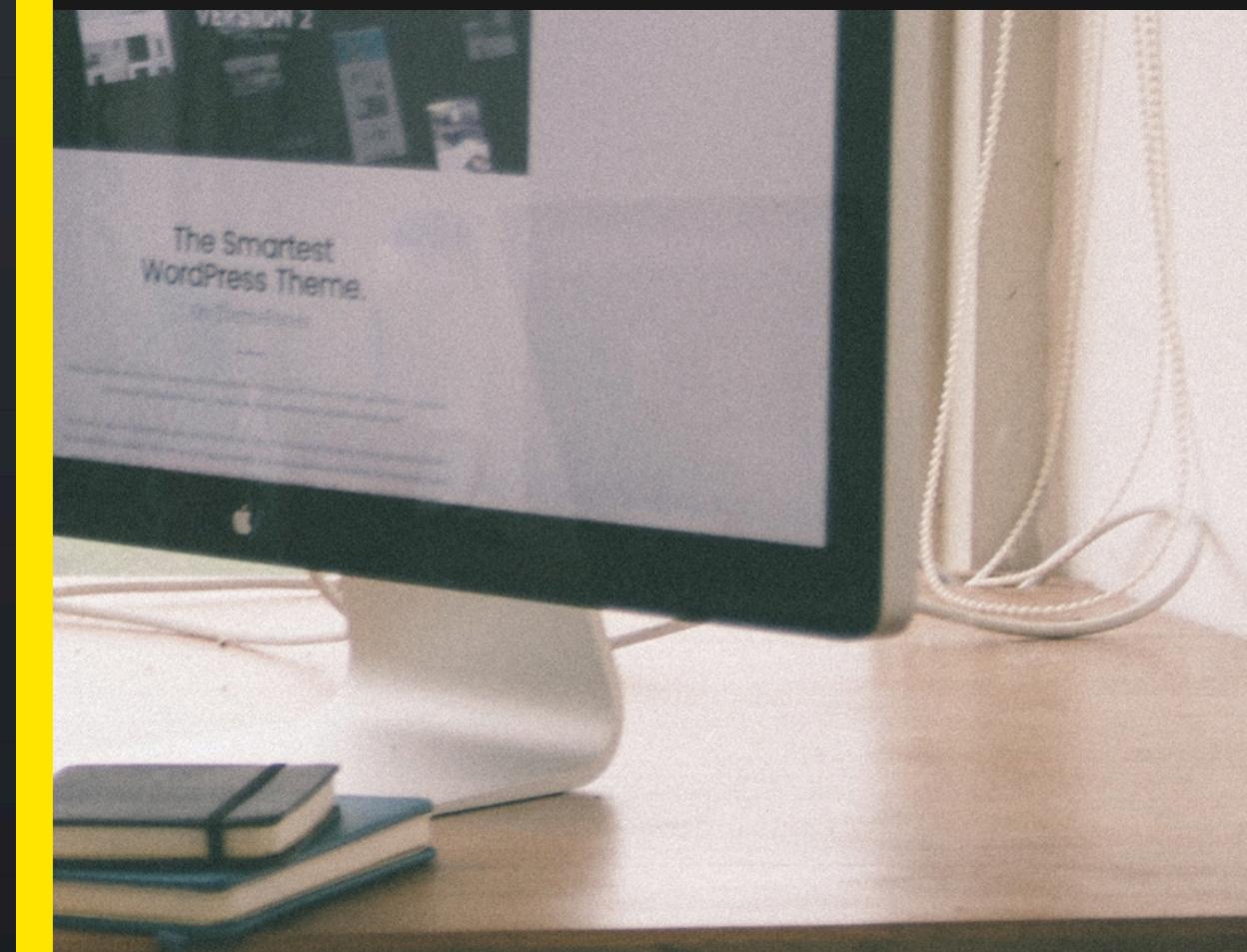


GROUP - I

DESKTOP ASSISTANT

with Voice commands



PROJECT GUIDE :
PROF.POOJA PATIL

Things to discuss

Key takeaways:

- Introduction
- Tools & Technologies
- System Requirements
- Objective
- Modules/Libraries Used
- Implementation
- Tasks
- Advantages/Disadvantages
- Scope of the project
- Conclusion
- References



TOOLS & TECHNOLOGIES

SYSTEM REQUIREMENTS

- OS : Windows 7 or above
- RAM : 4GB or above
- Hard Drive : 250 GB HDD
- Processor : Intel Dual Core And Above





INTRODUCTION



- – Python-based desktop voice assistant named "Desktop Assistant"
- – Understands natural language voice commands for various tasks
- – Completed and error-free project compiled in VS Code Editor
- – User-friendly, automates tasks like Wikipedia searches, music playback, and browser commands with voice commands

OBJECTIVE

- To Become familiar with the concepts of Python Language.
- To Implement the concepts of basic and intermediate python operations for making this project used in real life.
- To become familiar with different modules and libraries.
- To make ease for the users to automate the things by using own voice commands.

Moules/Libraries Used:

Pyttsx3

A python library that will help us to convert text to speech. In short, it is a text-to-speech library.
It works offline, and it is compatible with Python 2 as well as Python 3.

Datetime

To provide current or live time to Assistant.
Used for greeting user according to time.

Speech Recognition

Library for performing speech recognition, with support for several engines and APIs, online and offline.
Used for taking input from microphone as a source to perform tasks.

Wikipedia

Wikipedia is a Python library that makes it easy to access and parse data from Wikipedia.
It helps the user to get results for a particular query or search.

Web Browser

The web browser module provides a high-level interface to allow displaying Web-based documents to users. Under most circumstances, simply calling the open() function from this module will do the right thing.

OS

The OS module in Python provides functions for interacting with the operating system. This module provides a portable way of using operating system-dependent functionality.

Random

We can generate random numbers in Python by using random module. These are pseudo-random number as the sequence of number generated depends on the seed.

PyAutoGui

Pyautogui is a library that allows you to control the mouse and keyboard to do various things. In this project we use this library for taking screenshots of the screen.

Advantages:

Easy to use

Can work with variety of commands

Custom commands

Secure

Helpful for disabled

Artificial intelligence make advancement
in it.

Disadvantages:

Limited language support

Costly

Expensive equipments

It cannot work in noisy environment

Can't use for many numbers of people





Scope of the project

Presently, Chips is being developed as an automation tool and virtual assistant. Among the Various roles played by Jarvis are:

- Search Engine with voice interactions
- Medical diagnosis with Medicine aid.
- Reminder and To-Do application.
- Vocabulary App to show meanings and correct spelling errors.
- Weather Forecasting Application.

There shall be proper Documentation available on its Official GitHub repository for making further development easy and we aim to release our virtual assistant as an Open Source Software where modifications and contributions by the community are warmly welcomed.

Conclusion



Through this voice assistant, we have automated various services using a single line command. It eases most of the tasks of the user like searching the web, retrieving weather forecast details, vocabulary help and medical related queries.

We aim to make this project a complete server assistant and make it smart enough to act as a replacement for a general server administration. The future plans include integrating CHIPS with mobile using React Native to provide a synchronized experience between the two connected devices.

THANK YOU !!