import time, datetime.datetime

import requests

import RPi.GPIO as GPIO

import telepot

import urllib2

import sys

import Adafruit\_DHT

from telepot.loop import MessageLoop

white = 26 #light

yellow = 19 #fan

red = 13 #ac

green = 6 #door

GPIO.setmode(GPIO.BCM)

#LED White

GPIO.setup(white, GPIO.OUT)

GPIO.output(white, 0) #Off initially

#LED Yellow

GPIO.setup(yellow, GPIO.OUT)

GPIO.output(yellow, 0) #Off initially

#LED Red

GPIO.setup(red, GPIO.OUT)

GPIO.output(red, 0) #Off initially

#LED green

GPIO.setup(green, GPIO.OUT)

GPIO.output(green, 0) #Off initially

GPIO.setup(3,GPIO.OUT) #GPIO 3 -> Green LED as output

GPIO.setup(14,GPIO.IN) #GPIO 14 -> IR sensor as input

GPIO.setup(5,GPIO.OUT)

GPIO.output(5,0)

GPIO.setup(17,GPIO.OUT)

GPIO.output(17,0)

def vicky(msg):

chat\_id = msg['chat']['id']

command = msg['text']

upt = datetime.datetime.now()

print 'Received: %s' % command

if command == 'Hi':

telegram\_bot.sendMessage (chat\_id, str("Hi! Vicky"))

if command == 'Light on':

GPIO.output(white, 1)

telegram\_bot.sendMessage (chat\_id, str("Living Room Light Up"))

elif command == 'Light off':

GPIO.output(white, 0)

dt = datetime.datetime.now()

diff = divmod((datetime.datetime.now()-upt).total\_seconds(), 60)

tm=int(diff[0])

telegram\_bot.sendMessage (chat\_id, str("Living Room Light Down"))

payload = { "Name" : "Vicky", "Object": "Light", "Time\_in": tm.\_\_str\_\_() }

headers = {'content-type': 'application/json'}

requests.post('http://ec2-18-232-64-191.compute-1.amazonaws.com:3000/postdata', data=json.dumps(payload), headers=headers)

urllib2.urlopen('https://api.thingspeak.com/update?api\_key=7BDCW06SENBIO6KT&field1=%s' % (tm))

if command == 'Fan on':

GPIO.output(yellow, 1)

telegram\_bot.sendMessage (chat\_id, str("Living Room Fan Up"))

elif command == 'Fan off':

GPIO.output(yellow, 0)

dt = datetime.datetime.now()

diff = divmod((datetime.datetime.now()-upt).total\_seconds(), 60)

tm=int(diff[0])

telegram\_bot.sendMessage (chat\_id, str("Living Room Fan Off"))

payload = { "Name" : "Vicky", "Object": "Fan", "Time\_in": tm.\_\_str\_\_() }

headers = {'content-type': 'application/json'}

requests.post('http://ec2-18-232-64-191.compute-1.amazonaws.com:3000/postdata', data=json.dumps(payload), headers=headers)

urllib2.urlopen('https://api.thingspeak.com/update?api\_key=7BDCW06SENBIO6KT&field2=%s' % (tm))

if command == 'Ac on':

GPIO.output(red, 1)

telegram\_bot.sendMessage (chat\_id, str("Living Room Air Conditioner Up"))

elif command == 'Ac off':

GPIO.output(red, 0)

dt = datetime.datetime.now()

diff = divmod((datetime.datetime.now()-upt).total\_seconds(), 60)

tm=int(diff[0])

telegram\_bot.sendMessage (chat\_id, str("Living Room Light Down"))

payload = { "Name" : "Vicky", "Object": "AC", "Time\_in": tm.\_\_str\_\_() }

headers = {'content-type': 'application/json'}

requests.post('http://ec2-18-232-64-191.compute-1.amazonaws.com:3000/postdata', data=json.dumps(payload), headers=headers)

urllib2.urlopen('https://api.thingspeak.com/update?api\_key=7BDCW06SENBIO6KT&field3=%s' % (tm))

if command == 'Door lock':

GPIO.output(5, 1)

telegram\_bot.sendMessage (chat\_id, str("Door Locked"))

time.sleep(3)

GPIO.output(5, 0)

elif command == 'Door unlock':

GPIO.output(green, 1)

telegram\_bot.sendMessage (chat\_id, str("Door Unlocked By Vicky"))

telegram\_bot1.sendMessage (chat\_id, str("Door Unlocked By Vicky"))

telegram\_bot2.sendMessage(chat\_id , str("Door Unlocked By Vicky"))

if command == 'Help':

telegram\_bot.sendMessage (chat\_id, str("Sorry Help less"))

if command == 'Logdata':

r = requests.post("http://ec2-18-232-64-191.compute-1.amazonaws.com:3000/retrieve")

telegram\_bot.sendMessage (chat\_id, str(r.json()))

def duck(msg):

chat\_id = msg['chat']['id']

command = msg['text']

upt = datetime.datetime.now()

print 'Received: %s' % command

if command == 'Hi':

telegram\_bot1.sendMessage (chat\_id, str("Hi! Keerthana"))

if command == 'Light on':

GPIO.output(white, 1)

telegram\_bot1.sendMessage (chat\_id, str("Living Room Light Up"))

elif command == 'Light off':

GPIO.output(white, 0)

dt = datetime.datetime.now()

diff = divmod((datetime.datetime.now()-upt).total\_seconds(), 60)

tm=int(diff[0])

telegram\_bot1.sendMessage (chat\_id, str("Living Room Light Down"))

payload = { "Name" : "Vicky", "Object": "Light", "Time\_in": tm.\_\_str\_\_() }

headers = {'content-type': 'application/json'}

requests.post('http://ec2-18-232-64-191.compute-1.amazonaws.com:3000/postdata', data=json.dumps(payload), headers=headers)

urllib2.urlopen('https://api.thingspeak.com/update?api\_key=7BDCW06SENBIO6KT&field1=%s' % (tm))

if command == 'Fan on':

GPIO.output(yellow, 1)

telegram\_bot1.sendMessage (chat\_id, str("Living Room Fan Up"))

elif command == 'Fan off':

GPIO.output(yellow, 0)

dt = datetime.datetime.now()

diff = divmod((datetime.datetime.now()-upt).total\_seconds(), 60)

tm=int(diff[0])

telegram\_bot1.sendMessage (chat\_id, str("Living Room Fan Off"))

payload = { "Name" : "Vicky", "Object": "Fan", "Time\_in": tm.\_\_str\_\_() }

headers = {'content-type': 'application/json'}

requests.post('http://ec2-18-232-64-191.compute-1.amazonaws.com:3000/postdata', data=json.dumps(payload), headers=headers)

urllib2.urlopen('https://api.thingspeak.com/update?api\_key=7BDCW06SENBIO6KT&field2=%s' % (tm))

if command == 'Ac on':

GPIO.output(red, 1)

telegram\_bot1.sendMessage (chat\_id, str("Living Room Air Conditioner Up"))

elif command == 'Ac off':

GPIO.output(red, 0)

dt = datetime.datetime.now()

diff = divmod((datetime.datetime.now()-upt).total\_seconds(), 60)

tm=int(diff[0])

telegram\_bot1.sendMessage (chat\_id, str("Living Room Light Down"))

payload = { "Name" : "Vicky", "Object": "AC", "Time\_in": tm.\_\_str\_\_() }

headers = {'content-type': 'application/json'}

requests.post('http://ec2-18-232-64-191.compute-1.amazonaws.com:3000/postdata', data=json.dumps(payload), headers=headers)

urllib2.urlopen('https://api.thingspeak.com/update?api\_key=7BDCW06SENBIO6KT&field3=%s' % (tm))

if command == 'Door lock':

GPIO.output(5, 1)

telegram\_bot1.sendMessage (chat\_id, str("Door Locked"))

time.sleep(3)

GPIO.output(5, 0)

elif command == 'Door unlock':

GPIO.output(green, 1)

telegram\_bot.sendMessage (chat\_id, str("Door Unlocked By Keerthana"))

#telegram\_bot1.sendMessage (chat\_id, str("Door Unlocked By Vicky"))

telegram\_bot2.sendMessage(chat\_id , str("Door Unlocked By Keerthana"))

if command == 'Help':

telegram\_bot1.sendMessage (chat\_id, str("Sorry Help less"))

if command == 'Logdata':

r = requests.post("http://ec2-18-232-64-191.compute-1.amazonaws.com:3000/retrieve")

telegram\_bot1.sendMessage (chat\_id, str(r.json()))

def barath(msg):

chat\_id = msg['chat']['id']

command = msg['text']

upt = datetime.datetime.now()

print 'Received: %s' % command

if command == 'Hi':

telegram\_bot2.sendMessage (chat\_id, str("Hi! Vicky"))

if command == 'Light on':

GPIO.output(white, 1)

telegram\_bot2.sendMessage (chat\_id, str("Living Room Light Up"))

elif command == 'Light off':

GPIO.output(white, 0)

dt = datetime.datetime.now()

diff = divmod((datetime.datetime.now()-upt).total\_seconds(), 60)

tm=int(diff[0])

telegram\_bot2.sendMessage (chat\_id, str("Living Room Light Down"))

payload = { "Name" : "Vicky", "Object": "Light", "Time\_in": tm.\_\_str\_\_() }

headers = {'content-type': 'application/json'}

requests.post('http://ec2-18-232-64-191.compute-1.amazonaws.com:3000/postdata', data=json.dumps(payload), headers=headers)

urllib2.urlopen('https://api.thingspeak.com/update?api\_key=7BDCW06SENBIO6KT&field1=%s' % (tm))

if command == 'Fan on':

GPIO.output(yellow, 1)

telegram\_bot2.sendMessage (chat\_id, str("Living Room Fan Up"))

elif command == 'Fan off':

GPIO.output(yellow, 0)

dt = datetime.datetime.now()

diff = divmod((datetime.datetime.now()-upt).total\_seconds(), 60)

tm=int(diff[0])

telegram\_bot2.sendMessage (chat\_id, str("Living Room Fan Off"))

payload = { "Name" : "Vicky", "Object": "Fan", "Time\_in": tm.\_\_str\_\_() }

headers = {'content-type': 'application/json'}

requests.post('http://ec2-18-232-64-191.compute-1.amazonaws.com:3000/postdata', data=json.dumps(payload), headers=headers)

urllib2.urlopen('https://api.thingspeak.com/update?api\_key=7BDCW06SENBIO6KT&field2=%s' % (tm))

if command == 'Ac on':

GPIO.output(red, 1)

telegram\_bot2.sendMessage (chat\_id, str("Living Room Air Conditioner Up"))

elif command == 'Ac off':

GPIO.output(red, 0)

dt = datetime.datetime.now()

diff = divmod((datetime.datetime.now()-upt).total\_seconds(), 60)

tm=int(diff[0])

telegram\_bot2.sendMessage (chat\_id, str("Living Room Light Down"))

payload = { "Name" : "Vicky", "Object": "AC", "Time\_in": tm.\_\_str\_\_() }

headers = {'content-type': 'application/json'}

requests.post('http://ec2-18-232-64-191.compute-1.amazonaws.com:3000/postdata', data=json.dumps(payload), headers=headers)

urllib2.urlopen('https://api.thingspeak.com/update?api\_key=7BDCW06SENBIO6KT&field3=%s' % (tm))

if command == 'Door lock':

GPIO.output(5, 1)

telegram\_bot2.sendMessage (chat\_id, str("Door Locked"))

time.sleep(3)

GPIO.output(5, 0)

elif command == 'Door unlock':

GPIO.output(green, 1)

telegram\_bot.sendMessage (chat\_id, str("Door Unlocked By Barath"))

telegram\_bot1.sendMessage (chat\_id, str("Door Unlocked By Barath"))

#telegram\_bot2.sendMessage(chat\_id , str("Door Unlocked By Vicky"))

if command == 'Help':

telegram\_bot.sendMessage (chat\_id, str("Sorry Help less"))

if command == 'Logdata':

r = requests.post("http://ec2-18-232-64-191.compute-1.amazonaws.com:3000/retrieve")

telegram\_bot.sendMessage (chat\_id, str(r.json()))

#Ravian2bot

telegram\_bot = telepot.Bot('970046755:AAE1Y1Dw090GmCJuobqZt1Nf\_Oob7dGBRV4')

#Keerthanabot

telegram\_bot1 = telepot.Bot('810449538:AAHgkUDvcqX9YSn-78oK66t6sjTYfR-yxIY')

#Barath Bot

telegram\_bot2 = telepot.Bot('807505290:AAHHeLFytNlt6Te0eektIB3qXrDQtNVptzI')

print(telegram\_bot.getMe())

print(telegram\_bot1.getMe())

print(telegram\_bot2.getMe())

MessageLoop(telegram\_bot, vicky).run\_as\_thread()

MessageLoop(telegram\_bot1, duck).run\_as\_thread()

MessageLoop(telegram\_bot2, barath).run\_as\_thread()

print("Launch Control")

while 1:

if(GPIO.input(14)==False): #object is near

GPIO.output(3,True) #Green

else:

GPIO.output(3,False)

humidity, temperature = Adafruit\_DHT.read\_retry(11, 4)

if(int(temperature)> 20):

GPIO.output(17,0)

urllib2.urlopen('https://api.thingspeak.com/update?api\_key=7BDCW06SENBIO6KT&field4=%s' % (temperature))

urllib2.urlopen('https://api.thingspeak.com/update?api\_key=7BDCW06SENBIO6KT&field5=%s' % (humidity))