

**Abstract:** Knowingly, or unknowingly, personal assistants have become an integral part of our lives these days. It is because of all the features and ease of use they provide. Personal Assistants are also capable of automating some day-to-day tasks, so that a user can focus on what matters the most to them. Features like, making calls, writing messages, taking photographs, storing to-dos on the go, browsing internet etc., are offered by personal assistants. So, utilization of these features of a virtual assistant will save an individual a lot of time, and effort. It is important to focus more on what matters the most for an individual, whether it could be personal work, or professional work. People often spend more time on doing routine tasks, and they can be automated with these types of personal assistants. When someone works in an environment with which he/she is not familiar with, they often find it difficult to locate applications that they need, like browser, any IDE or nay other software. Most of the time, they will end up wasting hours of time, searching for the application alone. This results in unnecessary time wastage. Therefore, a voice enabled personal assistant will help automating this process. User is expected just to give a voice command, and the assistant will take care of the rest. The paper indicates the usage of a Voice enabled personal assistant and it can enable an individual to get things done with voice commands, and can save a lot of their time as well.

**Project overview:** In this proposed concept effective way of implementing a Personal voice assistant, Speech Recognition library has many in-built functions, that will let the assistant understand the command given by user and the response will be sent back to user in voice, with Text to Speech functions. When assistant captures the voice command given by user, the under lying algorithms will convert the voice into text. And according to the keywords present in the text (command given by user), respective action will be performed by the assistant. This is made possible with the functions present in different

libraries. Also, the assistant was able to achieve all the functionalities with help of some API's.

**Objectives:** Main objective of building personal assistant software (a virtual assistant) is using semantic data sources available on the web, user generated content and providing knowledge from knowledge databases. The main purpose of an intelligent virtual assistant is to answer questions that users may have. This may be done in a business environment, for example, on the business website, with a chat interface. Virtual assistants can tremendously save you time. We spend hours in online research and then making the report in our terms of understanding. One of the main advantages of voice searches is their rapidity. In fact, voice is reputed to be four times faster than a written search: whereas we can write about 40 words per minute, we are capable of speaking around 150 during the same period of time. In this respect, the ability of personal assistants to accurately recognize spoken words are a prerequisite for them to be adopted by consumers.

**Working procedure:** Firstly, one has to go to install the software into his/her laptop or desktop. Run the executable program. And give speech command then program will give answer with respect to the question.

**Features:**

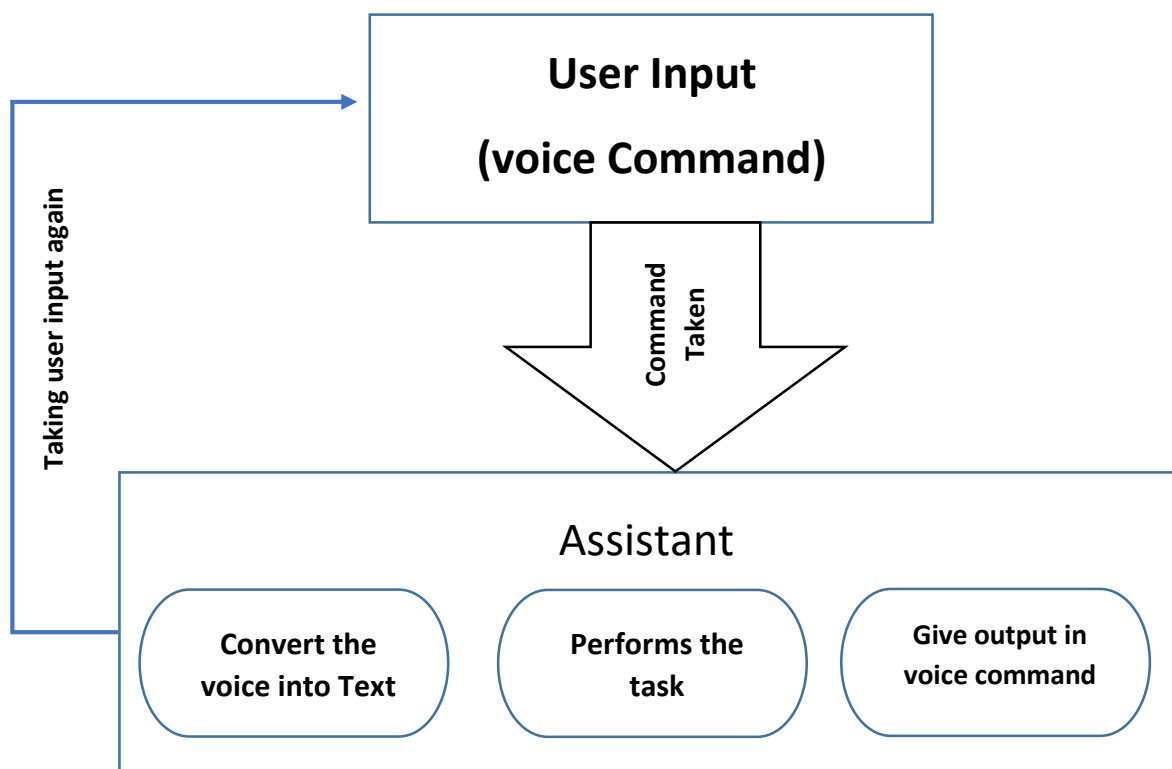
- This type of assistant program is helpful for blind persons.
- People of all ages can use this software.
- This software user interface will be user friendly.

**Requirements:** As the functional requirements, currently we have indicated:

- 1) Development tools, Visual Studio code to run Python and a sustainable environment for development.
- 2) Different types of Python library like 'pyttsx3' and APIs like 'google speech\_recognition'.
- 3) Feasibility analysis on result generation logic for implementation.

**Next Goals:** Although this description is a simple collection of huge work. Hence a single developer would not be able to deploy or handle everything in a limited time. So, our next target is to improve existed features. Add more feature so that user can use day-to-day basis more than before.

**System Environment:**



### Continue Assessment:

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