



K.D.K College Of Engineering, Nagpur Department Of Computer Technology Session 2018-19

AI Based Voice Assistant Using Python (AIVA)

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Content

- Introduction.
- WorkFlow.
- Literature survey.
- Problem statements.
- Objectives.
- Implementatin Tools.
- Experimental setup & result.
- References.









Introduction

- The **AIVA** is a Virtual Assistant Virtual powered by Artificial Intelligence.
- What AIVA can do?
- It is able to search the Internet, as if the user gives any query to AIVA it automatically goes to the Internet and get the best fit result for the user's query by saying search in the starting of the query.
- AIVA can post comments on the social media websites such as Facebook, Twitter, etc. By just few simple commands.
- User can get the talk back responsive solution for the respective query.
- It can open and launch web-applications and the local storage of the user computer.
- AIVA is the user friendly AI assistant to make the communication more easier between the user and the machine.

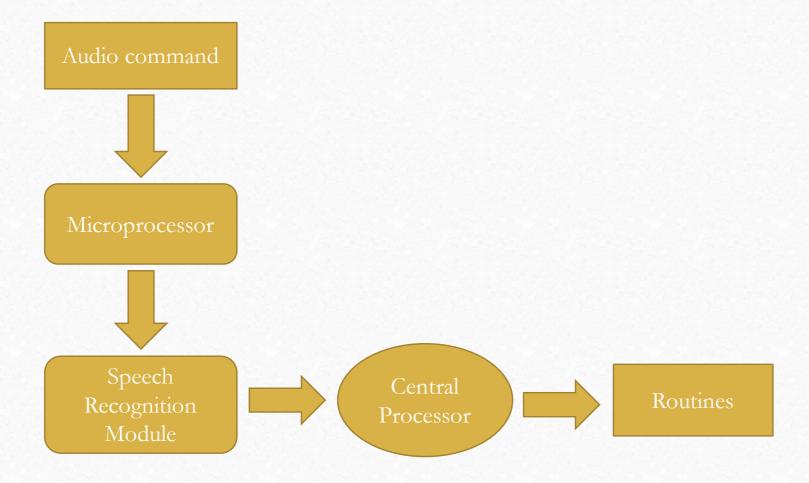






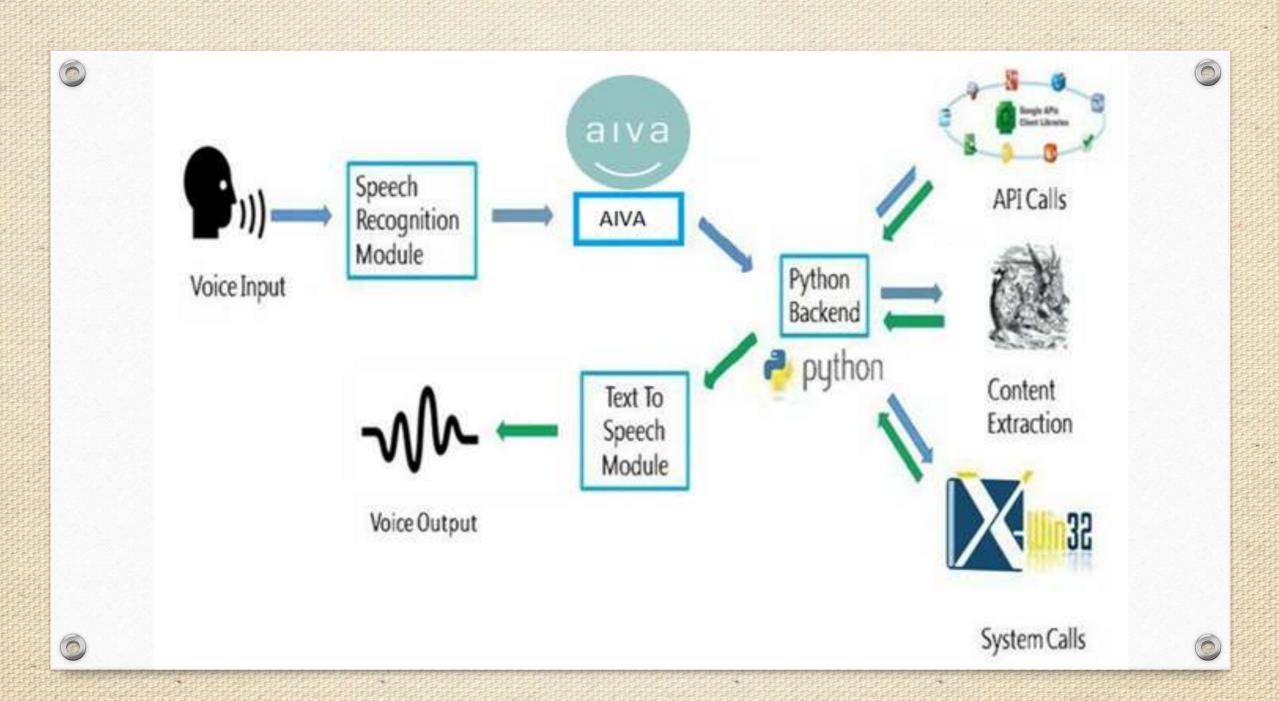
















Literature Survey

- There are few more assistants like Alexa, Cortana, and Google Assistant but non of them are able to do the stuffs such as interacting on the social media sites.
- Other assistants available now are not able to manage user local storage data instead of Microsoft Cortana.
- If one is able to do storage work than other is not able to do so and vise versa but Blue is an AI that will do both the tasks easily.
- A Survey was done which shows that the user familiar with assistants are more creative and able to do their work faster.









VIRTUAL ASSISTANT	USES
Apple Siri	34%
Google Assistant	19%
Amazon Alexa	6%
Microsoft Cortana	$4^{0}/_{0}$

Uses of Virtual Assistant









Problem Statements

- As we know that the machine working speed is many ways faster than the human so by the research it is proven that humans are more faster in verbal than performing tasks.
- Visually disabled users also had problems working with the Computers and they have to be dependent on others for their works so to help visually disabled user AIVA will be an huge advantages.
- User find it more interesting when interacting with an responsive program or like an assistant that can make their work easier and reduces their work of doing each and every thing by themselves.
- Now a days human beings are getting too lazy and everyone need an assistant for their work so Blue is going to be the perfect voice AI assistant for such users.









Objectives

- AIVA should be able to work with variety of commands.
- Opening and launching social media applications can be done easily just by using commands. Posting things on social media by voice command and can login\logout of social media websites by the commands.
- Help the user with finding results available on the Internet by just asking AIVA all the questions like what, who, why, when.
- To perform operations like deleting, creating new files on the local storage and also opening folders of the user.
- AIVA will also be able to play song and videos on both local storage and Internet by saying play command and the name of the song with it.
- User can any time get the latest climate condition around him\her just by asking AIVA what is the temperature now.
- AIVA is an AI assistant that automatically update itself with the trending things on the Internet.









Implementation Tools

> Software:

- PyCharm :- **PyCharm** is an integrated development environment (IDE) used in computer programming, specifically for the Python language.
- Python :- **Python** is an interpreted, high-level, general-purpose programming language. Created by Guido van Rossum and first released in 1991.
- AWS :- Amazon Web Services (AWS) is a subsidiary of Amazon that provides on-demand cloud computing platforms to individuals, companies and governments, on a paid subscription basis.

> Hardware:

- Computer System.
- Speakers.
- Mic.



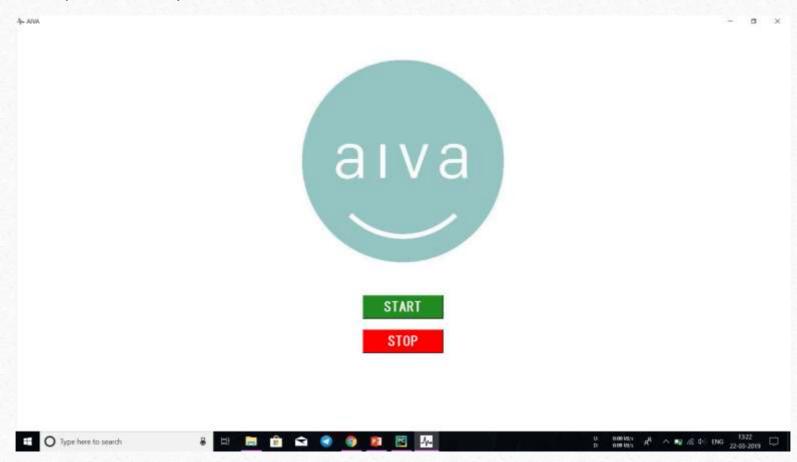






Experimental Setup & Result

• Face of AIVA (Front-End):

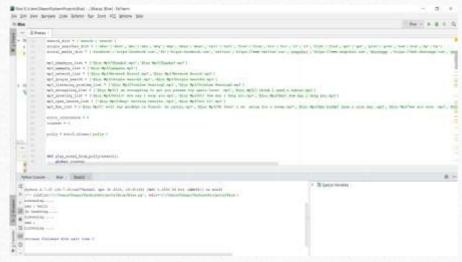




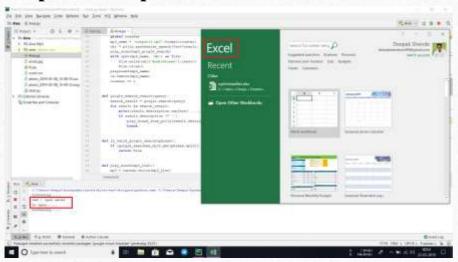




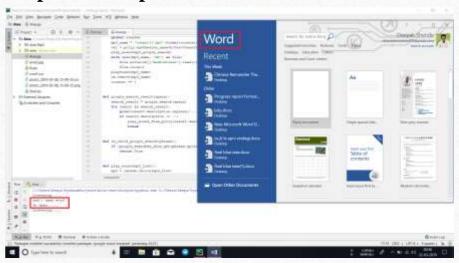
• Response on Hello/Hi/Hey:



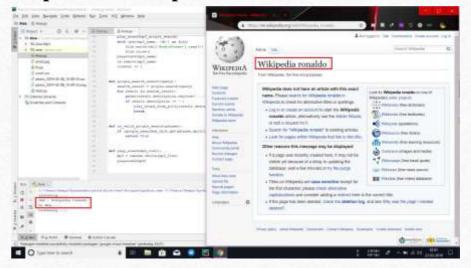
Response on Open Excel:



• Response on Open Word:



Response on Wikipedia Commands:



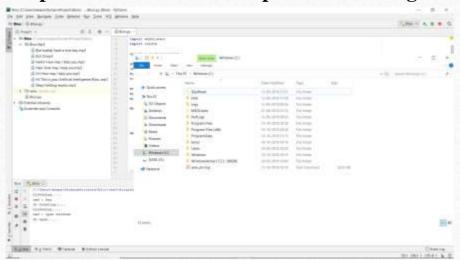




STAR



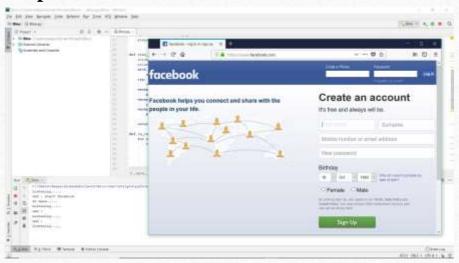
Response on commands to open Local Storage:



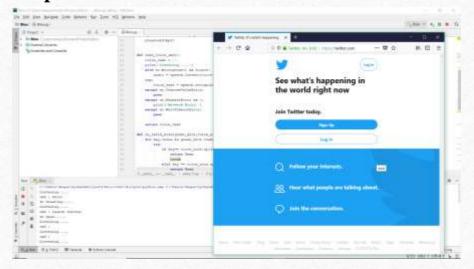
• Response on Instagram:



• Response on Facebook:



• Response on Twitter:

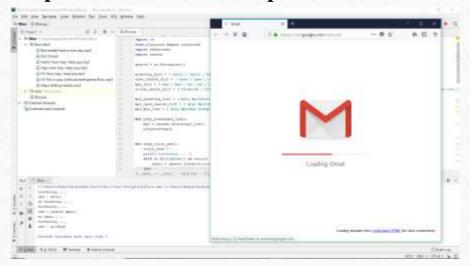




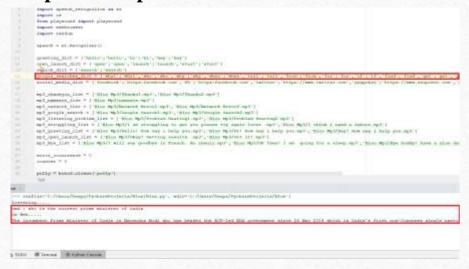




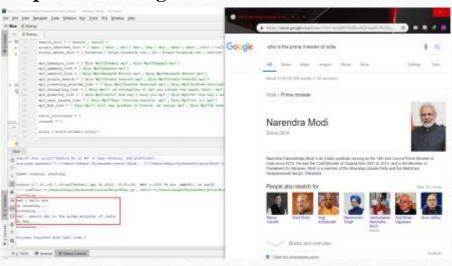
Response on commands to open Gmail:



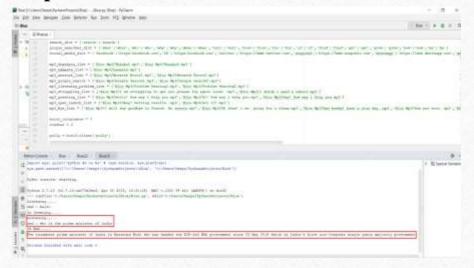
Response in Speech format:



Response on Google Search:



• Response in voice method:











References

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Thank You Output Description:



