bus

mfrc522.PCD\_Init(); // Initiate MFRC522

myservo.attach(SERVO\_PIN);

myservo.write( 70 );

delay(7500);

myservo.write( 0 );

Serial.println("Put your card to the reader...");

Serial.println();

}

void loop()

{

// Look for new cards

if ( ! mfrc522.PICC\_IsNewCardPresent())

{

return;

}

// Select one of the cards

if ( ! mfrc522.PICC\_ReadCardSerial())

{

return;

}

//Show UID on serial monitor

Serial.print("UID tag :");

String content= "";

byte letter;

for (byte i = 0; i < mfrc522.uid.size; i++)

{

Serial.print(mfrc522.uid.uidByte[i] < 0x10 ? " 0" : " ");

Serial.print(mfrc522.uid.uidByte[i], HEX);

content.concat(String(mfrc522.uid.uidByte[i] < 0x10 ? " 0" : " "));

content.concat(String(mfrc522.uid.uidByte[i], HEX));

}

Serial.println();

Serial.print("Message : ");

content.toUpperCase();

if (content.substring(1) == "69 C8 E2 2A") //change here the UID of the card

{

Serial.println("Authorized access");

Serial.println();

myservo.write( 70 );

delay(7500);

myservo.write( 0 );

}

else {

Serial.println(" Access denied");

delay(DENIED\_DELAY);

}

}