import pyttsx3 #pip install pyttsx3

import speech\_recognition as sr #pip install speechRecognition

import datetime

import wikipedia #pip install wikipedia

import webbrowser

import os

import smtplib

engine = pyttsx3.init('sapi5')

voices = engine.getProperty('voices')

# print(voices[1].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

*def* sendEmail(*to*, *content*):

    server = smtplib.SMTP('smtp.gmail.com', 587)

    server.ehlo()

    server.starttls()

    server.login('youremail@gmail.com', 'your-password')

    server.sendmail('youremail@gmail.com', to, content)

    server.close()

if \_\_name\_\_ == "\_\_main\_\_":

    wishMe()

    while True:

    # if 1:

        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 'play music' in query:

            music\_dir = 'D:\\Non Critical\\songs\\Favorite Songs2'

            songs = os.listdir(music\_dir)

            print(songs)

            os.startfile(os.path.join(music\_dir, songs[0]))

        elif 'the time' in query:

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

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

        elif 'open code' in query:

            codePath = "C:\\Users\\Haris\\AppData\\Local\\Programs\\Microsoft VS Code\\Code.exe"

            os.startfile(codePath)

        elif 'email to harry' in query:

            try:

                speak("What should I say?")

                content = takeCommand()

                to = "harryyourEmail@gmail.com"

                sendEmail(to, content)

                speak("Email has been sent!")

            except *Exception* as e:

                print(e)

                speak("Sorry my friend harry bhai. I am not able to send this email")