

N.K. BAGRODIA GLOBAL SCHOOL

Sector – 17, Dwarka



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Synopsis on Voice Assistant (Yarn)

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Introduction

In today's epoch, almost everything is digitalized. We have a smartphone in our hands and it is nothing less than having the whole world at our fingertips. These days we aren't even using fingers. We just speak of the task and it is done. There exist systems where we can say search on google, "What is Python programming language?" And the result is shown. That is the task of Virtual Assistant.

Virtual Assistants are software programs that help you ease your tasks, such as showing weather reports, sending emails etc. They can take commands via text or by voice. We have so many virtual assistants, such as Apple's Siri, Amazon's Alexa, Microsoft's Cortana, Google's Assistant and Now, my very own virtual assistant called **Yarn**.

Voice searches have dominated over text searches. Web searches conducted via mobile devices have only just overtaken those carried out using a computer and the analysts are already predicting that 50% of searches will be via voice in the near future. Virtual assistants are turning out to be smarter than ever. Allow your intelligent assistant to make email work for you.

Objective

There already exist several desktop virtual assistants. A few examples of available desktop virtual assistants in the market are Microsoft's Cortana and Braina.

Yarn is personal assistant software that runs on Python IDE. It helps the user to send emails or play a song or search something on Wikipedia. It records user inputs and converts them into commands and calls the function to run the task.

Supported Tasks:

- Email
- Covid Statistics
- Search Google and YouTube
- Play something on YouTube
- Give advice and refreshing quotes
- Play any song
- Send WhatsApp message
- Read news headlines and tell the weather
- Play games such as RPS, GTN, GTP, Trivia and Lie Swatter.

Drawback:

Everything is not good as it should be and it only works with Python IDE which means no GUI. You also cannot use the input and voice at the same time.

Requirements

Hardware Requirements:

- 4 GB RAM
- 1 GB free disk space
- x86 64-bit CPU (Intel / AMD architecture)

Software Requirements:

- Modern Operating System:
 - Windows 7 or 10
 - Mac OS X 10.11 or higher, 64-bit
 - Linux: RHEL 6/7, 64-bit (almost all libraries also work in Ubuntu)
- Python 3.9.6 and IDE

Code Editor used:

- Microsoft Visual Studio:
 - Code
 - Insiders
- GitHub Atom text Editor

Reference and Bibliography

Websites referred:

- www.github.com
- www.google.co.in
- www.stackoverflow.com
- www.tutorialspoint.com
- www.pythonprogramming.net