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# Orator AI

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***Abstract:*** ***In an organization, the people who are in high positions have their own assistants. This assistant assists them, schedules the whole day, manages their tasks, and properly schedules there meeting. But every common man does not have his own assistant, so the alternative option is a virtual assistant, which can do tasks like reminding him of important dates and opening some applications like YouTube, Chrome, etc.***
***Now there are various AI assistants in today's market. Google made its own AI assistant, Amazon Alexa, and Microsoft Cortona. We also try to make our own assistant, which is basically a Orator AI. Which can be operated on the desktop through voice commands. This assistant includes features such as voice recognition and natural language processing, which enhance its functionality and user experience.***
***The user interface is designed in such a way that beginners can also operate the desktop very easily using voice commands. It provides a seamless experience for both beginner and experienced users. By implementing Orator AI in our day-today use, we will enhance productivity and save time operating desktops.***

## I. INTRODUCTION

Technology has become very advanced in today's generation. We teach our computers to do their own tasks. Humans are increasingly communicating with computers. Nowadays, voice- based assistants are very popular in this era of smart devices. In our project, we use voice as a communication means, so it is a speech recognition application. So basically, speech recognition is the process of converting audio into text, and it is mainly used in voice assistants like Alexa, Siri, etc. Using virtual assistants, we communicate with our machines. Voice assistants understand a variety of languages, which is very easy for people and makes them more productive than ever before. A Orator AI is a combination of various technologies, such as voice recognition, voice analysis, and language processing. An Orator AI is a software program that can be designed to understand and execute voice commands received from users in natural language.

We don't need to worry about input devices like keyboards, mice, and touch screens. With the help of a Orator AI, users save a lot of time. Orator AI is make our tasks very easy, and it has become increasingly popular to perform various tasks on your computer, like opening apps, playing music, playing media, checking date and time, and searching anything on Google and YouTube with just a voice command. For creating a Orator AI for your computer, you have to go from basic Python to complex programming accordingly. A Orator AI has the ability to understand and perform requests. Orator AIs are very useful for people who are blind, physically disabled, or senior citizens who are not comfortable with keyboards. They can now interact with computers with the help of voice commands. The advantage of a Orator AI is that it is very fast. Those who get tired of writing will do their work by using voice. By using Orator AIs, our main aim is to enhance this project by integrating artificial intelligence technologies like machine learning and neural networks. We will be able to introduce new and exciting features to our Orator AI.

## II. WHAT IS ORATOR AI

Orator Ai is an advanced level tool which can operate our desktop using oral input means using voice and have ability to perform advance level tasks such as PPT creation, site Blocker, fully automated Whatsapp specific message sender to a specific person. The tool which can perform advance level tasks by giving input orally is called Orator AI.

## III. LITERATURE SURVEY

1) Desktop Virtual Assistant in Python [By Numapathi,Gkarthick,N Venkatesh, in July 2023] Natural Language Understanding (NLU) and Generation (NLG): Enhancing the ability of AI assistants to accurately understand and generate natural language remains a significant challenge. Improving NLU/NLG models to handle complex queries, understand context, and generate human-like responses is an ongoing area of research.
2) Personal A.I.DesktopAssistant [By Rabin joshi,Supriyo Kar and Mahesh T.R.in June 2023] Contextual Understanding: AI assistants often struggle with understanding and maintaining context across multiple interactions or tasks.

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Closing the gap in contextual understanding involves developing algorithms that can remember previous interactions, anticipate user needs, and adapt responses accordingly.

3) Desktop Voice Assistant System [Bandari ,Bhosale, Pawar Shelar ,Nikam and Salunkhe] They provide activities, such as responding to queries, carrying out tasks. Applications and use Cases: Exploring new applications and domains where voice assistants and domain where voice assistants can be beneficial, such as accessibility or productivity tools.
4) Voice Based Intelligent Personal Assistant [Kundu and Ekbal (2021)] The study provides insights implementation and performance of the developed assistant Context Understanding : Enhancing the ability of VIPAs to understand context more effectively, such as recognizing user intent in different situations or understanding user emotions.

## IV. METHODOLOGY

A Orator AI typically consists of various modules. A Orator AI is a software program that uses speech recognition and natural language processing to understand the user's commands and make them interactive. In Orator AI, a user is given a command or request from the desktop, and the desktop replies to that command. Here are some basic modules that are used in Orator AI:

1) *Text-to-speech:* Text-to-speech is a module of a Orator AI.




Fig: Text-to-speech.

2) *Speech Recognition:* Speech recognition is an module of an Orator AI. Speech recognition is used to understand the user commands. Speech recognition is an ability o a machine to convert an spoken words into the readable form. Our desktop can capture our voice command with the use of speech recognition. It can convert the spoken word into the text form with the use of speech recognition algorithm. With the use of speech recognition we can get interactive with the desktop.
3) *Natural language processing:* Natural language processing is an module of an Orator AI which can used to understand the user commands. It can understands the user commands and gives response to that particular command. Natural language processing can be used in many applications such as chatbots, sentiment analysis, etc.

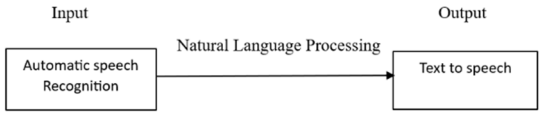



Fig: Natural Language Processing.

4) *Action integration module:* Action integration module is an module of an Orator AI. It that case user sends request to the desktop and after receiving users request desktop response to that command or request.

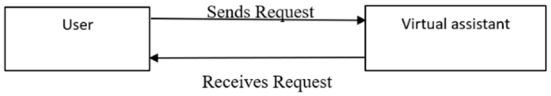



Fig: Action Integration Module.

## V. EXECUTION

To execute a Orator AI, you typically follow these general steps:

1) *Choose a platform:* Decide on the platform or framework you want to use to create your Orator AI. Common choices include Python with libraries like Pyttsx3 for text- to-speech and speech recognition libraries like Speech Recognition or Google's Speech-to-Text API.
2) *Design the assistant:* Define the functionality and features of your Orator AI. Determine what tasks it will perform, what commands it will respond to, and how it will interact with the user.

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3) *Implement the assistant:* Write the code for your Orator AI, incorporating the chosen platform's libraries for speech recognition, natural language processing, and text-to-speech. Integrate with APIs (optional): If your assistant requires external information or services, you may need to integrate them with relevant APIs. For example, if your assistant needs to fetch weather information, you would integrate it with a weather API.
4) *Test the Assistant:* Test your Orator AI to ensure that it functions correctly and responds appropriately to user input.
5) *Deploy the Assistant:* Once you are satisfied with the performance of your Orator AI, you can deploy it for use on your desktop or distribute it to others.

## VI. SCOPE

In today's world, as AI becomes more advanced day by day and voice technology becomes more accepted,. But voice-controlled digital assistance will not only become more natural; it will also become more integrated into more daily devices. Virtual assistants are skilled professionals who can provide remote administrative, technical, and creative assistance to individuals, entrepreneurs, and businesses. They work from their own offices, using the trending communication and collaboration technologies to stay in contact with their clients. The goals of our project are to create a voice assistant that can help users efficiently perform various tasks on their personal computers. If we look at the human interaction that humans provide in chat services, chat services take more time. With the help of a Orator AI, users can perform their tasks in less time. Virtual assistance has become an integral part of the modern workforce, and its popularity is increasing. As technology continues to evolve, virtual assistance will become more sophisticated, providing clients with more benefits.

## VII. CONCLUSION

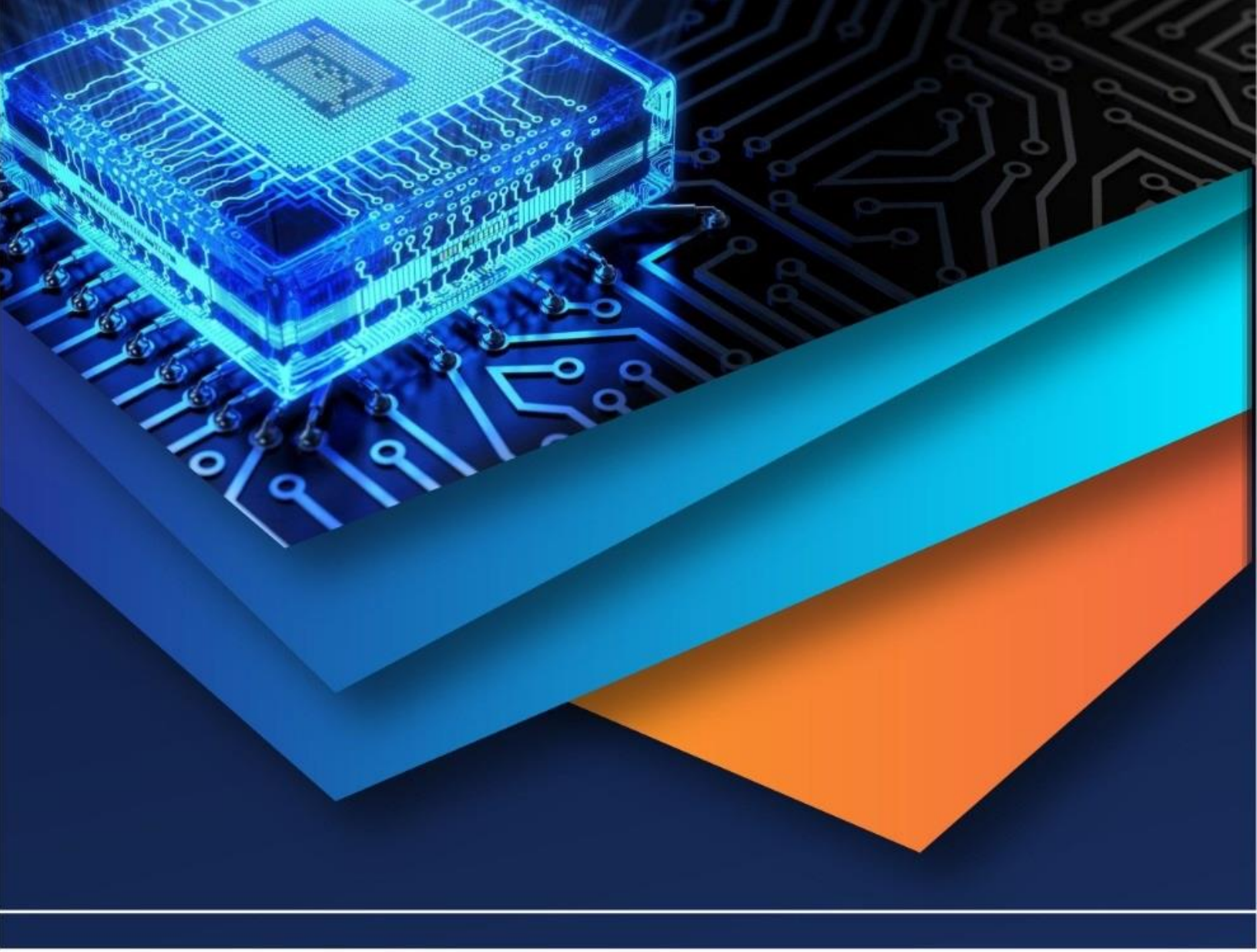
Our virtual Orator AI is designed in such a way that it fulfills user commands, from opening various files in the system to giving certain commands and opening various applications.

We have taken a straightforward approach to solving this problem by using Python and its libraries. The assistant supports various tasks, which include web searches, accessing YouTube videos, sending voicemails, and more.

The aim is to enhance the project by integrating artificial intelligence technologies such as machine learning, natural language processing, and neural networks. By integrating these advancements, we will be able to introduce new features to our Orator AI.

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