

Requirements

Document

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Requirements Document

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1.0 GENERAL INFORMATION

A. GENERAL INFORMATION

1.1 System Overview

Software Development Project, TalkBox Simulator, a piece of software that simulates the behavior of any TalkBox device. Has a user interface similar to that of the device. The number of buttons and their functionality is configurable. Is fully tested to behave as the hardware device.

1.2 System Requirement

In order to run this software, operating system should have Java Runtime Environment 1.8 (JRE-1.8)

2.0 GETTING STARTED

B. GETTING STARTED

2.1 Setting up JRE 1.8

Type 'java -version' in Terminal/PowerShell to check JRE version. If no JRE available or version is lower than 1.8, download JRE from link below

<https://www.oracle.com/technetwork/java/javase/downloads/jre8-downloads-2133155.html>

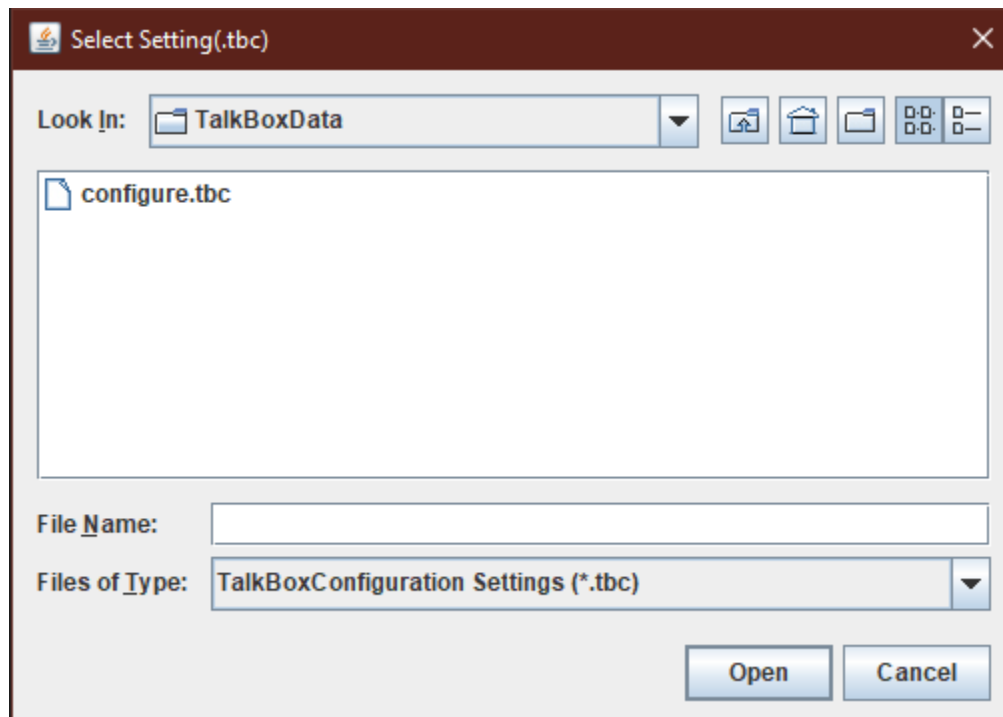
2.2 Download Software

Download and unzip 'EECS2311_group5-master' from link below

https://github.com/JacobJae/EECS2311_group5/archive/master.zip

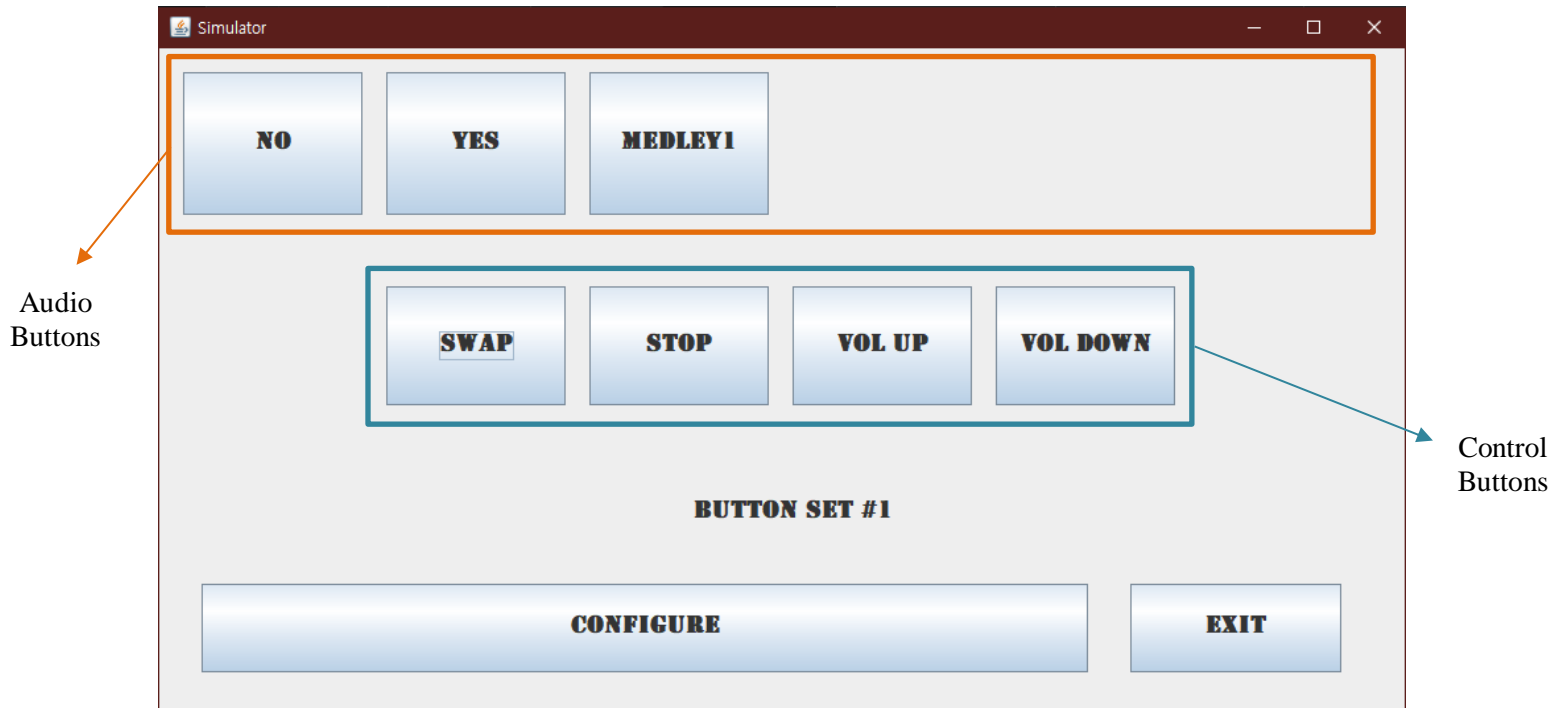
2.3 Starting TalkBox.jar

Inside of 'EECS2311_group5-master' folder, go to 'TalkBoxV2/vM' and execute 'TalkBoxV2' jar file. Select 'configure.tbc' file inside of 'TalkBoxV2/TalkBoxData' which is default setting for new user.



3.0 TALKBOX SIMULATOR

C. TALKBOX SIMULATOR



3.1 Client Requirements

- A physical device integrated with an application using Java. The device must have buttons that when pressed provides a set audio output associated with that button.
- Allowing user to switch between multiple (possibly infinite) amounts of button sets, each with different audio outputs.
- Allowing user to adjust volume of the audio output.
- User can stop the audio playback anytime during the playback.

3.2 System Working

- The top portion of software consist of audio buttons. When it's clicked, corresponding sound will play. If user want to make custom voice audio file, click 'Configure' button.
- 'SWAP' button sets the next set of audio buttons.
- 'VOL UP/DOWN' buttons control the volume of system. (not implemented yet)
- 'STOP' button stops the audio play.

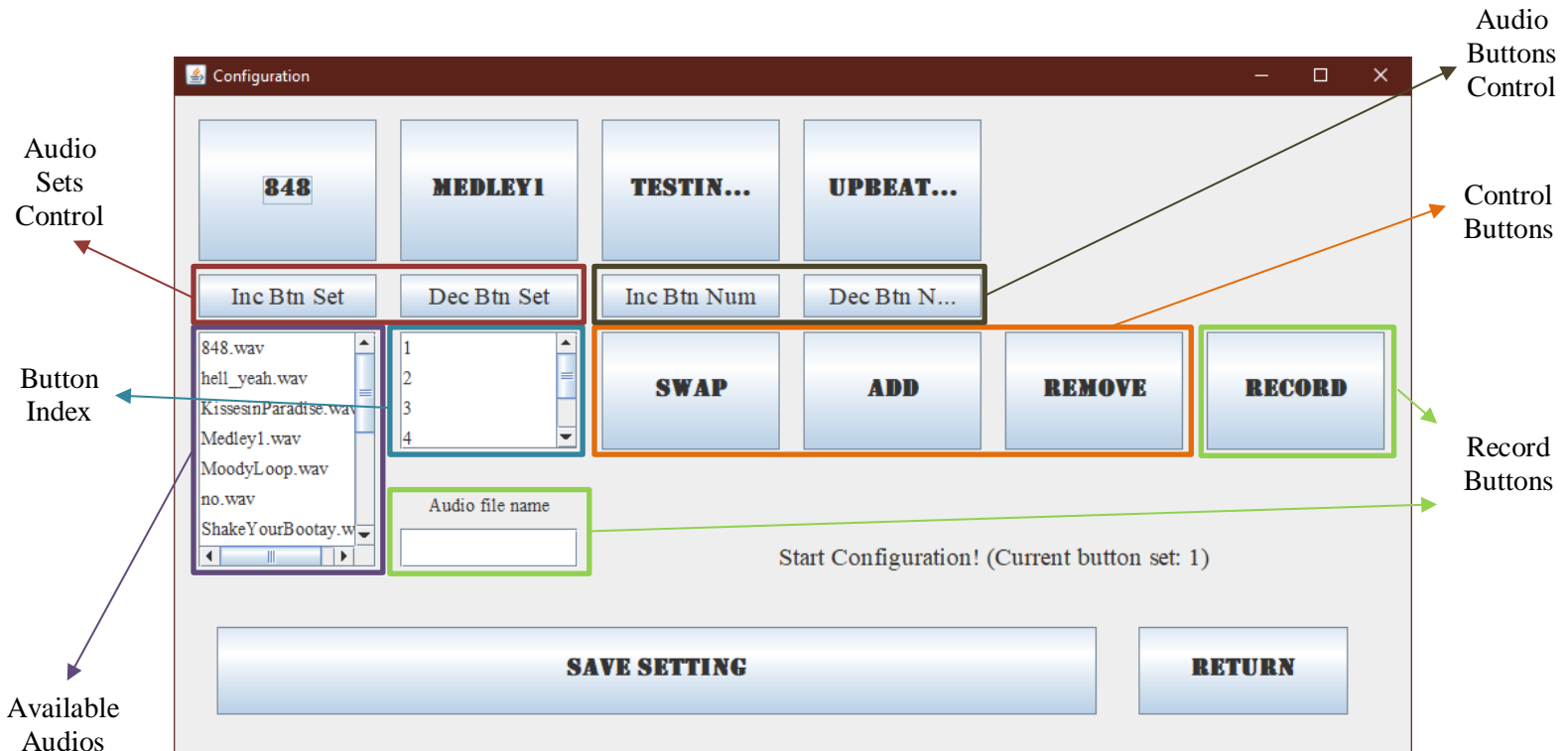
3.3 Client Use Case

The system has a typical use case by users with verbal deficiency like unable to speak from birth or by accident as well as clients with non-verbal deficiency like brain disorder, cognitive, sensory or motor.

This device can also be used as a toy for children due to the simplicity of operating this device.

4.0 CONFIGURATION

D. CONFIGURATION



4.1 Client Requirements

- User can add/remove audio buttons from current sets.
- User can add/remove audio sets.
- User can record and save audio as per requirements.
- User can choose from hundreds of available audio files.

4.2 System Working

- Add and remove buttons allow user to add and remove selected buttons from current set.
- Inc./ Dec. btn Set allow user to change the current button set, and then change the buttons in that set.
- Record button allows user to record audio using device microphone if available. The user can also name and save the file using the text field provided.
- A library of pre-installed audio files has been given to the user as well as the ability to record more.

4.3 System Testing

Please refer to the testing document for the system testing for all the above-mentioned features.

5.0 APPENDIX

APPENDIX

This section describes and depicts all addition information about the system. Use screen prints as needed to depict examples of text under each heading.