Description

Modules description ---->

Speech recognition: Speech recognition, or speech-to-text, is the ability
of a machine or program to identify words spoken aloud and convert
them into readable text.

To install the speech recognition module, first, we must open the terminal and write:

pip install speechrecognition

 pyttsx3: it is a text-to-speech conversion library in Python. Unlike alternative libraries, it works offline and is compatible with both Python 2 and 3.

To install the pyttsx3 module, first, we must open the terminal and write:

pip install pyttsx3

 datetime: Python Datetime module supplies classes to work with date and time. These classes provide several functions to deal with dates, times, and time intervals. Date and datetime are an object in Python, so when you manipulate them, you are manipulating objects and not string or timestamps.

Sometimes we didn't need to install the datetime module as it comes in standard library, if it is not there then we need to install the datetime module and for this we must open the terminal and write:

pip install datetime

• Wikipedia: Wikipedia is a Python library that makes it easy to access and parse data from Wikipedia.

To extract data from Wikipedia, we must first install the Python Wikipedia library, which wraps the official Wikipedia API. This can be done by entering the command below in your command prompt or terminal:

pip install Wikipedia

- Webbrowser: In Python, web browser module is a convenient web browser controller. It provides a high-level interface that allows displaying Web-based documents to users.
 web browser is part of the python standard library. Therefore, there is no need to install a separate package to use it.
- OS: The OS module in Python provides functions for interacting with the operating system. OS comes under Python's standard utility modules, so there is no need to install it externally.
- Time: Python time module allows to work with time in Python. It allows functionality like getting the current time, pausing the Program from executing, etc.
 The time module comes with Python's standard utility module, so there is no need to install it externally.
- Subprocess: subprocess is used to run new applications or programs through Python code by creating new processes. It also helps to obtain the input/output/error pipes as well as the exit codes of various commands.
- Ecapture: To capture images from your Camera.
 To install ecapture module type the below command in the command prompt or terminal:

pip install ecapture

 Wolframalpha: It is used to compute expert-level answers using Wolfram's algorithms, knowledgebase, and AI technology.
 To install wolframalpha module, type the below command in the command prompt or terminal:

pip install wolframalpha

• Json: JSON (JavaScript Object Notation) is a format for structuring data. It is mainly used for storing and transferring data between the browser and the server.

Python too supports JSON with a built-in package called json. This package provides all the necessary tools for working with JSON Objects including parsing, serializing, deserializing, and many more.

Ctypes: ctypes is a foreign function library for Python.
 It provides C compatible data types and allows calling functions in DLLs or shared libraries. It can be used to wrap these libraries in pure Python.

To install ctypes module type the below command in the command prompt or terminal:

pip install ctypes

requests: Requests is used for making GET and POST requests.
 To install requests module, type the below command in the command prompt or terminal:

pip install requests

 pytz: Pytz brings the Olson tz database into Python and thus supports almost all time zones. This module serves the date-time conversion functionalities and helps user serving international client's base. It enables time-zone calculations in our Python applications and also allows us to create timezone aware datetime instances.

To install pytz module, type the below command in the command prompt or terminal:

pip install pytz

 pyjokes: Pyjokes is used for the collection of Python Jokes over the Internet.

To install pyjokes module type the below command in the command prompt or terminal:

pip install pyjokes

Functions performed by personal voice assistance -----> It is programmed to minor tasks like :

- 1. Opening youtube
- 2. Opening google chrome
- 3. Opening gmail
- 4. Opening stackoverflow website
- 5. It shows time & day of any city
- 6. It can take a photo using camera
- 7. It can search any word in Wikipedia
- 8. It can search anything on google
- 9. It can predict weather of different cities
- 10. We can get top headline news from Indian Express
- 11. We can open music website
- 12. We can listen some jokes
- 13. It can solve arithmetic questions
- 14. We can lock window of system
- 15. It can shutdown system