SPEAK EASY

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INTRODUCTION

SpeakEasy (Info Bot) is based on Text-to-speech systems, also known as TTS which , were first developed to aid the visually impaired by offering a computer-generated spoken voice that would “read” text to the user.

It provides the information in a simple format as the result will be handy inform of voice output.

PYTHON

Advantages :

- Presence of third-party modules
- Extensive support libraries(NumPy for numerical calculations, Pandas for data analytics etc)
- Open source and community development
- Easy to learn
- User-friendly data structures
- High-level language
- Dynamically typed language(No need to mention data type based on value assigned, it takes data type)
- Object-oriented language
- Portable and Interactive
- Portable across Operating systems

ORGANIZATIONS USING PYTHON

1) Google(Components of Google spider and Search Engine)
2) Yahoo(Maps)
3) YouTube
4) Mozilla
5) Dropbox
6) Microsoft
7) Cisco
8) Spotify
9) Quora

WHAT IS THE NEED OF THIS APPLICATION?

- Searching for required information through browser was a tedious process .
- User friendly interface .
- Provides the information in a simple format.
- Voice output.
- Visually impaired.

HOW IS SPEAK EASY MORE EFFICIENT?

- Simple Search Engine platform
- It bypasses the pop-ups , advertisements , irrelevant data and doesn't create cookies like the browser does.
- Only meant for retrieval of information based on the keyword given as an input by the user.

DESIGN

BASED ON:

- Text-to-speech synthesizer system
- Wikipedia module

THREE MAJOR MODULES USED

1. Speech synthesis (Pyttsx3 module)
2. GUI (Tkinter)
3. Wikipedia module

PYTTSX3 MODULE

- pyttsx3 is a text-to-speech conversion library in Python.
- pip install pyttsx3

TKINTER MODULE

- Tkinter is a Python binding to the Tk GUI toolkit.
- Python with tkinter is the fastest and easiest way to create the GUI applications.
- **To create a tkinter app:**

  Importing the module – tkinter

  Create the main window (container)

  Add any number of widgets to the main window

  Apply the event Trigger on the widgets

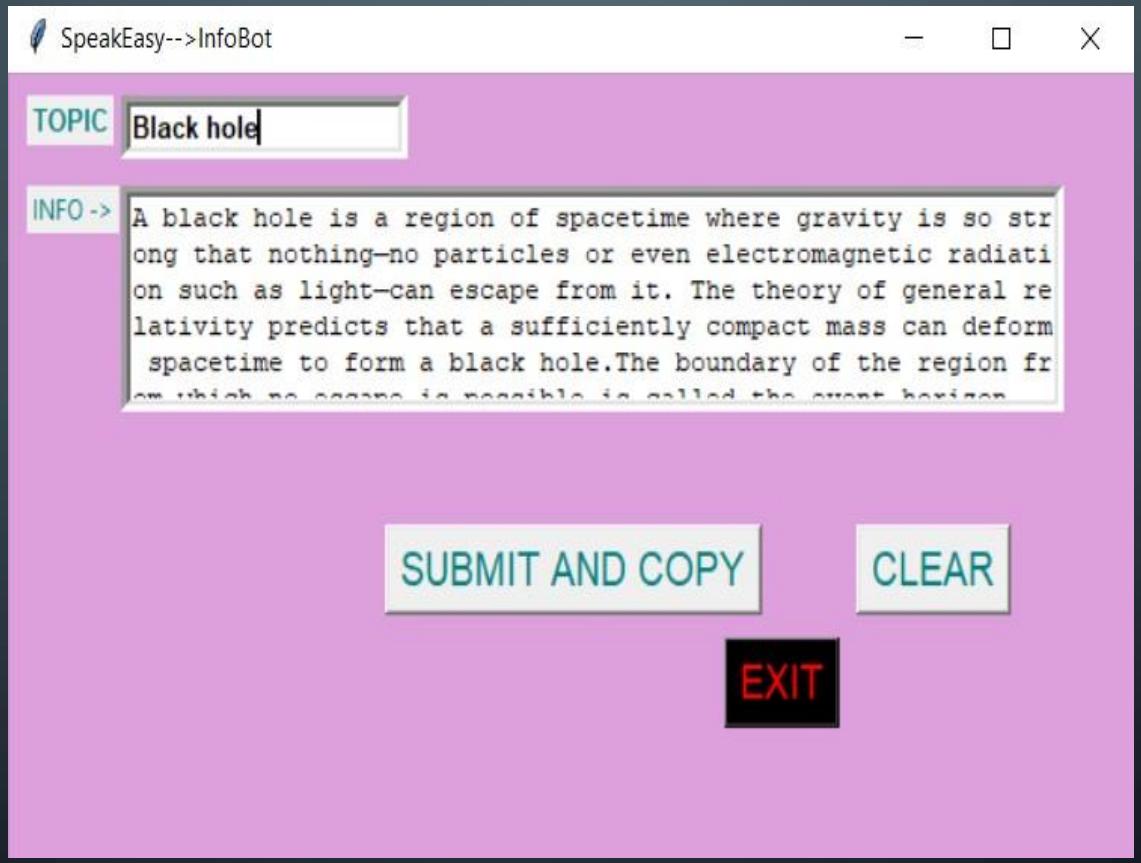
WIKIPEDIA MODULE

- **Wikipedia** is a multilingual online encyclopedia created and maintained as an open collaboration project by a community of volunteer editors using a wiki-based editing system.
- Wikipedia is a Python library that makes it easy to access and parse data from Wikipedia Search
- pip install Wikipedia

TOOLS USED

- Speech synthesis tool
- Python IDE
- GUI integration using Tkinter
- Python 3.8.0 Console

EXECUTION AND OUTPUT



CONCLUSION

Just as users got used to mobile devices instead of home phones, text messages as the new email , social media as the new word-of-mouth; it is likely that speech synthesis/speech recognition will eventually become the core of developing TTS/SS which is being used in AI.

THANK YOU