EX NO: 9 DATE:15.12.22	MINI PROJECT ON JARVIS USING PYTHON

AIM:

To implement **JARVIS** model using in python.

ABSTRACT:

Voice cognition of **JARVIS** refers to the ability of a computer program to recognize and interpret human speech. In Python, there are several libraries and frameworks that can be used to implement voice cognition capabilities. One common library for voice cognition in Python is the Speech-Recognition library. This library allows users to perform a variety of speech recognition tasks, such as converting speech to text, identifying individual words and phrases within speech, and recognizing different languages and accents.

INTRODUCTION:

JARVIS is an open-source content management system (CMS) that was designed to be fast, flexible, and easy to use. It is built using PHP and MySQL, and it provides a user-friendly interface for managing and organizing content on a website.

One of the key features of **JARVIS** is its modular design, which allows developers to easily extend and customize the CMS to fit their specific needs. It also includes a variety of tools and features for managing and organizing content, such as a built-in WYSIWYG editor, a media library for storing and managing images and other media files, and support for multiple languages.

Overall, **JARVIS** is a powerful and user-friendly CMS that is well-suited for a wide range of websites and applications.

PROJECT DESCRIPTION:

JARVIS is a content management system (CMS) written in PHP. It is designed to be flexible and easy to use, with a focus on customizability and extensibility. Some of the key features of **JARVIS** include:

1. A modern and intuitive user interface
2. A powerful and flexible content structure
3. Support for multiple languages and translation workflows
4. Extensive theme and extension support
5. Built-in support for SEO and social media integration

JARVIS is built on top of the Symfony PHP framework, which provides a solid foundation for building web applications. It is designed to be highly modular, with a wide range of extensions and plugins available to extend its functionality.

If you are considering using **JARVIS** for a project, you will need to have a good understanding of PHP and web development in general. However, **JARVIS** provides extensive documentation and support resources to help you get started.

REQUIREMENTS:

SOFTWARE REQUIREMENTS:

- PYTHON

- VISUAL STUDIO CODE
- PIP **(**Pip Installs Packages)

HARDWARE REQUIREMENTS:

- Microphones
- Computer

MODULE DESCRIPTION:

pyttsx3 is a Python package that allows you to convert text to speech. It provides a simple interface for synthesizing spoken words from text, and it supports a wide range of languages and voices.

Speech_recognition: A library for performing speech recognition, with support for several engines and APIs, including Google Speech Recognition, IBM Speech to Text, and CMU Sphinx.

PyAudio: A Python library for working with audio devices, including support for recording and processing audio.

SOURCE CODE:

```
import pyttsx3

import datetime

import speech_recognition as sr

import wikipedia

import webbrowser

import os

import sys


engine = pyttsx3.init('sapi5')
```

```
voices = engine.getProperty('voices')
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 BOSS!")

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

    else:
        speak("Good Evening!")

    speak("")
def takecommand():
    r=sr.Recognizer()
    with sr.Microphone() as source:
        print("listening...")
        r.pause_threshold=1
```

```
        audio=r.listen(source)

    try:
        print("Wait for few Moments")
        query=r.recognize_google(audio,language='en-in')
        print("user said", query)

    except Exception as e:
        print(e)
        query="nothing"
    return query

if __name__ == "__main__":
    wishMe()
    while True:
        query=takecommand().lower()
        if "wake up" in query:
            speak("I am On ,,,, please tell me what can i do ")
            while True:
                query = takecommand().lower()
                if 'wikipedia' in query:
                    speak('Searching in Wikipedia...')
                    query = query.replace("wikipedia", "")
                    results = wikipedia.summary(query, sentences=2)
                    speak("According to Wikipedia")
```

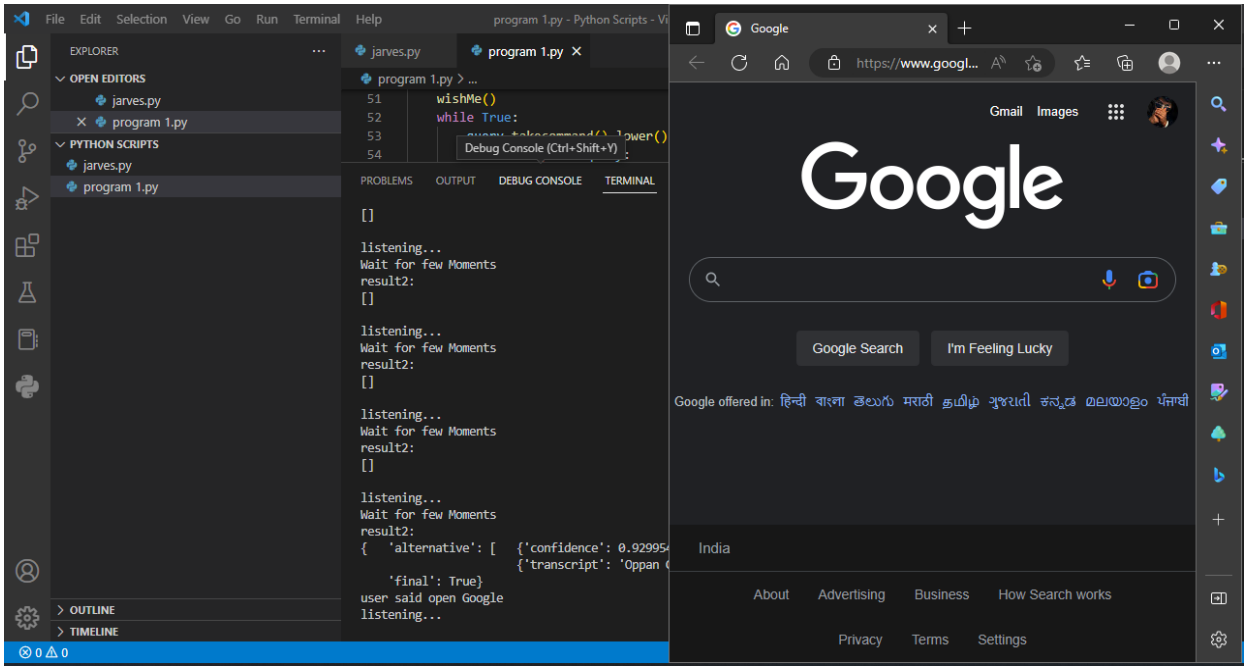
```
    print(results)
    speak(results)

elif 'shutdown now' in query:
     os.system("shutdown /s /t 1")
     speak("ok boss")



elif 'open youtube' in query:
  webbrowser.open("youtube.com")

elif 'open google' in query:
    webbrowser.open("google.com")



elif 'play music' in query:
    musicdir='C:\\Users\\dhivakar.m\\Music\\my music'
    music=os.listdir(musicdir)
    print(music)
    os.startfile(os.path.join(musicdir,music[0]))

elif 'open code' in query:
    codepath="C:\\Users\\dhivakar.m\\Videos"
    os.startfile(codepath)
```

```
elif 'open chrome' in query:
    webbrowser.open("chrome.com")

elif 'the time' in query:
    time=datetime.datetime.now().strftime("%H:%M")
    speak(time)

elif 'quit' in query:
    speak("quitting sir")
    break

elif 'exit' in query:
    exit()
```

OUTPUT SCREENSHOTS:

```
listening...
Wait for few Moments
result2:
{   'alternative': [   {'confidence': 0.76562339, 'transcript': 'wake up'},
                       {'transcript': '1 wake up'},
                       {'transcript': 'Ek wake up'},
                       {'transcript': 'Akon wake up'},
                       {'transcript': 'Ek Bar wake up'}],
    'final': True}
user said wake up
listening...
Wait for few Moments
result2:
{   'alternative': [   {   'confidence': 0.70092583,
                           'transcript': 'Shahrukh Khan Wikipedia'},
                       {'transcript': 'Shah Rukh Khan Wikipedia'},
                       {'transcript': 'Shahrukh Khan in Wikipedia'},
                       {'transcript': 'Shahrukh Khan ine Wikipedia'},
                       {'transcript': 'Shah Rukh Khan in Wikipedia'}],
    'final': True}
user said Shahrukh Khan Wikipedia
Shah Rukh Khan (pronounced ['ʃɑːɦrʊx xɑːn]; born 2 November 1965), also known by the initialism SRK, is an Indian actor, film p
roducer, and television personality who works in Hindi films. Referred to in the media as the "Baadshah of Bollywood", "King of
 Bollywood" and "King Khan", he has appeared in more than 80 films, and earned numerous accolades, including 14 Filmfare Awards
.
```

```
listening...
Wait for few Moments
result2:
{   'alternative': [   {   'confidence': 0.82483548,
                           'transcript': 'tell the time'},
                       {'transcript': 'give the time'},
                       {'transcript': 'all the time'},
                       {'transcript': 'tell me the time'},
                       {'transcript': 'kill the time'}],
    'final': True}
user said tell the time
```



CONCLUSION:

Jarvis is a digital and virtual assistant with artificial intelligency.

- It is very flexible and useful technology.
- It provides a better interface to deal with it.