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Agroguide: Jarvis (Voice Bot)

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ABSTRACT: The project aims to develop a personal-assistant for Windows-based systems. It has been designed to provide a user-friendly interface for carrying out a variety of tasks by employing certain identified commands. Users can interact with the assistant through voice commands The system integrates multiple APIs to ensure fast and accurate task execution.

The Jarvis Voice Bot is an AI-powered virtual assistant designed to perform tasks and respond to voice commands.

KEYWORDS: Software, Voice Recognition, Artificial Intelligence (AI), Text-to-Speech (TTS), Speech-to-Text (STT), Automation

I. INTRODUCTION

The Jarvis Voice Bot is a voice-activated virtual assistant designed to simplify daily tasks through voice commands. Jarvis integrates with platforms like Google, YouTube, and WhatsApp to perform tasks such as searching the web, finding videos, and sending messages.

This project aims to enhance user productivity by providing a hands-free, intuitive, and efficient way to interact with digital services.

II. PROBLEM STATEMENT

Typing search queries manually can be slow and inefficient:-

Voice commands enable instant Google searches without typing Sending WhatsApp messages while multitasking is difficult:-

Voice-activated WhatsApp messaging allows hands-free texting.

Accessibility challenges for visually impaired or busy users:- Hands-free operation enhances accessibility and ease of use.

III. SOLUTION

Voice-Activated Google Searches:

To perform Google searches using voice commands, you can integrate speech recognition into your application. Utilize speech recognition libraries to capture and transcribe the user's spoken input into text.

Voice-Activated WhatsApp Messaging:

Capture the user's voice input and convert it to text.

Parse the transcribed text to identify the recipient and the message content.

IV. IMPLEMENTATION

What tasks will the bot perform? (e.g., controlling smart home devices, providing information, scheduling, reminders, entertainment). Understand the meaning and intent of the text. Consider the platform (e.g., desktop). Convert spoken language into text.



V. SYSTEM REQUIREMENTS / TOOLS AND TECHNOLOGY

Software requirements:-

Operating System : Windows 10/11 •IDE : VS Code •Front-End : React, html, CSS •Back-End : Python

VI. FLOW DIAGRAM



VII. RESULTS AND DISCUSSION

Results :- JARVIS, implemented as a Software based assistant, integrates Speech Recognition and Synthesis technologies to enhance user interaction through natural language processing. Commands are processed to perform various tasks: opening specified websites like Google, YouTube, or Facebook; conducting web searches via Google or Wikipedia.

Discussion :-Software based assistant project leveraging Speech Recognition technology to enhance user interaction and task automation. The implementation of Speech Recognition facilitates intuitive command-based interactions, enabling users to perform tasks such as google searches, retrieving information, and controlling.

VIII. CONCLUSION

Hands-Free Efficiency – The Jarvis Voice Bot enables users to perform tasks like Google searches, YouTube video retrieval, and WhatsApp messaging using voice commands, enhancing convenience and productivity. Improved Accessibility – The project benefits visually impaired users and multitaskers by providing a seamless, speech-driven interface for digital interactions.



REFERENCES

- 1. AI-based Desktop Voice Assistant :-Published in: 2023 5th Biennial International Conference on Nascent Technologies in Engineering (ICNTE), Date Added to IEEE Xplore: 12 June 2023 Publisher: IEEE
- 2. Aiding the Visually Impaired using AI and Speech Recognition Technology :- Published in: 2022 4th International Conference on Inventive Research in
- 3. Computing Applications (ICIRCA), Date Added to IEEE Xplore: 29 December 2022 Publisher: IEEE
- 4. Artificial Intelligence-based Voice Assistant :-Published in: 2020 Fourth World Conference on Smart Trends in Systems, Security and Sustainability (WorldS4), Date Added to IEEE Xplore: 01 October 2020 Publisher: IEEE





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