import sys  
import time  
from turtle import title  
from turtledemo.chaos import f  
  
import pyautogui  
import pyjokes as pyjokes  
import pyttsx3  
import requests  
import speech\_recognition as sr  
import datetime  
import os  
import cv2  
import random  
from requests import get  
import wikipedia  
import webbrowser  
import pywhatkit as kit  
import smtplib  
import pyjokes  
import time  
  
  
  
  
  
  
engine = pyttsx3.init('sapi5')  
voices = engine.getProperty('voices')  
# print(voices[0].id)  
engine.setProperty('voices', voices[0].id)  
  
#text to speech  
def speak(audio):  
 engine.say(audio)  
 print(audio)  
 engine.runAndWait()  
  
#to convert voice into text  
def takecommand():  
 r = sr.Recognizer()  
 with sr.Microphone() as source:  
 print("listening...")  
 r.pause\_threshold = 1  
 audio = r.listen(source,timeout=1,phrase\_time\_limit=5)  
  
 try:  
 print("recognizing...")  
 query = r.recognize\_google(audio, language='en-in')  
 print(f"user said: {query}")  
  
 except Exception as e:  
 speak("say that again please...")  
 return "none"  
 return query  
  
#to wish  
def wish():  
 hour = int(datetime.datetime.now().hour)  
  
 tt = time.strftime("%I:%M %p")  
  
 if hour>=5 and hour<12:  
 speak(f"good morning sir, its {tt}")  
 elif hour==12:  
 speak(f"good noon sir, its {tt}")  
 elif hour>12 and hour<18:  
 speak(f"good afternoon sir,its {tt}")  
 elif hour>=18 and hour<21:  
 speak(f"good evening sir, its {tt}")  
 else:  
 speak("good night sir")  
 speak("i am jarvis. please tell me how can i help you")  
  
#to send email  
def sendEmail(to,content):  
 server = smtplib.SMTP('smtp.gmail.com', 587)  
 server.ehlo()  
 server.starttls()  
 server.login('striversayan7@gmail.com', 'Chottu@2002')  
 server.sendmail('striversayan7@gmail.com', to, content)  
 server.close()  
  
#for news updates  
def news():  
 main\_url = 'http://newsapi.org/v2/top-headlines?sources=techcrunch&apiKey=fdd4431a92394ce89e3fbd5ed27afe4e'  
 main\_page = requests.get(main\_url).json()  
 #print(main page)  
 articles = main\_page["articles"]  
 #print(articles)  
 head = []  
 day = ["first", "second", "third", "fourth", "fifth", "sixth", "seventh"]  
 for ar in articles:  
 head.append(ar["title"])  
  
 for i in range (len(day)):  
 speak(f"today's {day[i]} news is: {head[i]}")  
  
  
  
  
  
  
if \_\_name\_\_ == "\_\_main\_\_":  
 wish()  
 while True:  
 #if 1:  
  
 query = takecommand().lower()  
  
 #logic building for task  
  
 if "open notepad" in query:  
 apath = "C:\\Windows\\notepad.exe"  
 os.startfile(apath)  
  
 elif "open c program" in query:  
 bpath = "C:\\Program Files (x86)\\Dev-Cpp\\devcpp.exe"  
 os.startfile(bpath)  
  
 elif "open command prompt" in query:  
 os.system("start cmd")  
  
 elif "open camera" in query:  
 cap = cv2.VideoCapture(0)  
 while True:  
 ret, img = cap.read()  
 cv2.imshow('webcam', img)  
 k = cv2.waitKey(50)  
 if k==27:  
 break;  
 cap.release()  
 cv2.destroyAllWindows()  
  
 elif "play music" in query:  
 music\_dir = "D:\\Music"  
 songs = os.listdir(music\_dir)  
 rd = random.choice(songs)  
 os.startfile(os.path.join(music\_dir, rd))  
  
  
 elif "ip address" in query:  
 ip = get('https://api.ipify.org').text  
 speak(f"your ip address is {ip}")  
  
  
 elif "wikipedia" in query:  
 speak("searching wikipedia...")  
 query = query.replace("wikipedia", "")  
 results = wikipedia.summary(query, sentences=2)  
 speak("according to wikipedia")  
 speak(results)  
 # print(results)  
  
 elif "open youtube" in query:  
 webbrowser.open("www.youtube.com")  
  
 elif "open facebook" in query:  
 webbrowser.open("www.facebook.com")  
  
 elif "open github" in query:  
 webbrowser.open("www.github.com")  
  
 elif "search google" in query:  
 speak("sir,what should i search on google")  
 cm = takecommand().lower()  
 webbrowser.open(f"{cm}")  
  
 elif "send message" in query:  
 speak("what is the message?")  
 mes = takecommand().lower()  
 kit.sendwhatmsg\_instantly("+918092989706",f"{mes}")  
  
 elif "play song on youtube" in query:  
 speak("which song do i play?")  
 pl = takecommand().lower()  
 kit.playonyt(f"{pl}")  
  
 elif "send mail" in query:  
 try:  
 speak("what should i say?")  
 content = takecommand().lower()  
 to = "sayanhalder2k20@gmail.com"  
 sendEmail(to,content)  
 speak("Email has been sent to sayan")  
  
 except Exception as e:  
 print(e)  
 speak("sorry sir, i am not able to send this mail to sayan")  
  
  
 elif "no thanks" in query:  
 speak("thanks for using me, sir! have a good day.")  
 sys.exit()  
  
  
 # to close notepad  
 elif "close notepad" in query:  
 speak("okey sir, closing notepad")  
 os.system("taskkill /f /im notepad.exe")  
  
 #set an alarm  
  
 elif "set alarm" in query:  
 nn = int(datetime.datetime.now().hour)  
 if nn==11:  
 music\_dir = 'D:\\music'  
 songs = os.listdir(music\_dir)  
 os.startfile(os.path.join(music\_dir, songs[0]))  
  
 #to find a joke  
  
 elif "tell me a joke" in query:  
 joke = pyjokes.get\_joke()  
 speak(joke)  
  
 elif "shut down the system" in query:  
 os.system("shutdown /s /t 5")  
  
 elif "restart the system" in query:  
 os.system("shutdown /r /t 5")  
  
 elif "sleep the system" in query:  
 os.system("rundll32.exe powrprof.dll,SetSuspendState 0,1,0")  
######################################################################################  
######################################################################################  
 elif "switch the window" in query:  
 pyautogui.keyDown("alt")  
 pyautogui.press("tab")  
 time.sleep(1)  
 pyautogui.keyUp("alt")  
  
 elif "tell me news" in query:  
 speak("Please wait sir, fetching the latest news")  
 news()  
 speak("do you have any other work,sir")