

GRAPHICAL
USER
INTERFACE
FOR



VOICE
ASSISTED

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OVERVIEW

This Project makes user to write lots of code in simple and easier way. It has speech recognition and text to speech so that user can execute those commands via their voice. It stores Query and executable code in Database so that user can use those command again and again.

PYTHON MODULES USED

1. boltiot
2. tkinter
3. speechrecognition
4. os
5. pyttsx3
6. urllib.request
7. sqlite3

DEMONSTRATION LINK

https://youtu.be/6F_TE54LLQ8

ABOUT INTERFACE

Settings.py

The screenshot shows a window titled "Bolt IOT With GUI and Voice Assisted". It is divided into two main sections: "Connection" and "Commands".

Connection Section:

- Inputs: "Enter Your Bolt Device ID" and "Enter Your Bolt API Key".
- Buttons: "Connect Bolt Device" and "disconnect".
- Output: "Connected Device :" followed by a text field containing "BOLT292522".

Commands Section:

- Inputs: "Enter Your Command" (containing "turn on light") and "Enter Executable Code" (containing "digitalWrite(0,'HIGH')").
- Input: "Enter output" (containing "led turned on successfull").
- Buttons: "Add", "Update", "Clear", and "Delete".
- Output: A list box containing two entries:
 - {turn on light} digitalWrite(0,'HIGH') {led turned on successfully}
 - {turn off light} digitalWrite(0,'LOW') {led turned off successfully}

In Connection Section User needs to enter their BOLT Device ID and API Key and click on Connect Bolt Device button and the program store the information for further use. If the Device is already Connected the device ID will be visible on Connected device field and if user wants to connect other device then user needs to click on Disconnect button to delete Device ID and API key which is previously add to Database and another Device details will be stored.

In Commands Section User has Access to Add, Update and Delete the Command on Query Database. There are three input fields in Command Section.

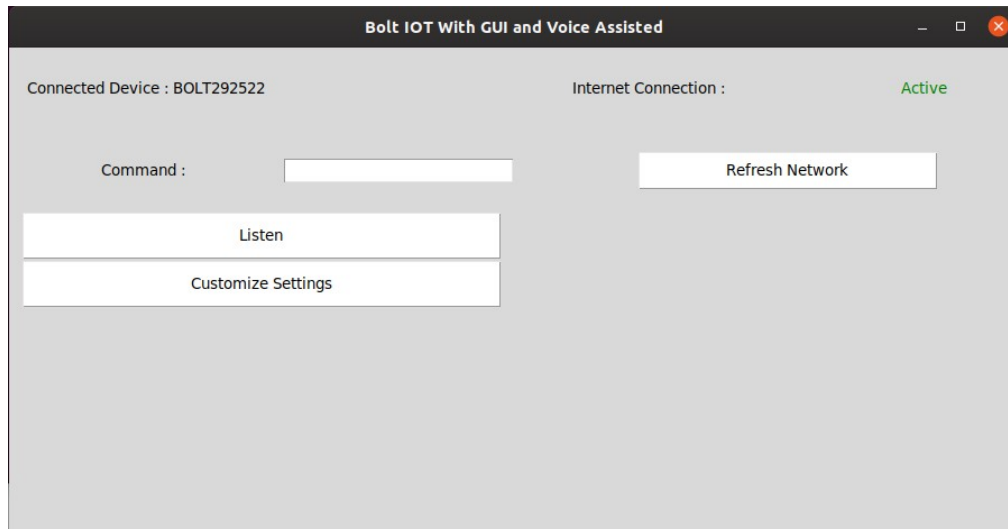
command represents the query which is compared with recognized voice to perform operations.

Executable code represents when the query is successfully matched with the recognized voice, this will be executed.

Output represents when the code is successfully executed, computer will talk back this field.

And this section has list to show all queries present in database file.

Main.py



Connected device field Shows Device ID which we added to database file.

Command field shows the recognized voice.

When user clicks on Listen button speech recognition function will be called to listen what user speaks and recognize it.

Customize settings button calls settings.py program.

Refresh Network button checks whether internet connection is active/inactive.