

Mini - Alexa : A virtual AI assistant

Libraries Used :

speech\_recognition - <https://pypi.org/project/SpeechRecognition/>

pywhatkit - <https://pypi.org/project/pywhatkit/>

pyttsx3 - <https://pypi.org/project/pyttsx3/>

datetime - <https://pypi.org/project/DateTime/>

wikipedia - <https://pypi.org/project/wikipedia/>

pyjokes - <https://pypi.org/project/pyjokes/>

sys - <https://docs.python.org/3/library/sys.html>

CODE :

In [ 2 ]:

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import speech_recognition as sr
import pyttsx3
import pywhatkit
import datetime
import wikipedia
import pyjokes
import sys
import webbrowser
from datetime import date

engine=pyttsx3.init()
engine.setProperty("rate", 150)
voices = engine.getProperty("voices")
engine.setProperty('voice', voices [1].id)
recognizer=sr.Recognizer()

def engine_talk(text):
    engine.say(text)
    engine.runAndWait()

def run_alexa():

    with sr.Microphone() as source:
        recognizer.adjust_for_ambient_noise(source,duration=1)
        print('\n')
        print("Start Speaking!!")
        engine_talk('listening.. ')
        recordedaudio=recognizer.listen(source)

    try:
        command=recognizer.recognize_google(recordedaudio,language='en-in')
        command = command.lower()
        if 'alexa' in command :
            command = command.replace('alexa', '')
            print('you said'+command)
        else :

            print('you said : '+command)

        if 'hello' in command :
            print('hello how can i helpp you ??')
            engine_talk('hello, how can i help you ??')

        elif 'who are you' in command :
            print('I am mini alexa a k a your virtual assistant master')
            engine_talk('I am mini alexa a k a your virtual assistant master. how can i help you ??')

        elif 'can you do' in command :
            print('''i can play songs on youtube , tell you a joke, search on wikipedia, tell date and time,find your location, locate area on map,
            open different websites like instagram, youtube,gmail, git hub, stack overflow and searches on google.How may i help you ??''')

            engine_talk('''i can play songs on youtube , tell you a joke, search on wikipedia, tell date and time,find your location, locate area on map,
            open different websites like insta gram, youtube,gmail, git hub, stack overflow and searches on google. How may i help you ??''')

        elif 'play' in command:
            song = command.replace('play', '')
            print('Playing'+song)
            engine_talk('Playing'+song)
            pywhatkit.playonyt(song)

        elif 'date and time' in command :
            today = date.today()
            time = datetime.datetime.now().strftime('%I:%M %p')
            # Textual month, day and year
            d2 = today.strftime("%B %d, %Y")
            print("Today's Date is ", d2, 'Current time is', time)
            engine_talk('Today is : '+ d2)
            engine_talk('and current time is '+ time)

        elif 'time and date' in command :
            today = date.today()
            time = datetime.datetime.now().strftime('%I:%M %p')
            # Textual month, day and year
            d2 = today.strftime("%B %d, %Y")
            print("Today's Date is ", d2, 'Current time is', time)
            engine_talk( 'Current time is '+ time)
            engine_talk('and Today is : '+ d2)

        elif 'time' in command:
            time = datetime.datetime.now().strftime('%I:%M %p')
            print('The current time is '+time)
            engine_talk('The current time is')
            engine_talk(time)

        elif 'date' in command:
            today = date.today()
            print("Today's date:", today)
            # Textual month, day and year
            d2 = today.strftime("%B %d, %Y")
            print("Today's Date is ", d2)
            engine_talk('The todays date is')
            engine_talk(d2)

        elif 'tell me about' in command:
            name = command.replace('tell me about', '')
            info = wikipedia.summary(name, 1)
            print(info)
            engine_talk(info)

        elif 'wikipedia' in command:
            name = command.replace('wikipedia', '')
            info = wikipedia.summary(name, 1)
            print(info)
            engine_talk(info)

        elif 'what is' in command:
            name = command.replace('what is', '')
            info = wikipedia.summary(name, 1)
            print(info)
            engine_talk(info)

        elif 'who is' in command:
            name = command.replace('who is', '')
            info = wikipedia.summary(name, 1)
            print(info)
            engine_talk(info)

        elif 'what is' in command :
            search = 'https://www.google.com/search?q='+command
            print(' Here is what i found on the internet..')
            engine_talk('searching... Here is what i found on the internet..')
            webbrowser.open(search)

        elif 'joke' in command:
            _joke = pyjokes.get_joke()
            print(_joke)
            engine_talk(_joke)

        elif 'search' in command :
            search = 'https://www.google.com/search?q='+command
            engine_talk('searching... ')
            webbrowser.open(search)

        elif "my location" in command:
            url = "https://www.google.com/maps/search/where+am+I+?/"
            webbrowser.get().open(url)
            engine_talk("You must be somewhere near here, as per Google maps")

        elif 'locate' in command :
            engine_talk('locating ...')
            loc = command.replace('locate', '')
            if 'on map' in loc :
                loc= loc.replace('on map',' ')
                url = 'https://google.nl/maps/place/'+loc+'/&amp;'
                webbrowser.get().open(url)
                print('Here is the location of '+loc)
                engine_talk('Here is the location of '+loc)

            elif 'on map' in command :
                engine_talk('locating ...')
                loc = command.split(" ")
                print(loc[1])
                url = 'https://google.nl/maps/place/'+loc[1]+'/&amp;'
                webbrowser.get().open(url)
                print('Here is the location of '+loc[1])
                engine_talk('Here is the location of '+loc[1])

            elif 'location of' in command :
                engine_talk('locating ...')
                loc = command.replace('find location of', '')
                url = 'https://google.nl/maps/place/'+loc+'/&amp;'
                webbrowser.get().open(url)
                print('Here is the location of '+loc)
                engine_talk('Here is the location of '+loc)

            elif 'where is' in command :
                engine_talk('locating ...')
                loc = command.replace('where is', '')
                url = 'https://google.nl/maps/place/'+loc+'/&amp;'
                webbrowser.get().open(url)
                print('Here is the location of '+loc)
                engine_talk('Here is the location of '+loc)

        elif 'bootcamps' in command :
            search = 'http://tathastu.twowaits.in/index.html#courses'
            engine_talk('opening boot camps')
            webbrowser.open(search)

        elif 'boot camps' in command :
            search = 'http://tathastu.twowaits.in/index.html#courses'
            engine_talk('opening boot camps')
            webbrowser.open(search)

        elif 'python bootcamp' in command :
            search = 'http://tathastu.twowaits.in/kickstart_python.html'
            engine_talk('showing pythonboot camp')
            webbrowser.open(search)

        elif 'data science bootcamp' in command :
            search = 'http://tathastu.twowaits.in/kickstart_data_science.html'
            engine_talk('showing data science and ml bootcamp')
            webbrowser.open(search)

        elif 'open google' in command :
            print('opening google ...')
            engine_talk('opening google..')
            webbrowser.open_new('https://www.google.co.in/')

        elif 'gmail' in command :
            print('opening gmail ...')
            engine_talk('opening gmail..')
            webbrowser.open_new('https://mail.google.com/')

        elif 'open youtube' in command :
            print('opening you tube ...')
            engine_talk('opening you tube..')
            webbrowser.open_new('https://www.youtube.com/')

        elif 'open instagram' in command :
            print('opening instagram ...')
            engine_talk('opening insta gram...')
            webbrowser.open_new('https://www.instagram.com/')

        elif 'open stack overflow' in command :
            print('opening stackoverflow ...')
            engine_talk('opening stack overflow...')
            webbrowser.open_new('https://stackoverflow.com/')

        elif 'open github' in command :
            print('opening git hub ...')
            engine_talk('opening git hub..')
            webbrowser.open_new('https://github.com/')

        elif 'bye' in command:
            print('good bye, have a nice day !!!')
            engine_talk('good bye, have a nice day !!!')
            sys.exit()

        elif 'thank you' in command :
            print('your welcome')
            engine_talk('your welcome')

        elif 'stop' in command:
            print('good bye, have a nice day !!!')
            engine_talk('good bye, have a nice day !!!')
            sys.exit()

        elif 'tata' in command:
            print('good bye, have a nice day !!!')
            engine_talk('good bye, have a nice day !!!')
            sys.exit()

        else:
            print(' Here is what i found on the internet..')
            engine_talk('Here is what i found on the internet..')
            search = 'https://www.google.com/search?q='+command
            webbrowser.open(search)

    except Exception as ex:
        print(ex)

print('Clearing background noise...Please wait')
engine_talk('Clearing background noise...Please wait')
print('\n')
print("hello, i am mini alexa how can i help you ??")
engine_talk ("hello i am mini alexa how can i help you ")

while True:
    run_alexa()
```

Clearing background noise...Please wait

hello, i am mini alexa how can i help you ??

Start Speaking!!

Start Speaking!!

Start Speaking!!  
you said : thank you  
your welcome

Start Speaking!!  
you said : bye bye  
good bye, have a nice day !!

An exception has occurred, use %tb to see the full traceback.

SystemExit

In [ ]:

In [ ]: