



VOICE ASSISTANT

USING PYTHON

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ABOUT VOICE ASSISTANT (SELENA)

- 'Hey SELENA' is a Virtual Assistant technology based on Artificial Intelligence.
- This software program use device's microphone to receive voice requests and processing on it, and sends response via Speaker.
- Uses combination of different technologies like Voice Recognition, Language Processing , Voice Analysis.
- Built and developed using python language and his modules



WHAT CAN IT (SELENA) DO

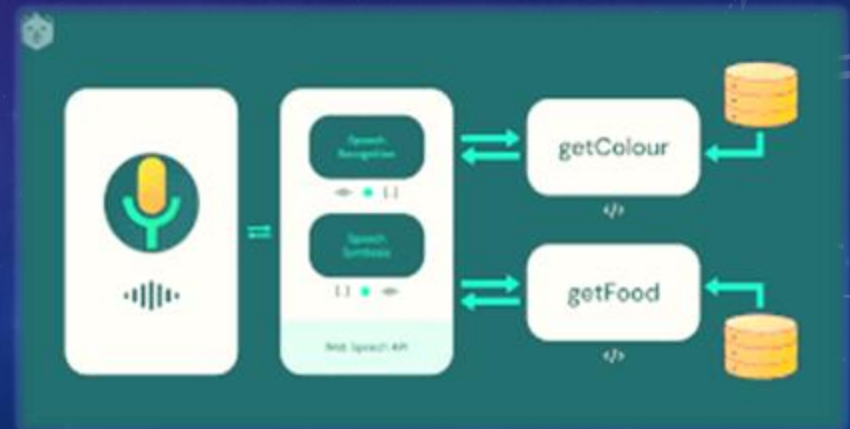
What can Assistant do?

- Controls your music.
- Tells time.
- Plays content from YouTube using any websites.
- Asks Jokes.
- Search information through Wikipedia.



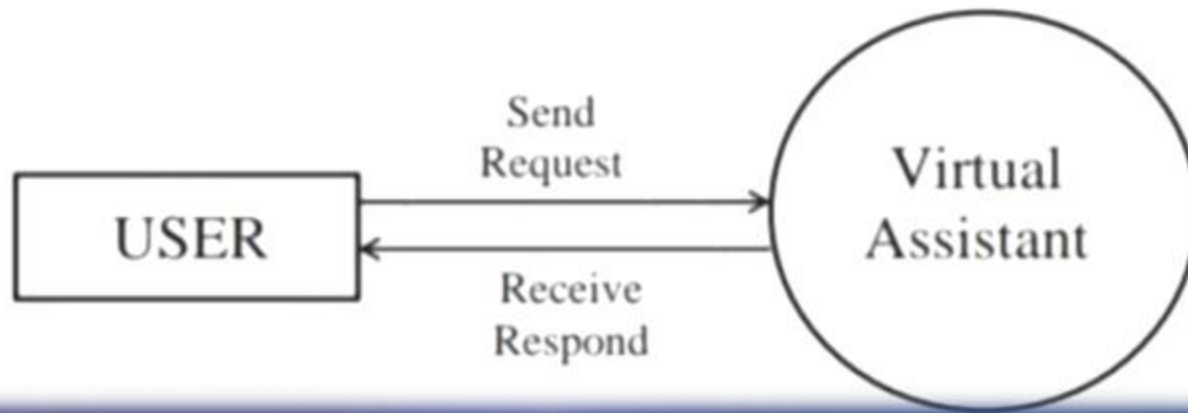
HOW IT WORKS?

- User ask the Assistant to perform the task.
- The natural language audio signal is converted into digital data that can be analyzed by the software.
- Compared with a database of the software using an innovative algorithm to find a suitable answer.
- This database is located on distributed servers in cloud networks.
- For this reason, it must have a reliable Internet connection.



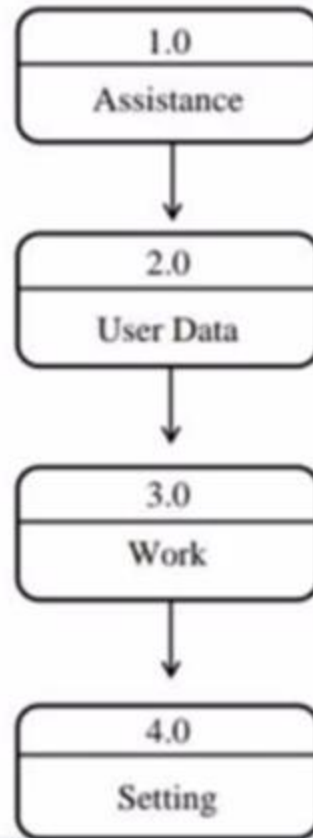
DATA FLOW DIAGRAM

4.6.1 DFD Level 0 (Context Level Diagram)

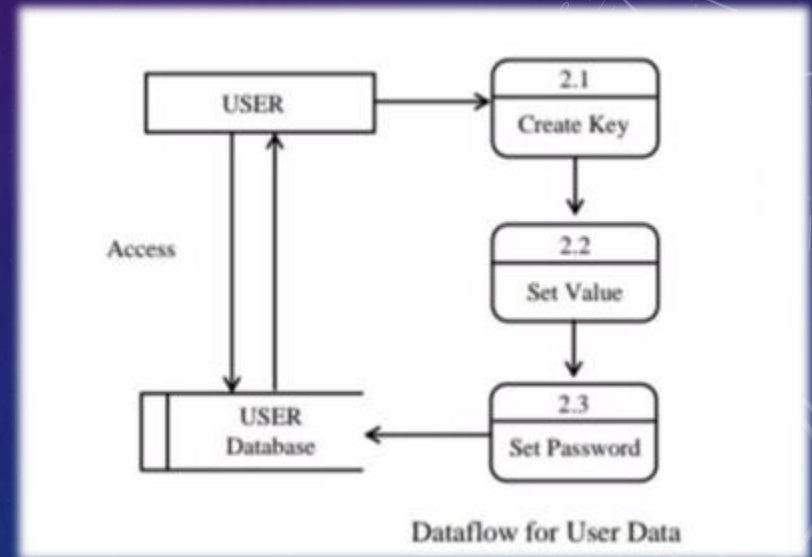
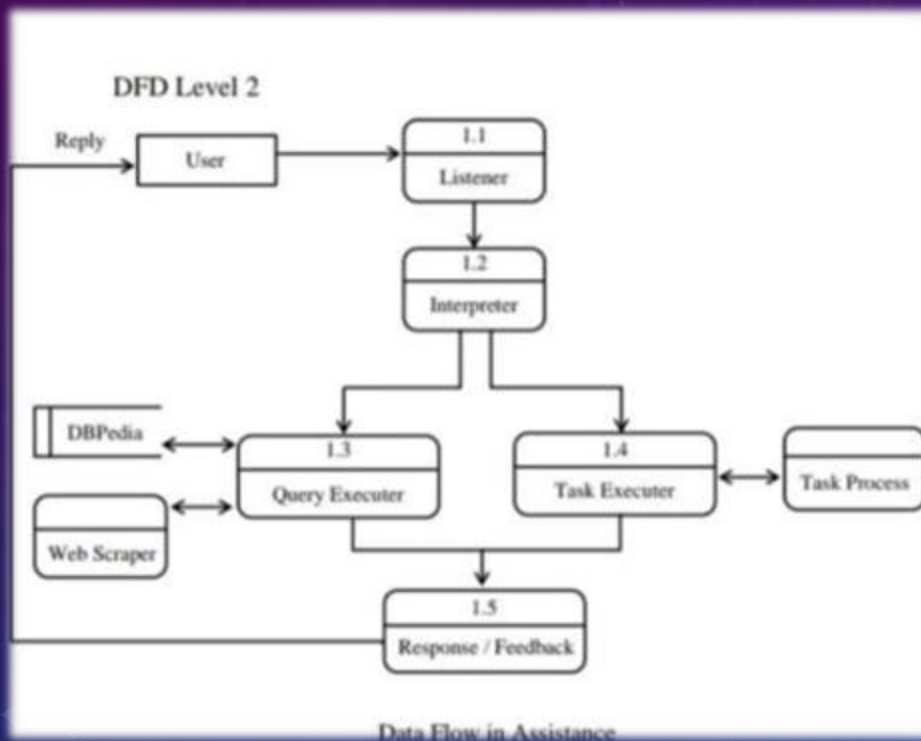


DATA FLOW DIAGRAM(LVL 1)

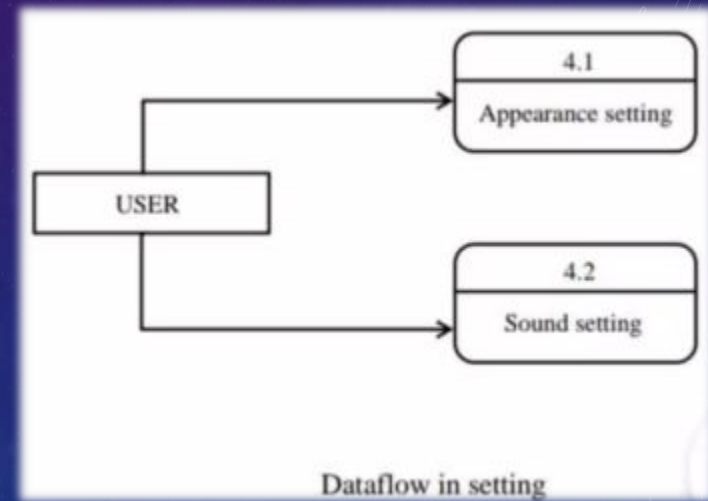
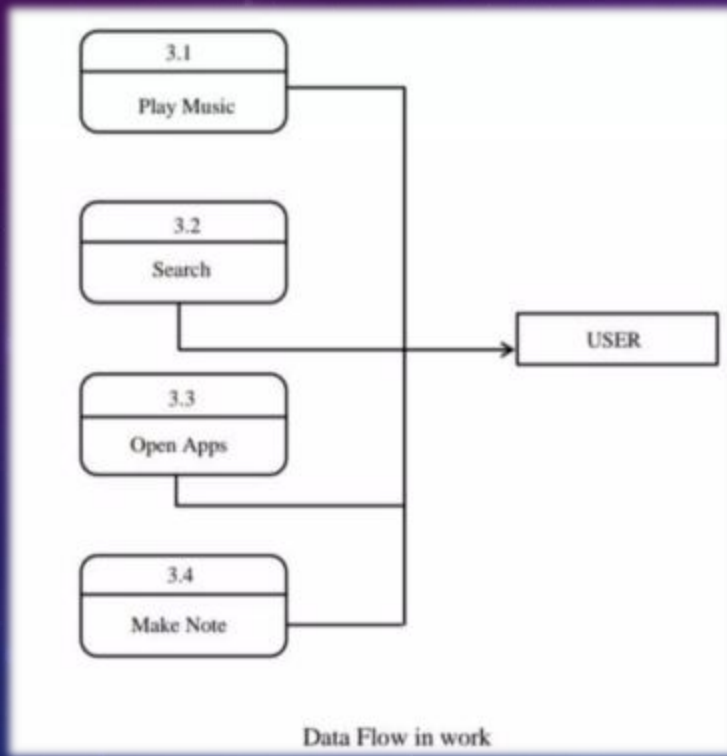
DFD Level 1



DATA FLOW DIAGRAM(LVL 2)



DATA FLOW DIAGRAM(LVL 3)



HARDWARE & SYSTEM REQUIREMENTS

Hardware Requirements

- Sound Cards
- Microphones
- Processors/Computer



System Requirements

- 1.6GHz Processor.
- 512 GB or more of RAM.
- Sound Cards with very clear signals.
- High quality microphones.



ADVANTAGES

Advantages of Voice Assistant

- Easily configured to perform many of regular tasks by simply giving voice command.
- Able to write the text through both keyboard and voice input.
- Different notepad commands such as open save clear etc.



Advantages of Voice Assistant

- Voice based search that is a boon for many like senior citizens who are not comfortable using the keypad/ keyboard.
- Requires less consumption of time in writing text.
- Lower operational cost.

DISADVANTAGES

Disadvantages of Virtual Assistant

- A user has to speak much louder and slower than their normal speed and volume.
- Not good in noisy place.
- Low accuracy



CONCLUSION



- This presentation is a blueprint of 'Hey Selena' virtual assistant. In this project we discuss about how what is this software and how it performed.
- With respect to less cost and less disadvantages we can say that, this system can have good future.



THANK YOU

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