

TalkBox User Manual

Version 1.0

EECS2311 Submission: Group 12

Amaan Vania

Tony Ly

Mohammed Nasiful Haque

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1.0 Introduction:

The purpose of the TalkBox application is to introduce a virtual environment allowing the simulation of a TalkBox. This software is suited towards users with speech impairments. The components of the applications are easily configurable to the liking of the user. The design is simple, yet effective.

The software makes use of “.tbc” files as the saved state of various TalkBox configurations. These configurations are sets of images, audio files, and labels. The three of these components make a single button. These buttons are configurable.

The TalkBox application consists of two different programs:

1. TalkBox Configuration Application
2. TalkBox Simulator Application

The TalkBox Configuration Application is suited towards creating configuration files.

The TalkBox Simulator Application is suited towards creating the virtual environment for the various configurations.

The both programs are interconnected.

The various functionalities of these application will be explained in depth, however at brief they include:

- Creating new configuration files
- Editing existing configuration files
- Recording Audio
- Saving configuration files
- Opening existing configuration files
- Volume adjusting
- Drag and drop functionality
- Ability to choose images
- Ability to choose audio files
- Ability to playback audio files
- Intuitive and easy to use interfaces

2.0 System Summary:

System Summary section provides a general overview the system. The summary outlines the uses of the system's hardware and software requirements and the system's configuration,

2.1 System Configuration

TalkBox operates on computer devices with any supported operating system. It requires JRE 8 and higher versions. The application requires internet connections for specific functionality such as loading documentation. The hardware required is graphics, a microphone to record audio and a mouse to interact. Data from the TalkBox applications are stored into the user's home directory. It is saved under "TalkBoxData" directory.

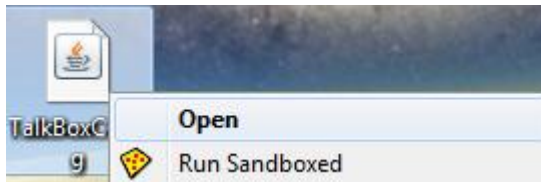
3.0 How to get started:

3.1 To open in an IDE and build:

1. Navigate to <https://github.com/amaanvania/TalkBox> and download or pull the project
2. Start the project in the IDE of your choice
3. Open Builder.java class and run the project

3.2 To download as a JAR

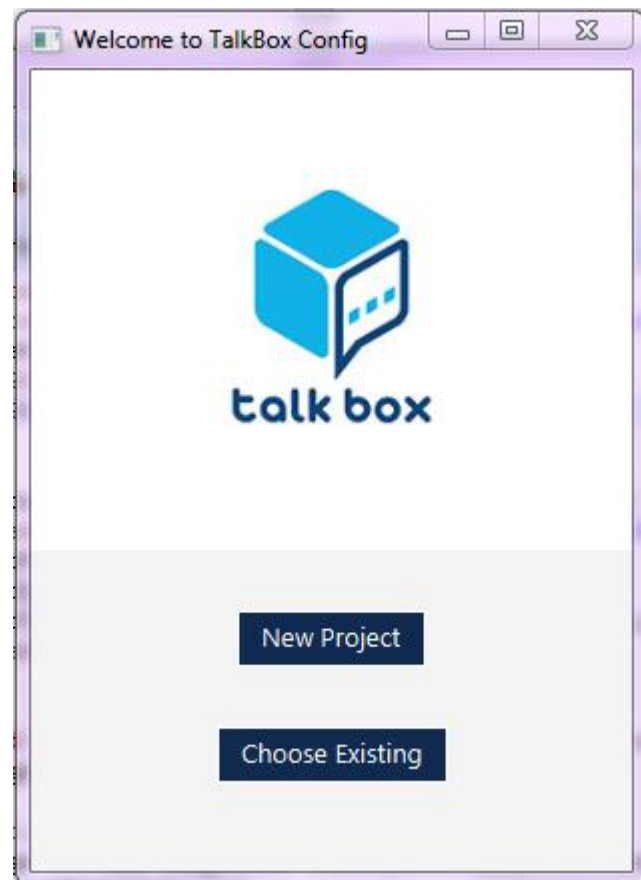
1. Navigate to <https://github.com/amaanvania/TalkBox> and download the JAR
2. Save and run the JAR as shown below



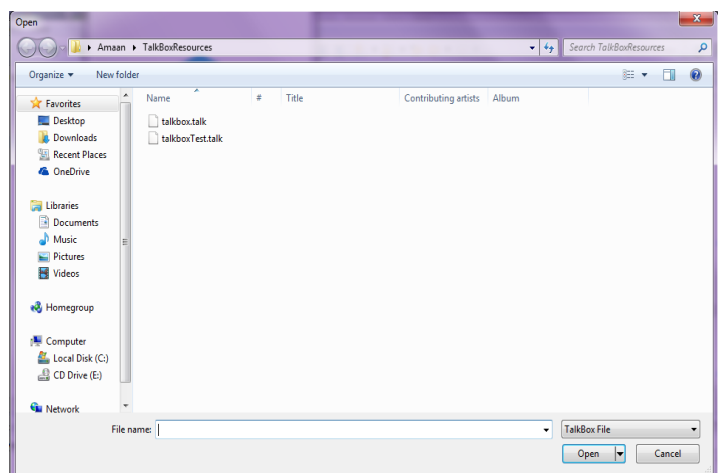
4.0 Config App User Interface:

This is the initial prompt (Welcome Screen) for the Configuration App.

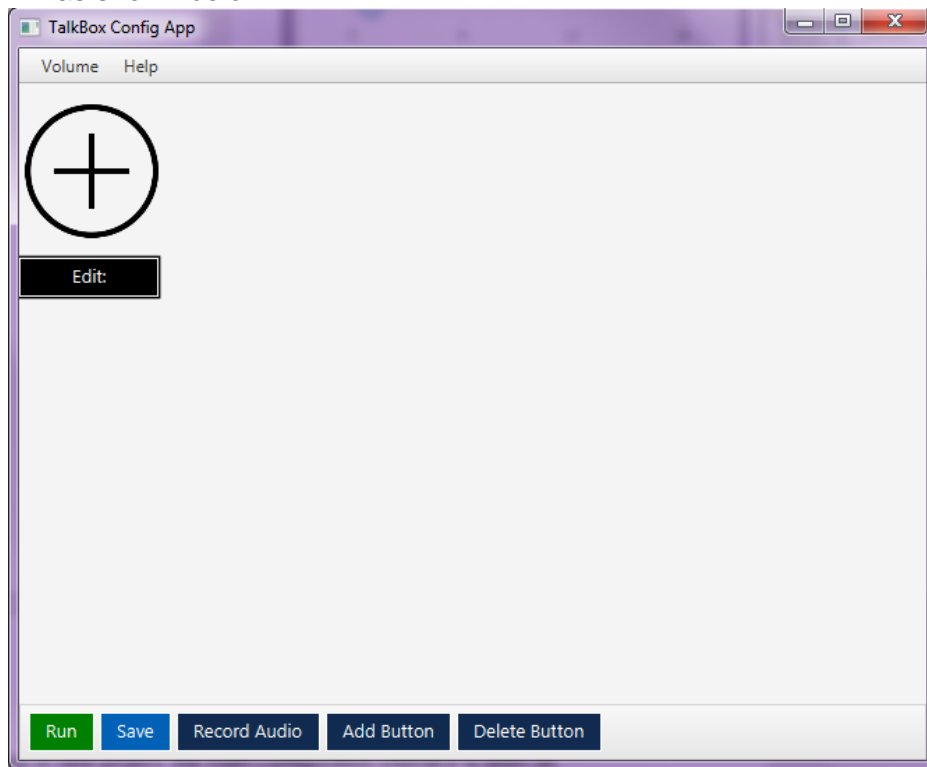
1. There are two options: Create New Project or Choose Existing Project.
2. Creating a new project opens the following prompt



3. Choose existing opens a file chooser, where it is possible to open an existing Talk Box file (. tbc extension)

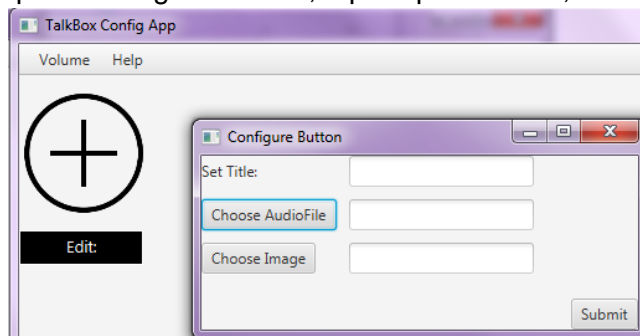


4. Upon opening an existing or new project, the main configuration interface is seen, as shown below:



4.1 Edit:

1. The edit button allows you to set the title, picture, and sound recording of any button.
2. Upon clicking the button, a prompt is shown, as seen below:



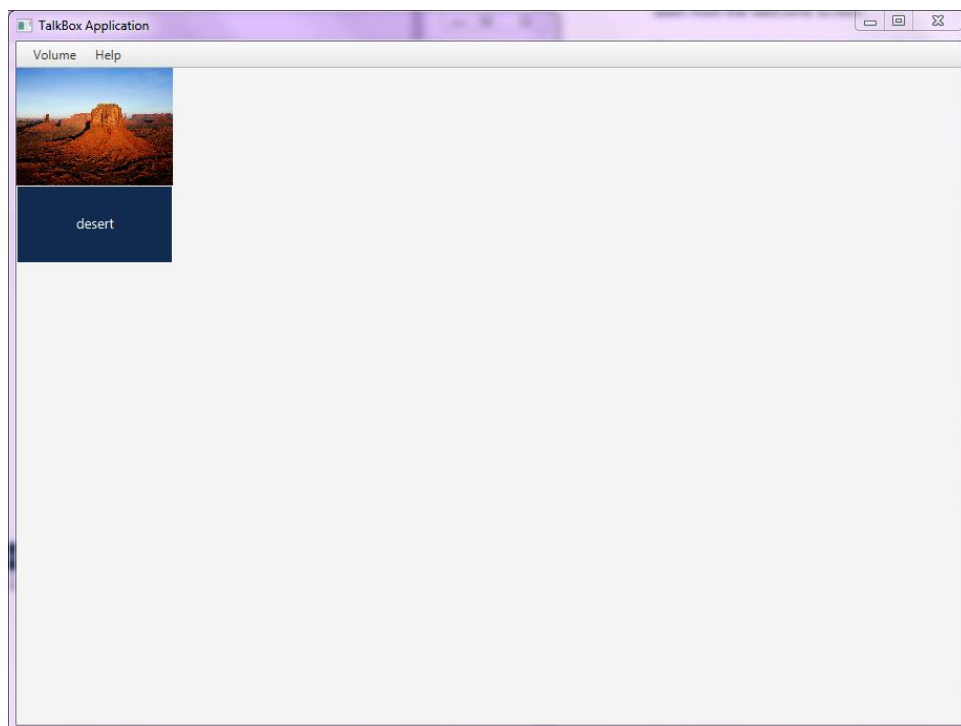
3. Clicking on "Choose AudioFile" and "Choose Image" will prompt a file chooser like that seen from the welcome screen.
4. Once the text fields are set, click submit.
5. This will update the main interface as seen:



5.0 Functionality

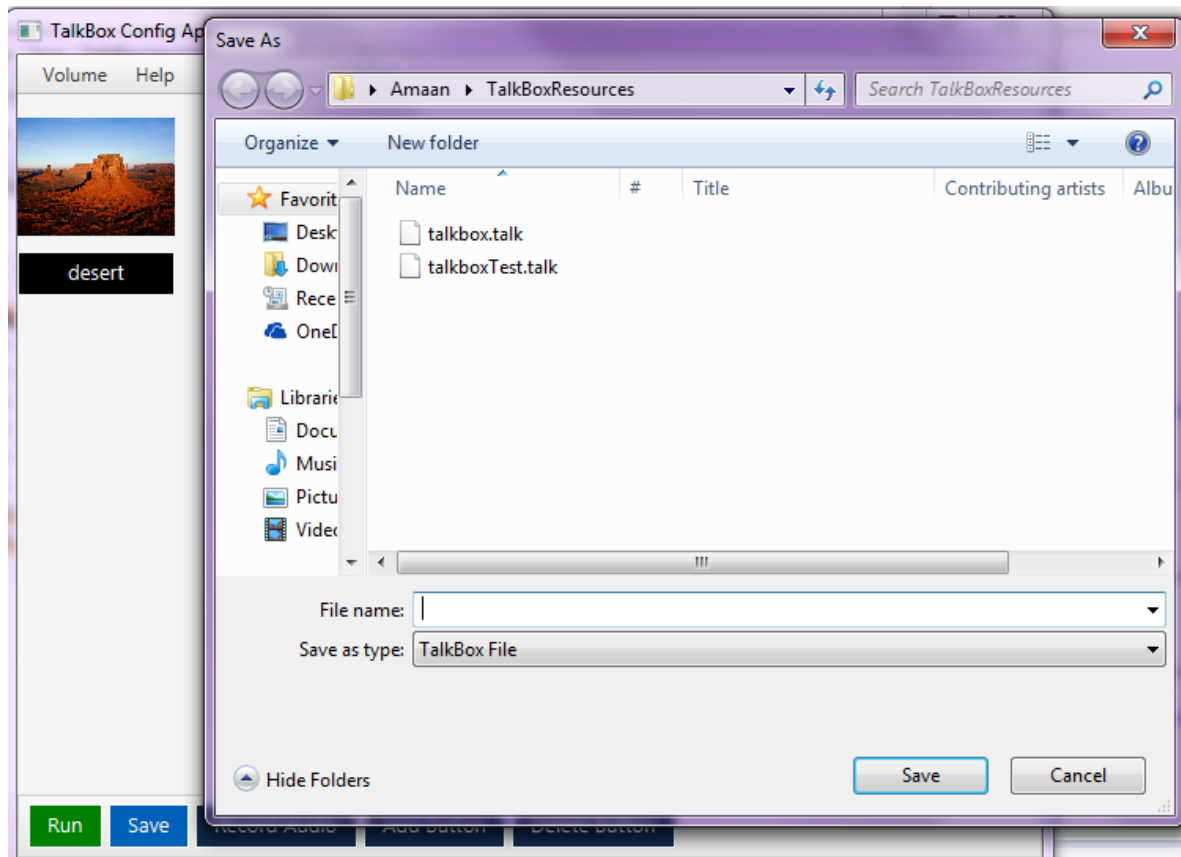
5.1 Run:

1. The run button allows you to run the current configuration in the TalkBox Simulator Application.
2. You must first save the configuration before attempting to run.
3. The TalkBox Simulator Application for this specific configuration is seen below:



5.2 Save:

1. The save button allows you to save the current configuration using a file saver.
2. The configuration is serialized and saved as a .tbc file.
3. Upon clicking the save button, the following prompt will appear:



4. Now that the configuration is saved, it is possible to re-open the configuration using the “choose existing” option from the welcome screen.

5.3 Record Audio:

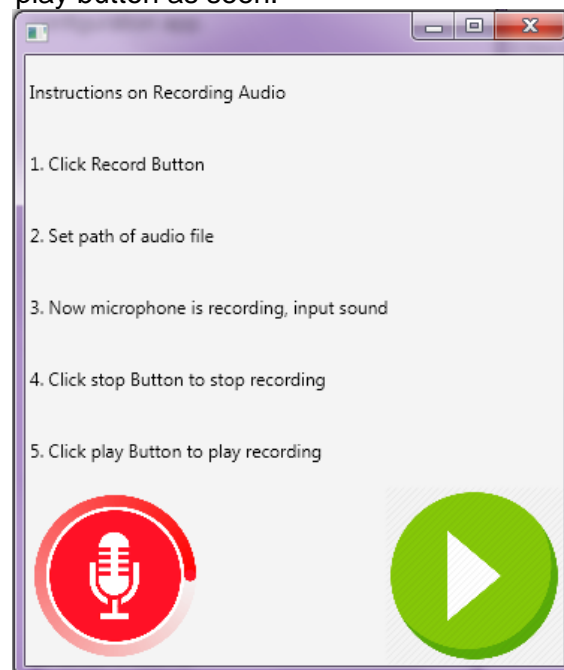
1. The record audio button is useful for recording audio directly from the microphone.
2. This allows you to create your own .wav files. These files are supported by the TalkBox configuration app.
3. Upon clicking the Record Audio button, the following prompt appears:



4. To start recording, simply click the record button.
5. Set the path and name the audio file of your choice.
6. The microphone will then start recording, speak or input sound.
7. To stop recording click the stop button as seen:

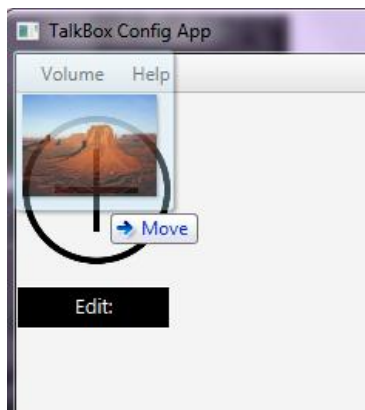


8. To play the recorded audio, click the play button as seen:



5.4 Drag and Drop

1. TalkBox Configuration App can accept Drag and Drop resources.
2. To do this simply select a resource and drop it onto the Image of your choice as seen below:



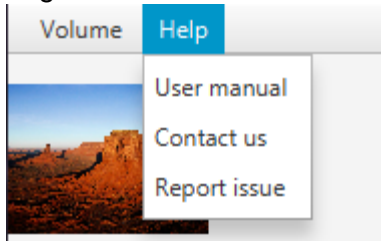
3. The Image will now update as shown:



4. This feature is only supported with images and audio files.

5.5 Top Tool Bar

1. The top toolbar includes a volume slider and a dropdown help menu.
2. The volume slider can be changed, to set the volume of the application accordingly.
3. The dropdown help menu has 3 options, "user manual", "contact" and "report bug" as shown:



4. Clicking on user manual will forward to this document on GitHub.
5. Clicking on contact will forward towards the wiki page on GitHub.

6. Clicking on report issue will forward towards issues page on GitHub.

5.6 Add and Delete Button

1. On the bottom toolbar, there is an "Add" and "Delete" button.
2. These buttons are meant to create new or delete Audio Buttons in the configuration app.
3. As of version 1.0 these buttons are not functional. But will soon be implemented.

TalkBox Application

6.0 Getting started:

6.1 To open in an IDE:

1. Navigate to <https://github.com/amaanvania/TalkBox> and download or pull the project
2. Start the project in the IDE of your choice
3. Open TalkBoxApp.java class and run the project

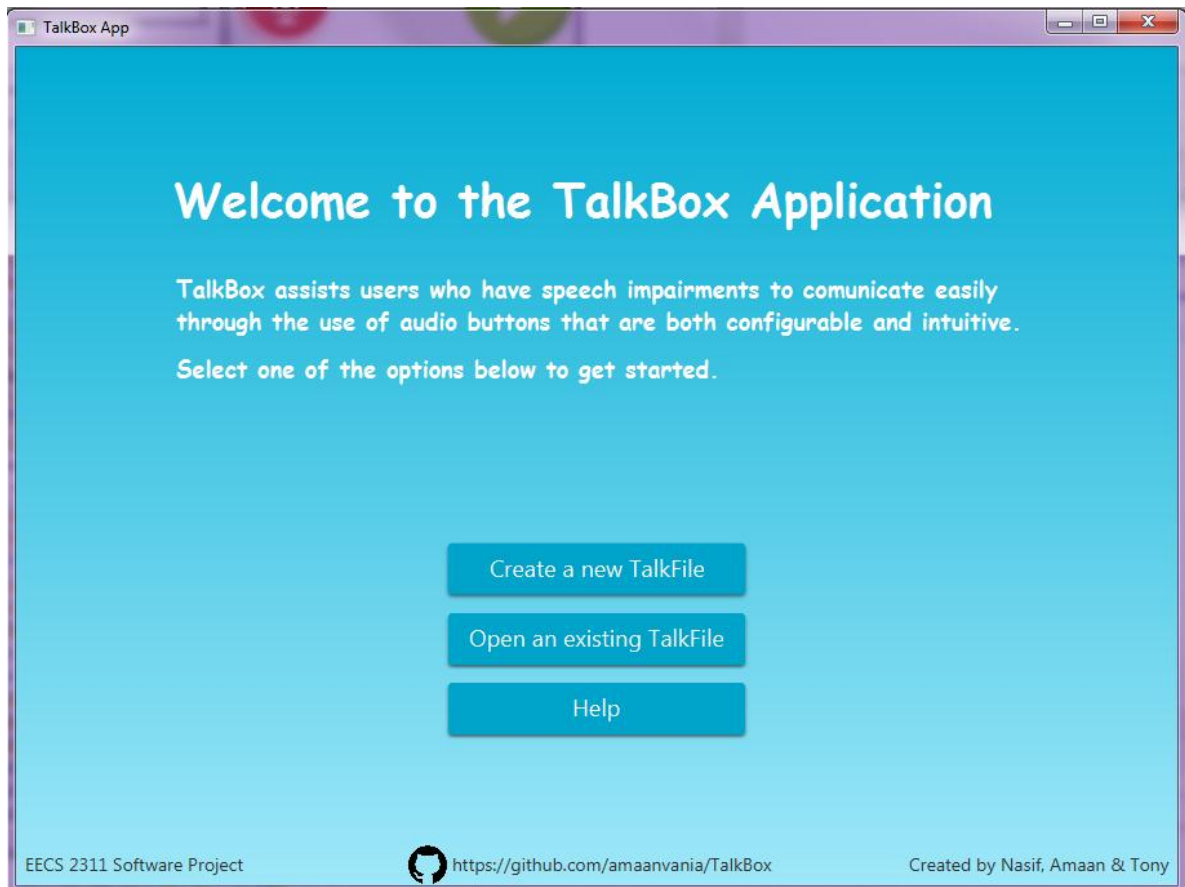
6.2 To download as a JAR

1. Navigate to <https://github.com/amaanvania/TalkBox> and download the JAR
2. Save and run the JAR as shown below



7.0 TalkBox Simulator User interface

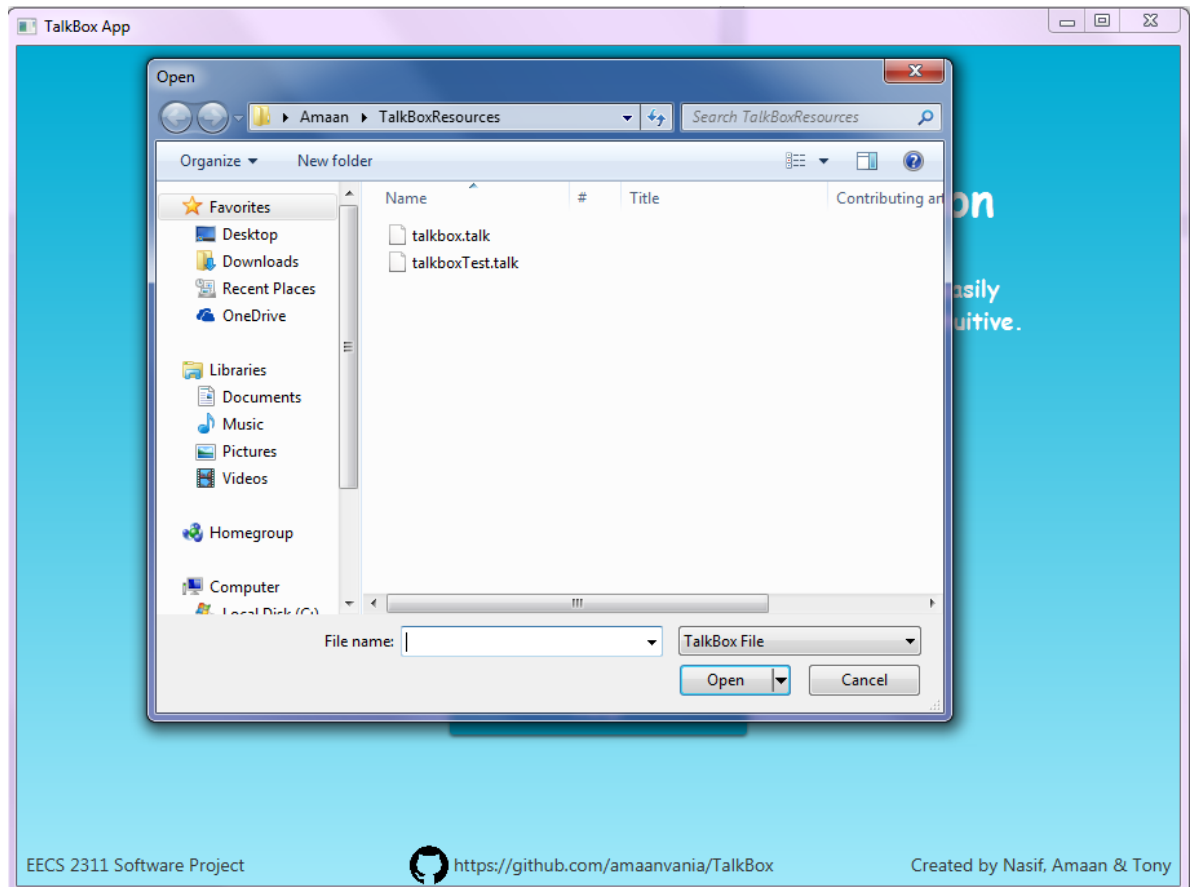
1. Upon starting the TalkBox simulator, you will be met with a welcome screen as shown below:



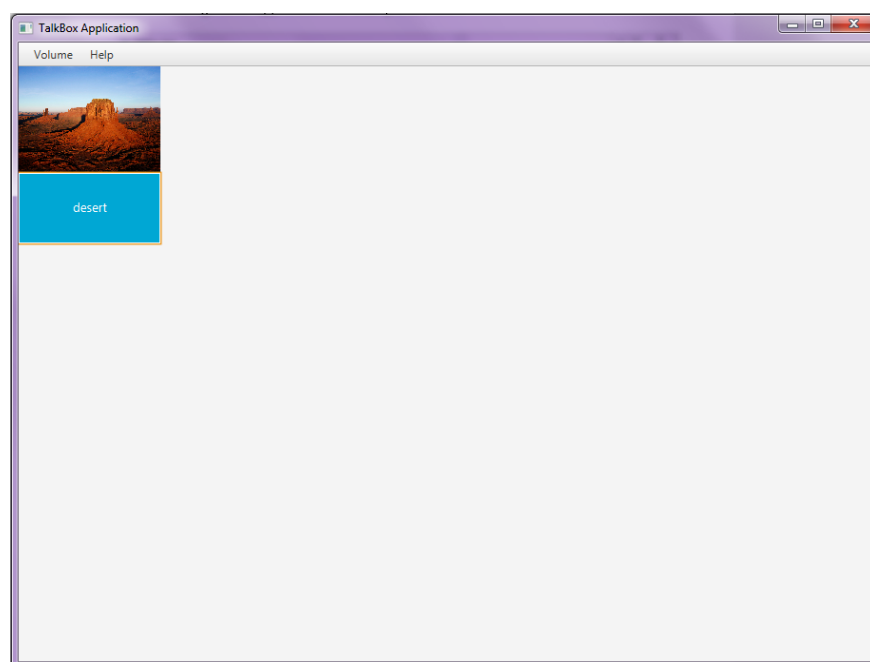
2. Create a new TalkFile button will show a prompt like the "New Project" prompt from the configuration application. As shown:



3. Open an existing TalkFile will prompt a filechooser like the “Choose existing” button from the configuration application. An example is shown:



4. Upon selection of an existing file, the TalkBox Simulator Interface is shown.



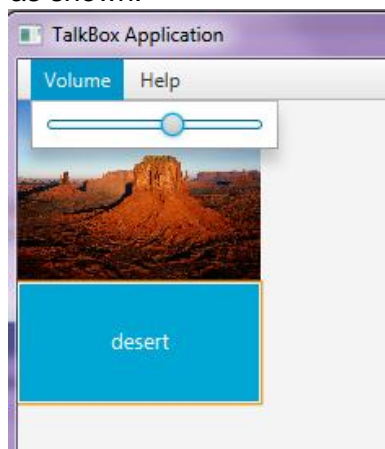
8.0 Functionality

8.1 Image Button:

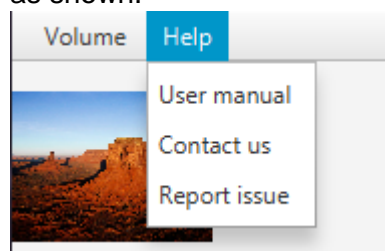
1. The image button is known as the button underneath the image.
2. Upon clicking the button, the corresponding audio file of that image is played.

8.2 Top Tool Bar:

1. The top toolbar includes a volume slider and a dropdown help menu
2. The volume slider can be changed, to set the volume of the application accordingly as shown:



3. The dropdown help menu has 3 options, “user manual”, “contact” and “report bug” as shown:



4. Clicking on user manual will forward to this document on GitHub.
5. Clicking on contact will forward towards the wiki page on GitHub.
6. Clicking on report issue will forward towards issues page on GitHub.