import RPi.GPIO as GPIO

import MFRC522

import signal

import requests

import pickle

import json

import time

pin = 12

GPIO.setmode(GPIO.BOARD)

GPIO.setwarnings(False)

GPIO.setup(pin,GPIO.OUT)

GPIO.output(pin,GPIO.LOW)

baseUrlString="http://78.156.114.85:8069/"

checkNfcString="api/BoxGateway/CheckNfc"

moveBoxString="api/BoxGateway/MoveBox"

renameBoxString="api/BoxGateway/RenameBox"

newBoxString="api/BoxGateway/NewBox"

filename="boxIdFile"

gotId=False

id=""

def checkId():

global filename

global gotId

global id

try:

f = file(filename, 'rb')

id = pickle.load(f)

gotId = True

print "Id found"

except (OSError, IOError) as e:

print "Id not found"

checkId()

print id

def addBox(UID):

global filename

global gotId

global id

global baseUrlString

global newBoxString

r = requests.post(baseUrlString+newBoxString,data={"nfcId":UID})

awnser = json.loads(r.text)

if(awnser["type"]=="succesful"):

gotId = True

id = awnser["key"]

f = file(filename, 'wb')

pickle.dump(id, f, 2)

f.close

print awnser["key"]

print 'id saved'

else:

print "Id does not belong to a user, pleace go to http://78.156.114.85:8069/profile to register"

def checkNFC(UID):

global id

global checkNfcString

global baseUrlcheckNfcString

if(not gotId):

addBox(UID)

else:

r = requests.post(baseUrlString+checkNfcString,data={"nfcId":UID,"boxKey":id})

awnser = json.loads(r.text)

if(awnser["type"]=="succesful"):

GPIO.output(pin,GPIO.HIGH)

print "yay"

time.sleep(1)

GPIO.output(pin,GPIO.LOW)

else:

print awnser["message"]

def end\_read(signal,frame):

global continue\_reading

print "Ctrl+C captured, ending read."

continue\_reading = False

GPIO.cleanup()

signal.signal(signal.SIGINT, end\_read)

MIFAREReader = MFRC522.MFRC522()

continue\_reading = True

while continue\_reading:

(status,TagType) = MIFAREReader.MFRC522\_Request(MIFAREReader.PICC\_REQIDL)

# Get the UID of the card

(status,uid) = MIFAREReader.MFRC522\_Anticoll()

# If we have the UID, continue

if status == MIFAREReader.MI\_OK:

# Print UID

UID = str(uid[0])+","+ str(uid[1])+ ","+str(uid[2])+ ","+str(uid[3])

print UID

checkNFC(str(UID))