Heisenberg

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1 Introduction to Heisenberg

Heisenberg is a voice assistant built on python. It uses speech recognition to take audio from the user and convert it into a text file , it can follow basic commands and do what we ask it to do and speaks out using the google text to speech API.

2 Modules required for running the program

The libraries required for running the program

1. selenium(Used to login to pages and open links)
2. gtts (google text to speech for converting a given text to speech)
3. playsound (for speaking out the results or output)
4. speech recognition (for taking input from the user)
5. random(for generating random excuse messages if anything happens)
6. getpass (For taking password as input without the characters being visible)
7. pyjokes
8. pyaudio (To record and save the command given by user)

3 What can Heisenberg do?

Heisenberg is still in the development stage but it satisfies the basic requirements for us.It can

1. Login to facebook,gmail,lms
2. Open google and search whatever we ask
3. open spotify

4. Play music or a video on youtube
5. Find location
6. Tell a joke
7. Give us the route, given the source and destination

4 Future scope

My main aim is to improvise the search, given the command in heisenberg, I would like to use Machine learning to train the program, so as to give better responses, I would also like to integrate the program with linux so that a simple command on terminal or a voice command from us would activate the voice assistant. I would like to make it more user friendly so that a visually impaired person can work on linux without any issues.

5 Problems faced

1. One major problem I faced was the webpage I opened using selenium webdriver keeps closing after we give another command, I resolved this issue by making the driver global, so that when the function ends, the driver doesn't close.
2. Another problem I faced was that If we don't close the program after you use it once, it takes whatever we say as command and it opens the respective pages, I am still working on that.

6 Overall experience

I have thoroughly enjoyed doing this project. I learned things like speech recognition, different API's used for converting speech to text, I learnt how a webpage is structured and how a component of a webpage can be found using the inspect option,this project taught me to manage time effectively and how to solve my own problems.

7 Resources used

1. Stackoverflow for any problems faced
2. Google to learn the use of a library