

Voice Assistant Software

Group 44

CS 3307

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Description

Raspberry voice assistant software will allow the user to ask certain questions that the voice assistant will respond to. Based on the command, the software will attempt to find the answer online, utilizing the Alexa services. If certain commands are not recognized the raspberry voice assistant will respond with a message asking the user to repeat their question with a recognized command.

Features

- Required Features
 - Ability to listen to all speech and identify the specified “wake” word and run the requested command.
 - When “awake” identified by the specified word, a light will turn on to indicate that the Voice Assistant Software is on and available to be interacted with
 - Communicate with the user if the Voice Assistant Software is able to respond with the correct information.
 - The voice assistant software is able to respond to basic questions such as the current time or simple math calculations.
 - Able to give information regarding the current weather.
 - Voice Assistant Software is capable of adding events to a calendar and reminding the user of what events are to come
 - Able to add events to a to-do list for everyday tasks
 - Capable of setting a timer and alarms
- Optional Features
 - Ability to connect to third party applications.
 - Play music using services such as Apple Music and Spotify
- Wish-list Features
 - Directly communicating with smart devices such as televisions, garage openers, and thermostats.
 - Make the application available iOS and Android.
 - Increase the overall capabilities of the software, allowing it to successfully handle a diverse set of commands.

Risks

- Lack of familiarity with the Alexa Voice Services (AVS).
 - Read the developer’s documentation for a better understanding of the AVS

- Allow time before hand to review the basics before starting the project
- Poor microphone quality can negatively impact the speech recognition software, resulting in inaccurate commands.
 - Consider upgrading microphone to higher quality if the current microphone proves to be insufficient.
- Lack of experience in app development
 - Consider sorting project into smaller, manageable chunks.
 - Actively and consistently work as a group to progress as quickly as possible, combining all set of skills.

Other Notes