TECHNOPHILIA SUMMER TRAINING AZEOTROPY IIT BOMBAY

A
PROJECT REPORT
ON

" DESKTOP VOICE ASSISTANCE "

FOR THE COURSE
PYTHON PROGRAMMING

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SUBMITTED TO
TECHNOPHILIA SUMMER TRAINING
AZEOTROPY IIT BOMBAY

IN YEAR

2021

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INTRODUCTION

The main Objective of this project is to design a responsive **AI Desktop Voice Assistant** with fledged logic and environment using new trending technologies in market with maximum functionalities, efficiency, maximum optimal speed on Desktop or Web and one key feature it must be more informative…

……

DEVELOPMENT TOOLS :-

1) I Make our Module with **PYTHON**
2) I Used Visual Studio Code as our Editor.
3) I Used 11 types of pip modules.
4) I used Hp EliteBook 8460p for Developing Code.

HARDWARE AND SOFTWARE REQUIREMENTS

The software is designed to be light-weighted so that it doesn't be a burden on the machine running it. This system is being build keeping in mind the generally available hardware and software compatibility. Here are the minimum hardware and software requirement for virtual assistant.

Hardware:

- Pentium-pro processor or later.
- RAM 512MB or more.
- 120 GB HDD.
- LAN OR WAN.

Software:

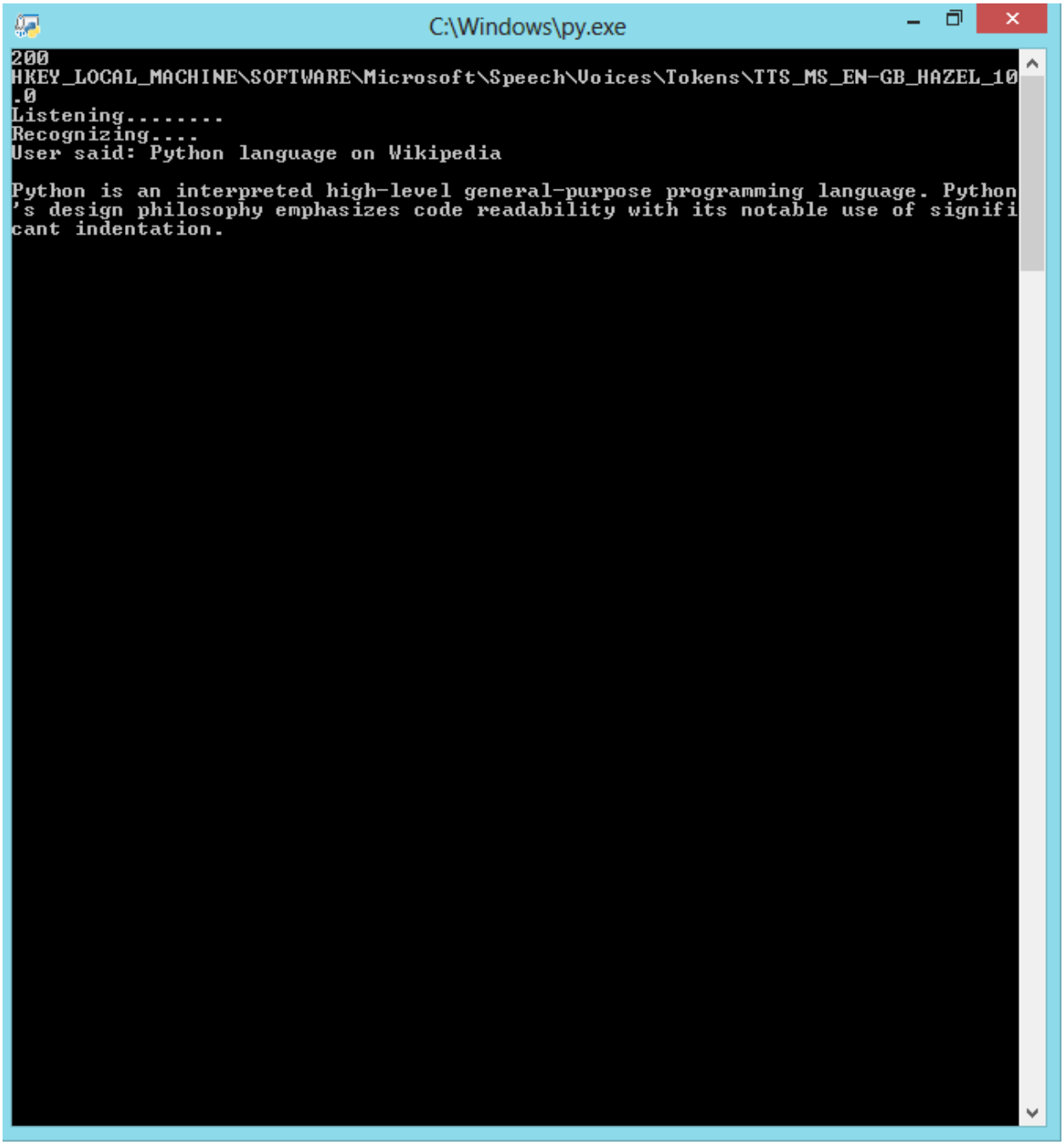
- Windows 7(32-bit) or above.
- Python 3.7 or later .
- Chrome Driver .

FEATURES

- Inexpensive.
- With Many More Modules like Speech Recognition, Web-Browser, Pyjokes, Urlopen, Wikipedia, Wolframalpha, pyttsx3 and many more.
- User Friendly.
- Fully Informative.
- Easy-To-Use.
- Easy-To-Modify.
- Easy-To-Handle.
- It Content AI Calculator.
- It Content random Jokes and News Generators.
- And Many More Features.

SNAPSHOTS

Following Snapshots shows the Interferance Of My Python Program Output **:-**



Source Code

SOURCE CODE FOR PYTHON PROGRAM :-

```
import pyttsx3
import speech_recognition as sr
import datetime
import wikipedia
import webbrowser
import os
import time
import pyjokes
import urlopen
import json
import wolframalpha

engine = pyttsx3.init('sapi5')
voices =engine.getProperty('voices')
print(voices[1].id)
engine.setProperty('voice', voices[1].id)


def speak(audio):
  engine.say(audio)
  engine.runAndWait()


def wishMe():
   hour = int(datetime.datetime.now().hour)
   if hour>=0 and hour<12:
      speak("Good Morning!")
```

```
elif hour>=12 and hour<18:
        speak("Good Afternoon!")

    else:
        speak("Good Evening!")

    speak("I am jarvis Sir.Please tell me how may I help you")

def takeCommand():
    r = sr.Recognizer()
    with sr.Microphone() as source:
        print("Listening.....")
        r.pause_threshold = 1
        audio = r.listen(source)

    try:
        print("Recognizing....")
        query = r.recognize_google(audio, language='en-in')
        print(f"User said: {query}\n")
    except Exception as e:
        print(e)

        print("Say that Again Please")
        return"None"
    return query

if __name__ == '__main__':
    wishMe()
    #while True:
    if 1:
        query = takeCommand().lower()
))
```

#Logic for Executing task on query

```
if 'wikipedia' in query:
    speak('Searching Wikipedia.....')
    query = query.replace("wikipedia", "")
    results = wikipedia.summary(query, sentences=2)
    speak("Acoording to Wikipedia")
    print(results)
    speak(results)

elif 'open youtube' in query:
    speak("Here you go to Google\n")
    webbrowser.open("https://www.youtube.com")

elif 'open google' in query:
    speak("Here you go to Google\n")
    webbrowser.open("google.com")

elif 'open Google Translate' in query:
    speak("Here you go to Google Translate\n")
    webbrowser.open("https://translate.google.co.in/")

elif 'open stackoverflow' in query:
    speak("Here you go to Stack Over flow.Happy coding")
    webbrowser.open("stackoverflow.com")

elif 'play music' in query or 'play songs' in query:
    speak("Here you go with music")
    music_dir = "C:\\Users\\MOHANE HOAME\\Music"
    songs = os.listdir(music_dir)
    print(songs)
    os.startfile(os.path.join(music_dir, songs[0]))
```

```
 elif 'what time is it' in query:
        strTime = datetime.datetime.now().strftime("%H:%M:
%S")
        speak(f"Sir, the time is {strTime}")
        print(strTime)

    elif 'Open VS code' in query:
        codePath = "C:\\Users\\MOHANE HOAME\\AppData\\
Local\\Programs\\Microsoft VS Code"
        os.startfile(codePath)

    elif 'how are you' in query:
        speak("I am fine, Thank you")
        speak("How are you, Sir")

    elif 'fine' in query or "good" in query:
        speak("It's good to know that your fine")

    elif 'exit' in query:
        speak("Thanks for giving me your time")
        exit()

    elif "who made you" in query or "who created you" in qu
ery:
        speak("I have been created by Ayush Mohane.")

    elif 'joke' in query:
        speak(pyjokes.get_joke())

    elif "calculate" in query:
```

```
app_id = "Wolframalpha api id"
        client = wolframalpha.Client(app_id)
        indx = query.lower().split().index('calculate')
        query = query.split()[indx + 1:]
        res = client.query(' '.join(query))
        answer = next(res.results).text
        print("The answer is " + answer)
        speak("The answer is " + answer)

    elif 'search' in query or 'play' in query:

        query = query.replace("search", "")
        query = query.replace("play", "")
        webbrowser.open(query)

    elif "who i am" in query:
        speak("If you talk then definitely your human.")

    elif "why you came to world" in query:
        speak("Thanks to Ayush Mohane. further It's a secret")


    elif "who are you" in query:
        speak("I am your virtual assistant created by Ayush Mo
hane")

    elif 'reason for you' in query:
        speak("I was created as a Minor project by Mister Ayus
h Mohane ")
```

```
    elif 'news' in query:

        try:
            jsonObj = urlopen('''https://newsapi.org / v1 / articles?source = the-times-of-
india&sortBy = top&apiKey =\\times of India Api key\\''')
            data = json.load(jsonObj)
            i = 1

            speak('here are some top news from the times of india')
            print('''=============== TIMES OF INDIA ========
====''' + '\n')

            for item in data['articles']:

                print(str(i) + '. ' + item['title'] + '\n')
                print(item['description'] + '\n')
                speak(str(i) + '. ' + item['title'] + '\n')
                i += 1
        except Exception as e:

            print(str(e))
```

FUTURE SCOPE

- Many more New Voices.
- Many more Mor New Function.
- Send E-mail Function.
- Upload posts on Social media Function.
- Search On Google or other Web-Browsers.
- And Many more Future Scope.