### Experiment – No-13

* **Speech Recognition (Open various Web Browsers using Speech)**

### ****AI Pilot Project****

### PREREQUISITES:

### Step 1: pip install pyttsx3

### Step 2: pip install Speech Recognition

### Step 3: pip install pyaudio

### Step 4: import webbrowser(pre-installed python library)

### IDE Environment: VsCode, Jupyter e.t.c

### Must Have: Microphone in your System

### Required: Good Internet Connection for Voice recognition through Google Voice API.

***Program:***

import pyttsx3

import speech\_recognition as sr

import datetime

import wikipedia

import webbrowser

import os

import pyjokes

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 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

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")

if \_\_name\_\_ == "\_\_main\_\_":

    wishMe()

    if 1:

    #while True:

        query = takeCommand().lower()

        # All queries

        if 'wikipedia' in query:

            speak('Searching wikipedia...')

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

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

            speak("According to wikipedia")

            # print(result)

            speak(result)

        elif 'open youtube' in query:

            webbrowser.open("youtube.com")

        elif 'open facebook' in query:

            webbrowser.open("facebook.com")

        elif 'open gmail' in query:

            webbrowser.open('gmail.com')

        elif 'open google' in query:

            webbrowser.open('google.com')

        elif 'play music' in query:

            music\_dir = 'E:\\HOLLYWOOD SONGS\\HOLLY NEW'

            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\\Akshay singh\\AppData\\Local\\Programs\\Microsoft VS Code\\Code.exe"

            os.startfile(codePath)

        elif 'who is akshay' in query:

            speak("akshay is a good boy.He is pursuing mca in kiet group of institutions")

        elif 'who are you' in query:

            speak("Hello Im Jarvis a personal assistance of mister akshay singh")

        elif 'hello jarvis' in query:

            speak("Hello ready to your service sir")

        elif 'who i am' in query:

            speak("I don't know may be a useless person")

        elif 'speak' in query:

            speak("Please say something")

        elif 'shutdown jarvis' in query:

            speak('Bye sir')

            exit()

        elif 'joke' in query:

            speak(pyjokes.get\_joke())

### *Output :*

