

# User Manual

## Treasure Box Braille: Authoring App

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## 1.0 Document Overview

This document aims to provide an overview of the functions and accessibility features of the Scenario Creator software. It contains detailed instructions on how to use the program as well as a list of short cuts available.

### 1.1 System Requirements

The Scenario Creator software is compatible with Windows, Linux and Mac Operating Systems. The audio accessibility features are compatible with the following screen readers: NVDA (Windows), ORCA (Linux), and Voiceover (Mac)

### 1.2 Installation

To install the Scenario Creator, simply download the AuthoringApp.lib.zip file from GitHub. Once the download is complete, open the file and double click on the AuthoringApp.jar file to start creating!

## 2.0 Scenario Creator

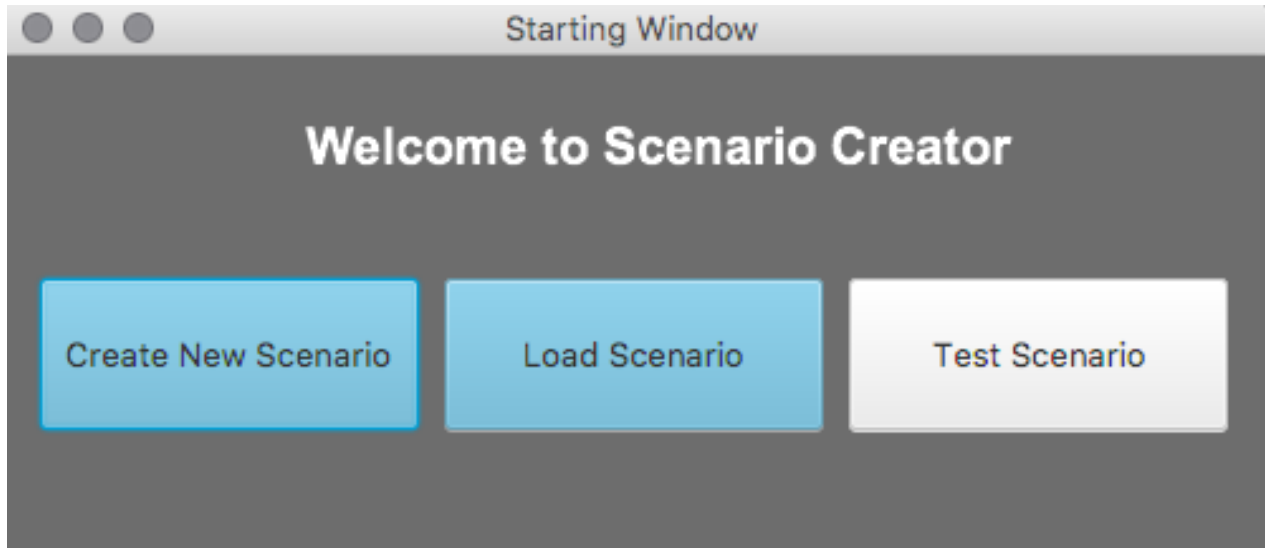
This section of the document takes a closer look at the functions and accessibility features of the Scenario Creator. The software helps you manage your scenario more easily by breaking it down into sections.

Each section will contain a story element, where you can provide a small lesson [ex. demonstrate what a word looks like in braille] or you can ask a question and receive button press answers (ex. you can have a word displayed on the braille cells and provide multiple choice answers associated with the buttons on the Treasure Braille Box. You can also choose what happens when a correct or incorrect response entered and create as many sections as you want for your scenario. At the end of every section, the braille cell pins are automatically reset to display nothing.

You can also record or import sound files to use in your scenario and the software features full audio accessibility so that the Scenario Creator app can be used by the visually impaired.

## 2.1 Getting Started

Once you have double clicked on the AuthoringApp.jar file, you will be taken to the starting window.



### Create New Scenario

This will take you to the Scenario Setup window.

### Load Scenario

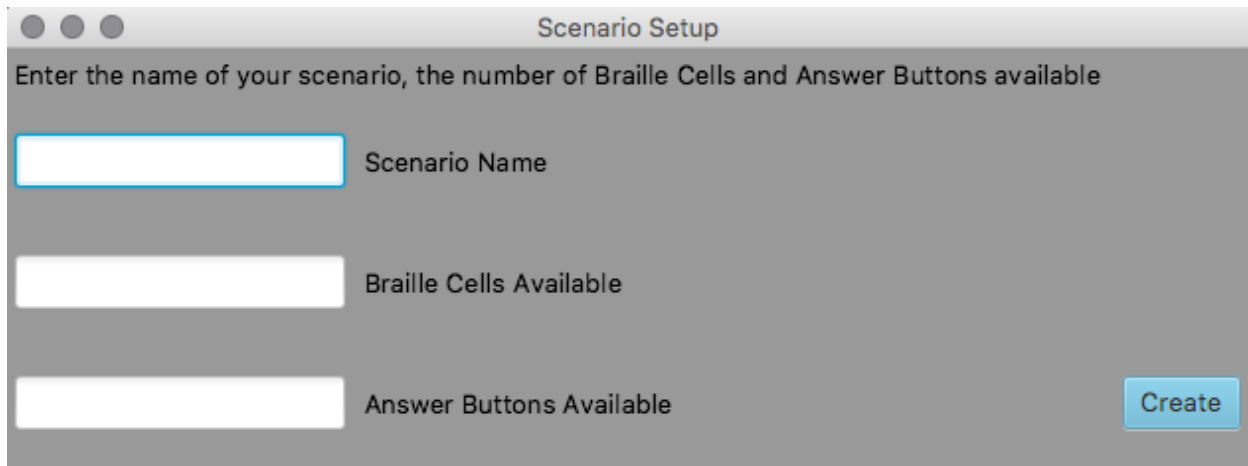
This will open up a file chooser so that you can load a previously saved scenario. See section 2.5 for more details on loading.

### Test Scenario

This will open up a file chooser so that you can test a previously saved scenario. The test is run using provided software that simulates the Treasure Braille Box. See section 2.6 for more details on testing.

## 2.2 Scenario Setup

After selecting Create New Scenario, you will be brought to the Scenario Setup window.



Scenario Setup

Enter the name of your scenario, the number of Braille Cells and Answer Buttons available

Scenario Name

Braille Cells Available

Answer Buttons Available

Create

### Scenario Name:

Enter the title of your scenario in this text field. Later on when you choose to save your scenario, a .txt named after the title will be created and saved on your system.

- *This field cannot contain less than 15 characters. A warning window will display if you leave this field empty and try to click on the Create button.*

### Braille Cells Available:

Enter the number of Treasure Box Braille cells you have available.

- *This field must contain a number. A warning window will display if you leave this field empty or enter a non-numeric character and on click the Create button.*

### Answer Buttons Available:

Enter the number of answer buttons available on the braille cells.

- *This field must contain a number. A warning window will display if you leave this field empty or enter a non-numeric character and on click the Create button.*

### Create:

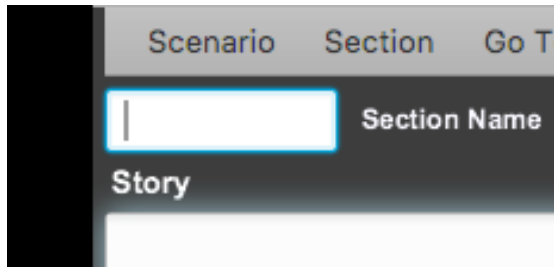
Once the fields have been completely, click or press enter on this button to start creating!

## 2.3 Scenario Creator GUI

After clicking create, you will be brought to the main Scenario Creator Window. This section details the different parts of the Scenario Creator graphic user interface (GUI) and provides an overview of what each element is for and what to write in each text field.

The screenshot shows the 'Scenario Creator' window with a dark grey background. At the top, there is a title bar with three window control buttons on the left and the text 'Scenario Creator' in the center. Below the title bar is a horizontal menu bar with four items: 'Scenario', 'Section', 'Go To', and 'Sound'. To the right of the menu bar is a dropdown menu labeled 'Select a section' with a downward arrow. Below the menu bar, there are four input fields: a text field, a field labeled 'Section Name', another text field, and a field labeled 'Answer Buttons Used'. To the right of these fields is a button labeled 'Scenario Menu'. Below these fields is a large white text area labeled 'Story'. Below the 'Story' area are three more input fields: a text field, a field labeled 'Braille', another text field, and a field labeled 'Answer'. To the right of these fields is a blue button labeled 'Add Sound'. Below these fields are two more white text areas: one labeled 'Correct' and one labeled 'Incorrect'. At the bottom of the window are two blue buttons: 'Save Section' on the left and 'Clear Section' on the right.

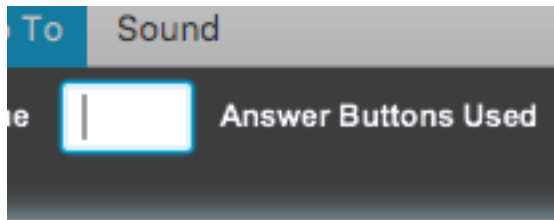
### 2.3.1 Section Name

A screenshot of a software interface. At the top, there are three tabs: 'Scenario', 'Section', and 'Go T'. Below the 'Section' tab, there is a text input field with a blue border and a vertical cursor. To the right of the input field is the label 'Section Name'. Below the input field, the word 'Story' is visible.

Enter the name you want for the section. After the section has been saved, the name you used here will appear in the drop down menu, so that you can come back and edit this section anytime.

- *This field cannot be empty. A warning window will display if you leave this field blank and try to save the section.*

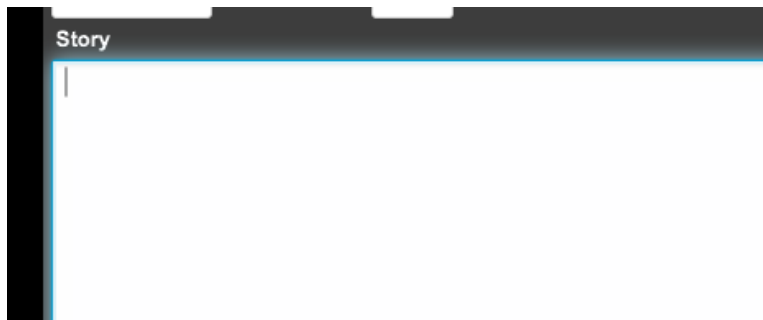
### 2.3.2 Answer Buttons Used

A screenshot of a software interface. At the top, there are two tabs: 'To' and 'Sound'. Below the 'To' tab, there is a text input field with a blue border and a vertical cursor. To the right of the input field is the label 'Answer Buttons Used'.

Enter the number of answer buttons you want active during this section. At least one button has to be used. If you are simply doing a demonstration of what a letter looks like in braille, you could just simply set 1 button to be used. All the other buttons will be left inactive, and the student can click on the chosen button to skip to the next section.

- *This field must contain a number that is less than or equal to the number of answer buttons available, as indicated in the Scenario Setup window. A warning window will display if you leave this field blank or enter a non-numeric character and try to save the section.*

### 2.3.3 Story

A screenshot of a software interface showing a text input field. The field is labeled "Story" in the top left corner. The field itself is empty with a vertical cursor line at the beginning.

This is the text field in which you can write your short lesson or ask you question. If you are asking multiple choice questions, you should let students know what the choices are associated with here. You can also add sounds in this text field, see section 2.9 for more details on adding sound.

- *This field must at least 15 characters. A warning window will display if you have less than 15 characters entered for your story and try to save the section.*

### 2.3.4 Braille

A screenshot of a software interface showing a text input field. The field is labeled "Braille" on the right side. The field itself is empty.

Enter the letter or word you want displayed on the braille cell here.

- *This field must contain a letter or a word that is less than or equal to the number of braille cells that you have available, as indicated in the Scenario Setup window. A warning window will display if you leave this field blank or enter a non-numeric character and try to save the section*

### 2.3.5 Answer

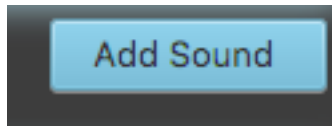
A screenshot of a software interface showing a text input field. The field is labeled "Answer" on the right side. The field itself is empty.

Enter the button number that you want associated with the correct response.

- *This field must contain number that is less than the number of answer buttons available. A warning window will display if the conditions are not met and you try to save the section.*

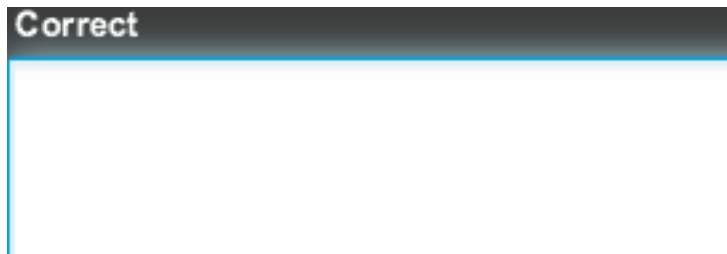


### 2.3.6 Add Sound



This button will take you to the Sound Menu where you can record or import sounds. See section 2.9 for more details on adding sound.

### 2.3.7 Correct



You can enter the message you want played when a student has triggered the correct response. You can also add sound to this text field. See section 2.9 for more details on adding sound.

### 2.3.8 Incorrect



You can enter the message you want played when a student has triggered the wrong response. You can also add sound to this text field. See section 2.9 for more details on adding sound.

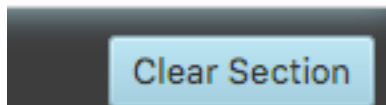
### 2.3.9 Save Section



After the required fields [Section Name, Answer Buttons Available, Story, Braille and Answer] are filled out properly, pressing this button will save this section, and the section name will appear in the drop down menu so that you can return to it at another time.

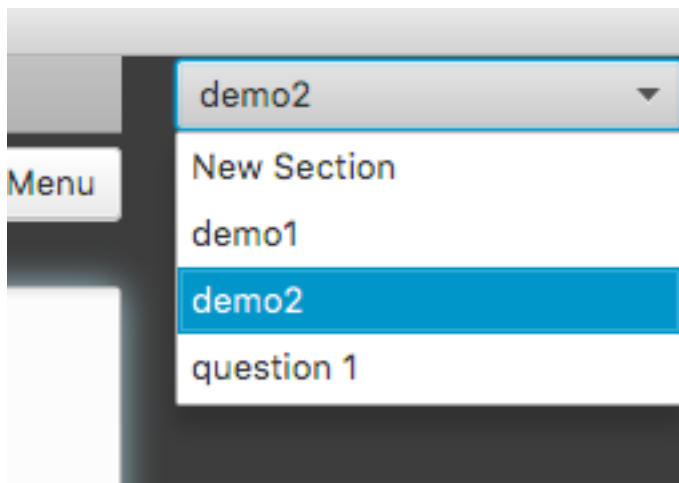
• **IMPORTANT:** closing the Scenario Creator app at this point will delete all progress. In order to save the sections onto your computer, you must choose to save the scenario. See section 2.4 for more information about saving scenarios.

### 2.3.10 Clear Section



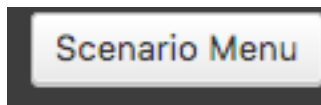
Pressing this button will clear every field in the Scenario Creator, a warning dialog will appear first as doing so will lose any unsaved progress.

### 2.3.11 Drop down Menu

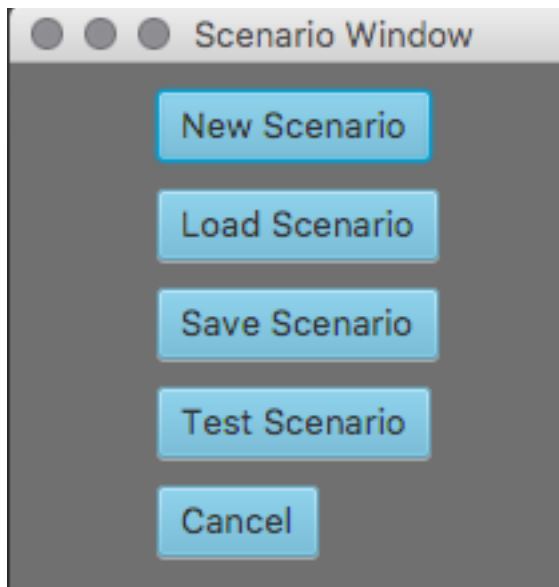


This drop down menu provides a quick way for you to navigate back and forth between different sections. Simply select the section you want to go to and the Scenario Creator will automatically repopulate the text fields with the saved information.

### 2.3.12 Scenario Menu



This quick access scenario menu button opens up a separate window which provides you with access to the main functions associated with the scenario.



#### New Scenario

This will take you to the Scenario Setup window, all unsaved progress will be lost.

#### Load Scenario

This will open up a file chooser so that you can load a previously saved scenario. See section 2.5 for more details on loading.

#### Save Scenario

As long as one section is saved, pressing this button will save a .txt named after the title of your scenario onto your system. The .txt file will be formatted to work with the braille simulator program. See section 2.4 for more details on saving.

#### Test Scenario

This will open up a file chooser so that you can test a previously saved scenario. The test is run using provided software that simulates the Treasure Braille Box. See section 2.6 for more details on testing.

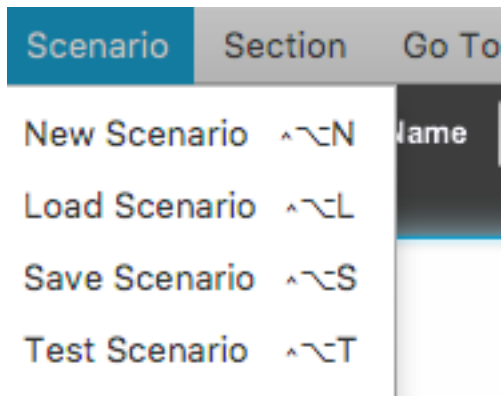
#### Cancel

This will return you to the main Scenario Creator Window.

### 2.3.12 Menu Items

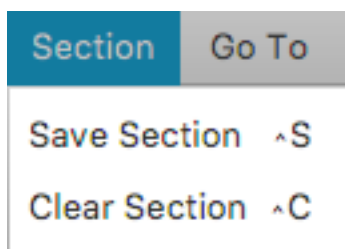
This section will detail the functions that available from the Menu

#### 2.3.12.1 Scenario Menu Items



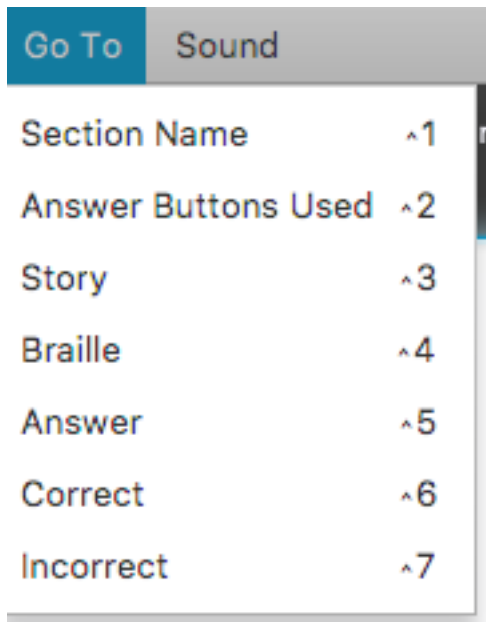
This menu bar item contains the same contents as the quick access scenario menu. The functions performed are identical to those of the Scenario Menu, but it provides a reminder of the keyboard shortcuts that exist for the four features. See section 3.0 for more information about hot keys.

#### 2.3.12.2 Section Menu Items



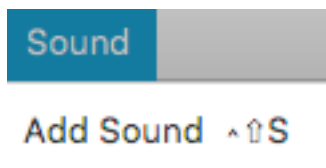
This menu bar item allows users to save or clear the section. The functions performed are identical to the save section and clear section buttons found in the main GUI, but it provides a reminder of the keyboard shortcuts that exist for the two features. See section 3.0 for more information about hot keys.

### 2.3.12.3 Go To Menu Items



This menu item serves as a reminder of keyboard short cuts that exist which will allow users to jump to a specific item in the Scenario Creator GUI. Selecting an item from this menu will also move the focus to the specific item in the GUI.

### 2.3.12.4 Sound Menu Items



This menu item serves as a reminder of keyboard short cuts that exist which will allow users to quickly add sounds to their scenario. See section 2.9 for more details on adding sound.

## 2.4 Save Scenario

You must have saved at least one section before you can save a scenario. When a scenario is saved, a .txt named after the scenario title is saved onto your system. This is not a regular text file, as it has been formatted by the software in order to make it compatible with the braille cell simulator. As such, it is best you do not directly edit the text file, as it can potentially corrupt the entire scenario file. Use the loading / editing tool instead, that's what it is there for.

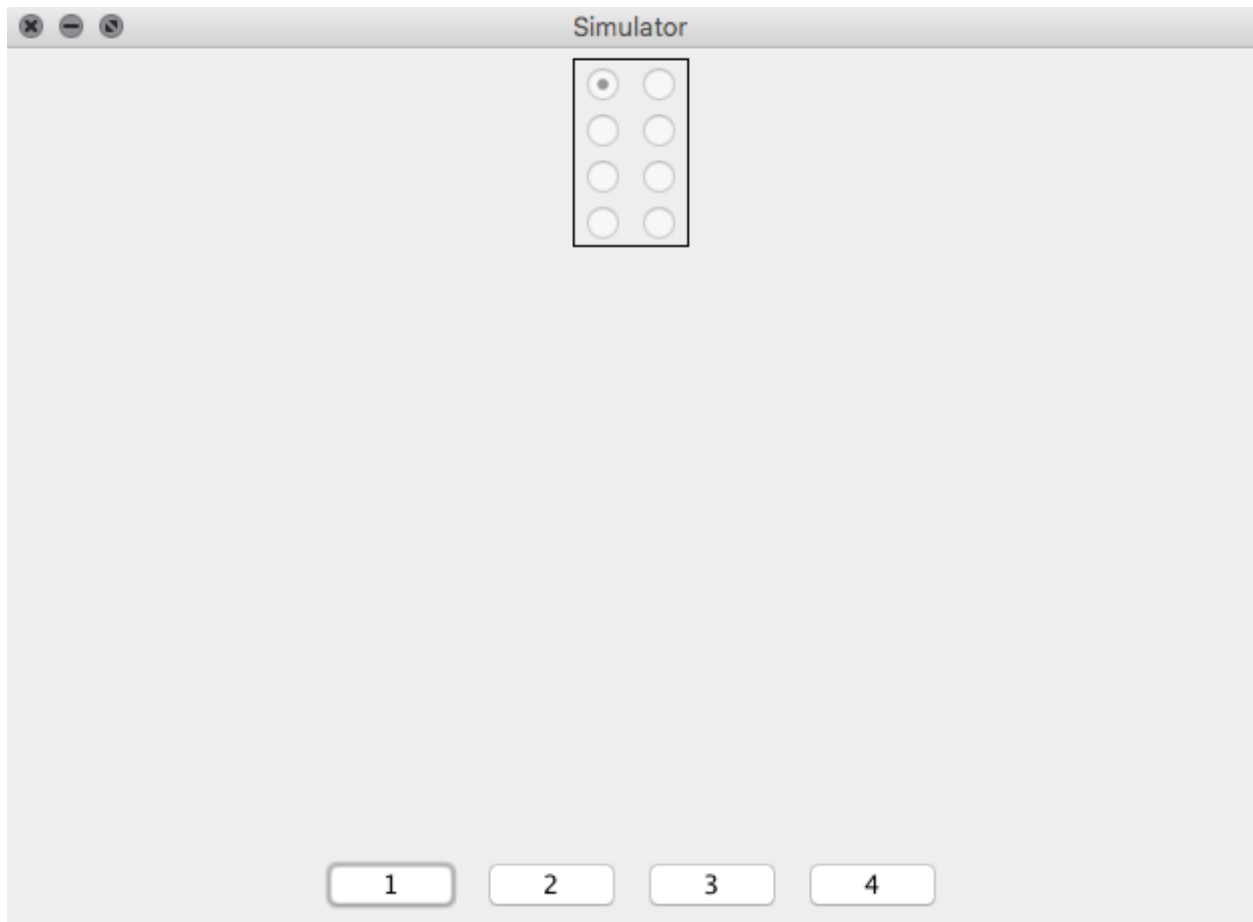
## 2.5 Load Scenario

You can choose to load a previously saved scenario from the starting window or from within the Scenario Creator App itself. Be careful as doing so will delete any unsaved progress on the current scenario you are working on.

As stated in the previous section, the scenario text file is formatted to work with the braille cell simulator software. Therefore, only .txt files created from the Scenario Creator app can be loaded.

## 2.6 Test Scenario

You can choose to test a previously saved scenario from the starting window or from within the Scenario Creator App itself. After selecting an appropriate file, a new window named Simulator will open.



This mimics the braille cell. Turn on audio accessibility to hear spoken dialog describing changes made in the GUI, such as the pins that are displayed.

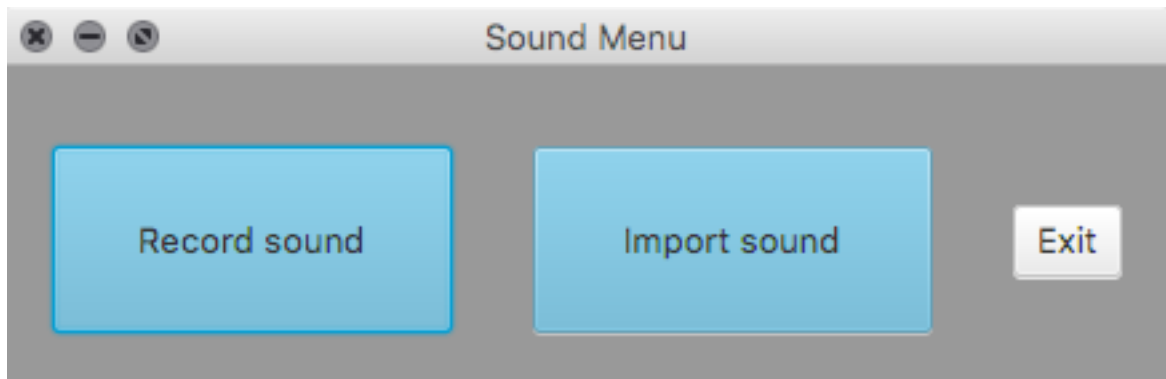
## 2.7 Set Pins on Braille Cell(s)

Setting the pin(s) you want displayed on the braille cell is as easy as typing the word or letter you want displayed in the Braille text box in the Scenario Creator GUI.

At this time, the Braille cell field can only accept alphabetical characters. Also make sure that the word you type in the Braille cell field contains fewer characters than the number of braille cells you have available.

## 2.8 Add sounds

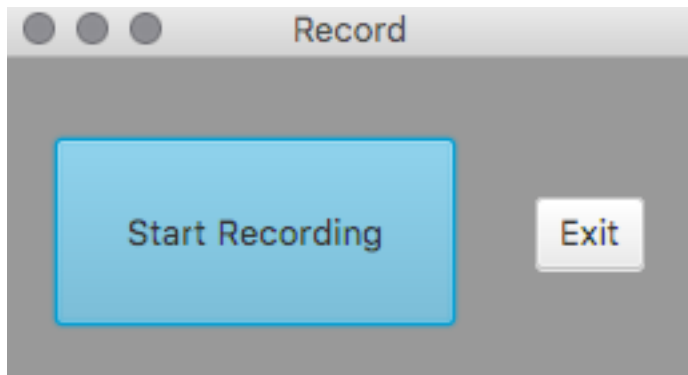
This section details how you can add audio to your scenario. After choosing the add sound option, either via the button in the Scenario Creator GUI, or through the keyboard shortcut, you will be brought to the sound Menu.



Users can add sounds to the Story, Correct or Incorrect text fields by typing `/~sound:` followed by the name of the sound file including the `.wav` file extension. `/~sound: example.wav`

### 2.8.1 Record Audio

After pressing the Record Sound button, you will be prompted to name the sound file. A .wav file with the name you provided will be saved on your system. After clicking okay, you will be brought to the Record window.



#### Start Recording

Pressing this button will start the recording. The maximum record time is one minute and you can press the button to stop recording. You can record as many sound files as you like.

#### Exit

Pressing this button will return you to the main Scenario Creator window.

### 2.8.2 Import Audio

Choosing the import audio option will open up a file chooser so that you can load a .wav file into program. Typing `/~sound: eample.wav` will add the sound file into your scenario.

## 2.9 GUI Audio Accessibility

Both the scenario creator and the braille cell simulator has audio accessibility. The audio accessibility features are compatible with the following screen readers: NVDA (Windows), ORCA (Linux), and Voiceover (Mac).

With screen readers enabled on your system, the software will read out what each element of the GUI is for, and how to use it. Verbal descriptions of changes that occur on screen are also provided, for example when a scenario is saved, or when the simulated braille cell changes positions.



## 2.10 Logger

A .txt file entitled the log of doom, will be saved onto the user's system. This will keep track of functions and features accessed, as well as any errors that occur during the running of the software.

## 3.0 Hot keys

This section provides a list of the hot keys available in this software.

### 3.1 Functional

These hot keys are associated with the features and functions of the Scenario Creator.

Command	Hot Key
New Project	Alt + Control + N
Load Project	Alt + Control + L
Save Project	Alt + Control + S
Test Project	Alt + Control + T
Save Section	Control + S
Clear Section	Control + C
Add Sound Menu	Control + Shift + S

### 3.2 Navigational

These hot keys are associated with making it easier to navigate through the Scenario Creator GUI.

Command	Hot Key
Focus on Section Name Text Field	Control + 1
Focus on Answer Buttons Used Text Field	Control + 2
Focus on Story Text Field	Control + 3
Focus on Braille Text Field	Control + 4
Focus on Answer Text Field	Control + 5
Focus on Correct Text Field	Control + 6
Focus on Incorrect Text Field	Control + 7
Jump to next element in GUI	Hold Control + tab
Jump to Menu Bar	Option