import speech\_recognition as sr # recognise speech

import webbrowser # open browser

import time

import playsound # to play an audio file

import random

import os

from gtts import gTTS # google text to speech

from time import ctime

def there\_exists(terms):

for term in terms:

if term in voice\_data:

return True

r = sr.Recognizer() # initialise a recogniser

# listen for audio and convert it to text:

def record\_audio(ask=False):

with sr.Microphone() as source: # microphone as source

r.energy\_threshold=500 #voice level number increse more sensitive

r.adjust\_for\_ambient\_noise(source,1.2)# noise cancel rate

r.pause\_threshold= 1

if ask:

speak(ask)

audio = r.listen(source) # listen for the audio via source

voice\_data = ''

try :

voice\_data = r.recognize\_google(audio) # convert audio to text

except sr.RequestError:

speak('Sorry, the service is down') # error: recognizer is not connected

except sr.UnknownValueError: # error: recognizer does not understand

print('Recognizing..')

print(f">> {voice\_data.lower()}") # print what user said

return voice\_data.lower()

# get string and make a audio file to be played

def speak(audio\_string):

tts = gTTS(text=audio\_string, lang='en-in') # text to speech(voice)

r = random.randint(1,20000000)

audio\_file = 'audio-' + str(r) + '.mp3'

tts.save(audio\_file) # save as mp3

playsound.playsound(audio\_file) # play the audio file

print(audio\_string) # print what app said

os.remove(audio\_file) # remove audio file

def respond(voice\_data):

# 1: greeting

if there\_exists(["hey","hi","hello","wake up","hai"]):

greetings = ["hey", "hey, what's up? ", " how can I help you","I'm listening","hello"]

greet = greetings[random.randint(0,len(greetings)-1)]

speak(greet)

# 2: name

if there\_exists(["your name","what i call you","what is your good name"]):

name= record\_audio("my name is Vavo stand for virtual assistance version One. what's your name?")

speak('Nice to meet you '+ name )

speak('how can i help you ' + name)

# 3: Origin

if there\_exists(["who are you","your inventor","invented you","created you","who is your developer"]):

greetings = ["I am Virtual Voice Assistant","I am developed by vijaya kumar,sarathy, mukunthan s as a voice assistance"] # You can Add your name

greet = greetings[random.randint(0,len(greetings)-1)]

speak(greet)

if there\_exists(["what is your age","how old are you","when is your birthday"]):

greetings = ["I came into this world in march 2023"]

greet = greetings[random.randint(0,len(greetings)-1)]

speak(greet)

# 3: Take care's

if there\_exists(["how's everything" ,"how ia everything","how are you","how are you doing","what's up","whatsup"]):

greetings = ["I am well ...thanks for asking ","i am well" ,"Doing Great" ]

greet = greetings[random.randint(0,len(greetings)-1)]

speak(greet)

# 3: greeting

if there\_exists(["What are you doing" ,"what you doing","doing"]):

greetings = ["nothing", "nothing...,just working for you","Nothing much"]

greet = greetings[random.randint(0,len(greetings)-1)]

speak(greet)

# 4.1: time

if there\_exists(["what's the time","tell me the time","what time is it","what is the time","time is going on"]):

time = ctime().split(" ")[3].split(":")[0:2]

if time[0] == "00":

hours = '12'

else:

hours = time[0]

minutes = time[1]

time = f'{hours} {minutes}'

speak(time)

# 5: search wekiapedia

if there\_exists(["wikipedia"]):

search = record\_audio('What do you want to search for?')

url = 'https://en.wikipedia.org/wiki/'+ search

webbrowser.get().open(url)

speak('Here is what I found for' + search)

# 5: search

if there\_exists(["do google","search google","on google","search for","in google"]):

search = record\_audio('What do you want to search for?')

url = 'https://google.com/search?q='+ search

webbrowser.get().open(url)

speak('Here is what I found for' + search)

# 5.6: opening youtube

if there\_exists(["open the youtube","open youtube"]):

url = 'https://www.youtube.com/'

webbrowser.get().open(url)

speak('Opening')

# 5.7: opening google

if there\_exists(["open the google","open google"]):

url = 'https://www.google.com/'

webbrowser.get().open(url)

speak('Opening')

# 5.7: opening gemail

if there\_exists(["open gmail","open email","open my email","check email"]):

url = 'https://mail.google.com/'

webbrowser.get().open(url)

speak('Opening')

# 5.5: find location

if there\_exists(["location"]):

location = record\_audio('What is the locatio n?')

url = 'https://google.nl/maps/place/' + location + '/&amp;'

webbrowser.get().open(url)

speak('Opening map of' + location )

# 6: search youtube

if there\_exists(["search youtube","search the youtube","search in youtube","in youtube","on youtube"]):

search = record\_audio('What do you want to search for?')

r.pause\_threshold=2

url = 'https://www.youtube.com/results?search\_query='+search

webbrowser.get().open(url)

speak('Here is what I found')

#OS shutdown

if there\_exists(["shutdown system","system off","shutdown the system","system shutdown"]):

speak('Okay system will off in 30 seconds')

os.system("shutdown /s /t 30")

if there\_exists(["good","thank you","thanks","well done"]):

greetings = ["my pleasure","Don't mention","Thanks for your compliment","No problem.","Thank you, it makes my day to hear that."]

greet = greetings[random.randint(0,len(greetings)-1)]

speak(greet)

#office room

if there\_exists(["where is office room","where is a office room","office room"]):

greetings = ["located in admin block first floor then take center step and take left then your destination will be reached"]

greet = greetings[random.randint(0,len(greetings)-1)]

speak(greet)

#library

if there\_exists(["where is library","where is a library","library"]):

greetings = ["located in admin block first floor then take center step and take right then your destination will be reached"]

greet = greetings[random.randint(0,len(greetings)-1)]

speak(greet)

#computer science and department

if there\_exists(["where is computer science department","where is a computer science department","computer science department"]):

greetings = ["on circuit block third floor"]

greet = greetings[random.randint(0,len(greetings)-1)]

speak(greet)

if there\_exists(["where is 3rd year cse b class","where is a 3rd year cse b class","3rd year cse b class"]):

greetings = ["on circuit block third floor"]

greet = greetings[random.randint(0,len(greetings)-1)]

speak(greet)

if there\_exists(["where is 3rd year cse b section","where is a 3rd year cse b section","3rd year cse b section"]):

greetings = [" located on circuit block third floor"]

greet = greetings[random.randint(0,len(greetings)-1)]

speak(greet)

#ece departmentL:

if there\_exists(["where is ece department","where is a ece department","ece department"]):

greetings = ["on circuit block forth floor"]

greet = greetings[random.randint(0,len(greetings)-1)]

speak(greet)

#mechanical department:

if there\_exists(["where is mechanical department","where is a mechanical department","mechanical department"]):

greetings = ["on admin block second floor"]

greet = greetings[random.randint(0,len(greetings)-1)]

speak(greet)

#civil department:

if there\_exists(["where is civil department","where is a civil department","civil department"]):

greetings = ["on admin block third floor"]

greet = greetings[random.randint(0,len(greetings)-1)]

speak(greet)

#boys rest room:

if there\_exists(["where is boys restroom","where is a boys restroom","boys restroom"]):

greetings = ["on admin block each floor on the right croner"]

greet = greetings[random.randint(0,len(greetings)-1)]

speak(greet)

if there\_exists(["exit", "quit","sleep","shut up","close"]):

greetings = ["Going offline ! you can call me Anytime","Okay ,you can call me Anytime","See you later","See you soon","Have a good day."]

greet = greetings[random.randint(0,len(greetings)-1)]

speak(greet)

exit()

time.sleep(1)

while(1):

voice\_data = record\_audio() # get the voice input

respond(voice\_data) # respond