import webbrowser

import pyttsx3

import speech\_recognition as sr

import datetime

import wikipedia

import random

import os

engine = pyttsx3.init('sapi5')

voices = engine.getProperty('voices')

print(voices[0].id)

engine.setProperty('voice',voices[0].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():

    #It takes microphone input from the user and returns string output

    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()

    query = takeCommand().lower()

    while True:

        query = takeCommand().lower()

    #logic for executing tasks based on query

        if 'wikipedia' in query:

            speak('searching wikipedia...')

            query = query.replace("wikipedia", "")

            results = wikipedia.summary(query,sentences=2)

            speak("According to wikipedia")

            print(results)

            speak(results)

        elif 'open youtube' in query:

            webbrowser.open("youtube.com")

        elif 'open google'  in query:

            webbrowser.open("google.com")

        elif 'open stackoverflow' in query:

            webbrowser.open("stackoverflow.com")

        elif 'open codechef'  in query:

            webbrowser.open("codechef.com")

        elif 'open instagram' in query:

            webbrowser.open("instagram.com")

        elif 'open spotify'  in query:

            webbrowser.open("spotify.com")

        elif 'play music' in query:

            n=random.randint(0,3)

            print(n)

            music\_dir = 'C:\\Users\\HP\\OneDrive\\Desktop\\n'

            songs = os.listdir(music\_dir)

            print(songs)

            os.startfile(os.path.join(music\_dir,songs[n]))

        elif 'the time' in query:

            strTime = datetime.datetime.now().strftime("%H:%M:%S")

            speak(f"Sir, the time is {strTime}")