



# ***SPEECH ASSISTANT***

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Team:-

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# ***OBJECTIVE***

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To build a small prototype of Alexa , an interactive speech assistant, that can listen to the user and give output like playing songs, opening browser, etc.

# ***MOTIVATION***

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- To ease the use of technology for the uneducated people
- By using speech assistant blind people can easily use this new technology.
- In this chaotic world of today accessing different feature separately has become time consuming hence speech assistant like this helps to save time.

# ***FUNCTIONALITY***

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- Interactive assistant.
- Opens WhatsApp and automatically send message.
- Plays songs on Spotify.
- Tells the exact time.
- Opens YouTube , Searches specific video on YouTube.
- Finds location on maps.
- Search function on Google.

# ***FUNCTIONALITY***

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- Opens instance of Chrome driver and login into a gmail account.
- Opens Gmeet through URL
- Automatically switches of camera and video.
- Goes offline on exit function.

# ***PYTHON MODULE USED***

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- Speech\_recognition
- Random
- Selenium
- Time
- Webbrowser
- Spotipy
- Pytsx3
- Pywhatkit
- Pyaudio

# ***Functionality:***

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- **Record Audio** : as the python file starts, a function called record audio is called which uses microphone to record audio and convert it to a text file called voice data. Record audio function returns the string voice data.
- **Respond**: this voice data is taken as an input by the respond function which has various functionalities like search, whatsapp, gmeet, etc.
- **There \_exists** : in the respond function there exist function is called in If else statement that searches the voice data string for particular words to define the functionality that the assistant needs to do.
- **Search** : if “search” exists in the voice data then the assistant performs search on the basis of what is after “for” In the voice data, also chooses the searching platform like youtube, google etc, on the basis of what is after “ on” in the voice data.

# Functionality:

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- **Opens urls:** it searches for the words like maps, time, whatsapp and open them on browser through url.
- **Spotify:** if there exists open spotify in voice data then the assistant calls the function spotify which takes input the song name. song name is what comes after “play” in voice data. Spotify function takes access token and searches the song on spotify, after which it opens and plays on browser.
- **Whatsapp\_sendmsg:** if there exists “open whatsapp and send msg” in the voice data then the functions whatsapp\_sendmsg is opened and sends the msg in whatsapp at a specific time. It takes input the msg and time at which the msg is to be sent.
- **Google meet:** if there exists “google meet” in voice data, then it takes user id, password and meet code, and calls function g2,gmeet() that takes in the above inputs and opens browser logs in gmail and opens gmeet through that browser and turns of mic and camera.



# ***REAL WORLD IMPLEMENTATION***

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- Apple's Siri
- Amazon's Alexa
- Google Google's home

# ***LIMITATIONS***

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- Due to authentications and privacy settings it is not able to automatically play a song on Spotify.
- In WhatsApp automatic sending feature, we have to input the mobile number through hard coding.
- We have to talk to the assistant in specific format.

# ***FUTURE SCOPE***

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- WhatsApp -
  - 1)Send message on a group
  - 2)Send pictures and videos on personals and group
  - 3)WhatsApp calling feature
- Spotify-
  - 1)Create playlist
  - 2)Access song on playlist
  - 3)Create playlist through YouTube suggestion

# ***FUTURE SCOPE***

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- Google meet-
  - 1)Automatically sharing the screen

**THANK YOU!!!**

