A Project-I Synopsis On

Desktop Assistant

Submitted In Partial Fulfillment Of The Requirements For The Award Of The Degree Of BACHELOR OF TECHNOLOGY

IN

COMPUTER SCIENCE AND ENGINEERING DEPARTMENT

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➢ ABSTRACT

- This project thesis looks at how new technologies can be used to develop an intelligent Desktop Assistant that focuses on user-based data.
- It will analyze the possible utility of one single piece of software as a Desktop Assistant by looking at examples of intelligent programs with natural language processing that are now available, with various categories of support.
- Natural Language Processing is used to activate the ability to communicate socially, storing (and evaluating) information in the context of the user.
- New technology, it is suggested, may soon make the conceptof desktop assistants a reality.
- Experiments conducted on this system, combined with user testing, have provided evidence that a basic program with natural language processing algorithms in the form of a Desktop Assistant, with basic natural language processing and the ability to function without the need for other type of human input (or programming) may already be viable.

- Keywords: Voice Assistant, Desktop Voice Assistant, Python Project, Assistant Using Python.

➢ INTRODUCTION

- Human interaction is rapidly being supplanted by.
- Performance is one of the key reasons behindthis shift.
- Rather than progress, technology has undergone a significant transformation.
- In today's world, we use technologies like Machine Learning and Neural Networks to teach our machines to do their jobs on their own or to think like people.
- With the help of Desktop assistants, we may now communicate with our machines in the modern world.
- Companies such as Google, Apple, Microsoft, and others have Desktop assistants such as Google Now, Siri, andAlexa that allow users to operate their machines just by speaking to them.
- These types of virtualassistants are beneficial to the elderly, the visually and physically challenged, children, and others by ensuring that interacting with machines is no longer a challenge.
- Even blind persons who are unable to see the computer can communicate with it just through their voice.

➢ Problem Statement

Python program for Desktop Assistant. We are creating this program to manage your desktop just by speech for easy and fast desktop services.

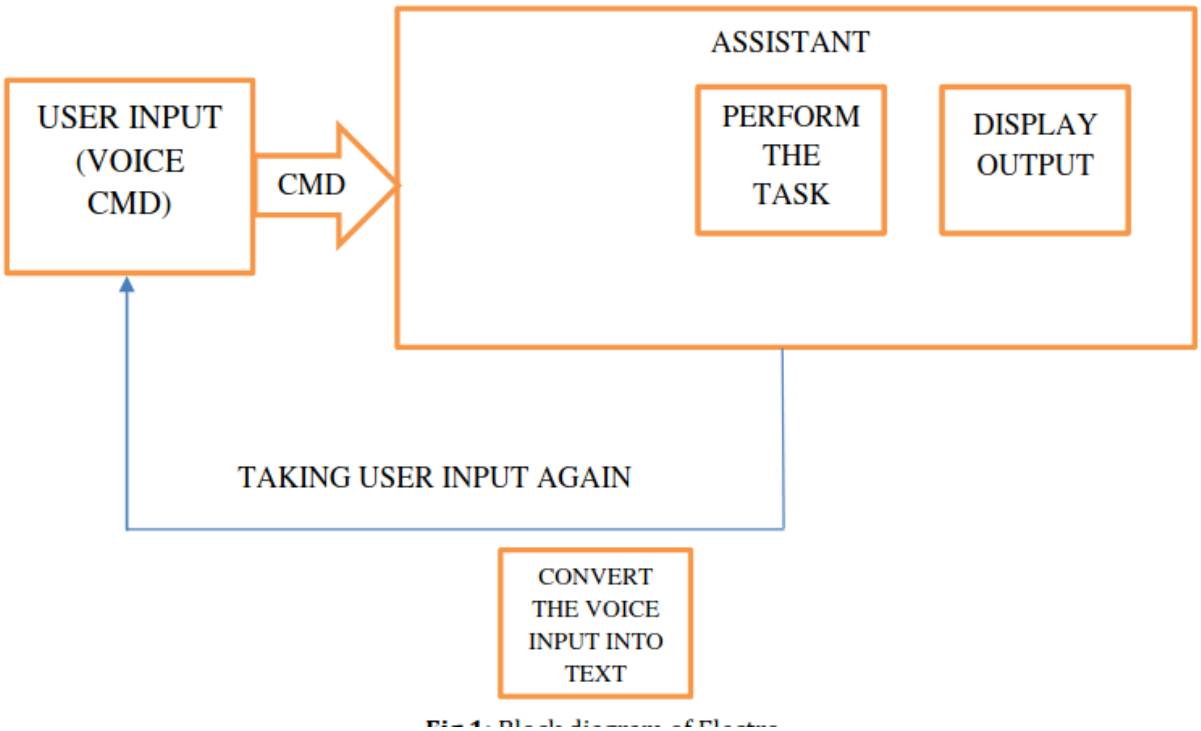
➢ Objectives

- Our virtual assistant is a desktop assistant that uses speech recognition.
- It can understand and carry out the audio instructions given by the user.
- We don't have to worry about using input devices like the keyboard and mouse, so we'll use them less.
- It also saves the user a lot of time.
- People who are blind, elderly, or physically disabled can engage with equipment via the virtual assistant.
- As a result, these impaired persons can now interact as well.
- So, with the voice assistant, we're moving to the next stage of technological innovation, when we'll be able to converse with our machines.

➢ Proposed System Architecture (in detail)

- The system to be developed here is a Virtual Desktop Assistant.
- This system is based on Functional Programming.
- The main structure is linked with small modules containing specific task which is to be performed
- The keyword “import” is used to link all the small modules with main structure.
- This Virtual Assistant can be used to perform multiple tasks such as getting Aggregate Percentage (RTMNU), Random Password Generator, etc.
- Basically, it provides helping hand to all the students.

- BLOCK DIAGRAM



1. User Input (Voice Command): Initially, the assistant electro will greet the user with respect to time and then ask the user for task and then listen to it.
2. Assistant: Here the assistant consists of three sub blocks i.e. Convert The Voice Input into Text: Perform the Task: Display Output:

a. Convert the Voice Input into Text: Here with the help of speech recognition module the electro will convert the input command into text.

b. Perform the Task: Now according to the user input the electro will perform the task.

c. Display Output: The result of the given task is shown here.

3. Feedback: The assistant will run in a loop i.e., keep asking for the input and the performing the tasks until "turn off" command is given. The turn off command will break the loop.

➢ System Requirement

Workstation

1-gigahertz (GHz) 32-bit (x86) processor or 1-GHz 64-bit (x64)
processorWindows 10 or later 32 or 64 bit operating systems
4 GB of system memory
1 GB of free hard disk space (program files and blank database, plus 1 MB per client)Windows-compatible pointing device
16 bit True Colour display adapter
Monitor capable of 800 x 600 or higher screen resolutionInternet connection

➢ Conclusion

- How quickly did the time pass? When we go back twenty years, Voice Recognition was stillin its infancy.
- When the computer system first appeared, it was a pipe dream to have full- fledged interaction with the machine.
- Now we can chat, question, and even give orders to complete the task. This technological innovation is propelling the planet forward.
- When weconsider the future capabilities of voice recognition and facial detection, we can see how they can assist security services in verifying criminal details and so on.
- If we look back twodecades, our remarks might not have carried as far as we could have expected.
- Desktop Assistant performs many of the same functions as a smartphone, such as managing several applications via voice commands.
- It allows you to access the system without having to typeanything.
- An individual can access the system using facial recognition, and face detection helps to secure the data by ensuring that no other person can access the system.
- It employs machine learning algorithms and assists users in gaining secure access.

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