

VOXSPELL USER MANUAL

Max McLaren
195223686 mmcl953

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Overview

VOXSPELL is a spelling assistance program design mainly for second language learners. It grants you the ability to test your spelling on words in categories, review your less proficient words, and view statistics about your spelling.

Installation Guide

Before launching the program, ensure that there is a directory which contains VOXSPELL.jar, runVoxspell.sh and the reward_videos directory which in turn contains reward.avi. Ensure that Festival is installed and the following voices are installed: voice_kal_diphone and voice_aki_nz-diphone. If either voice is not installed VOXSPELL will run, but will be silent if that voice is selected. If this is the case, change the voice in the settings screen (page 11). Also ensure that Java 1.8 is installed at /usr/lib/jvm/jdk8/.

To start VOXSPELL run runVoxspell.sh from the terminal. You can do this by opening the terminal (ctrl-alt-T on most computers), navigating to the directory containing runVoxspell.sh using the cd command, and executing the following line:

```
./runVoxspell.sh
```

Main Menu

This is the first screen you will see upon launching the application. It has four buttons which all lead to different screens.

These buttons can be navigated using the mouse or the arrows keys on your keyboard. This menu can be returned to from any screen by clicking the "Menu" button or pressing the "Esc" key.

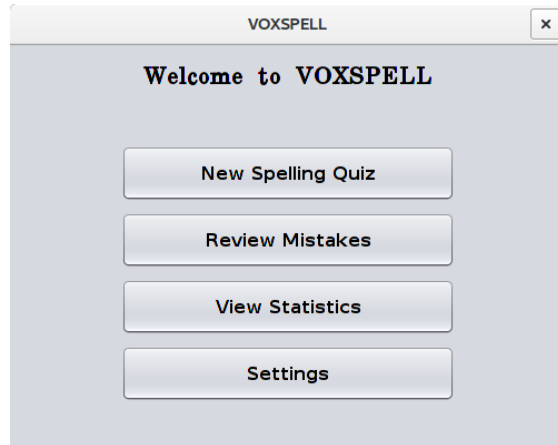


Fig. 1 VOXSPELL Main Menu

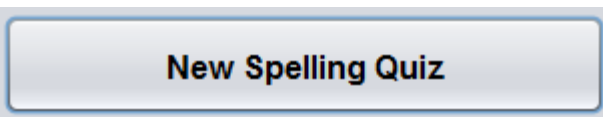


Fig. 2 New Spelling Button

Pressing this will bring you to the category select screen. From that screen you will then be able to go to the quiz screen and quiz your spelling.

Next is the "Review Mistakes" button (Fig. 3). This is similar to the "New Spelling Quiz" button, however, instead



Fig. 3 Review Mistakes Button

of initiating a regular spelling quiz, this starts a review quiz. This kind of quiz is used to go over words you have misspelled recently. The button brings you to the review category select screen and then to the review quiz screen, both of which are described in the Review section.



Fig. 4 View Statistics Button

Whenever you attempt a word in a spelling quiz the result of that attempt is recorded locally and your statistics can be viewed in the statistics screen.

The final button on the menu screen is the "Settings" button (fig. 5). This button will bring you to the settings screen. In this screen, various settings for the application can be set.

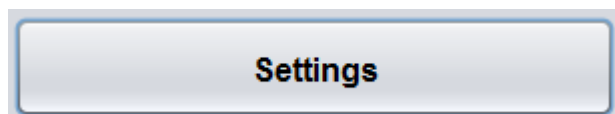


Fig. 5 Settings Button

Category Select Screen

This is the screen in which you select a category to be quizzed on. The Categories are shown in the list section with the name of the file they are from first followed by the names of the category after the slash "/" symbol. e.g. WordFile.txt/Planets: this would represent the "planets" category from the "WordFile.txt" file.



Fig. 6 Category Select Screen

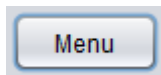


Fig. 7 Menu

The "Menu" button (Fig. 7) in the top left corner is present on every screen except for the menu screen and can bring you back to the menu screen at any time.

In order to be able to start a quiz, you first need to select a category to be quizzed on. Click on one of the categories in the list category list. Once clicked on, an entry in the list will appear selected as in Fig. 8.

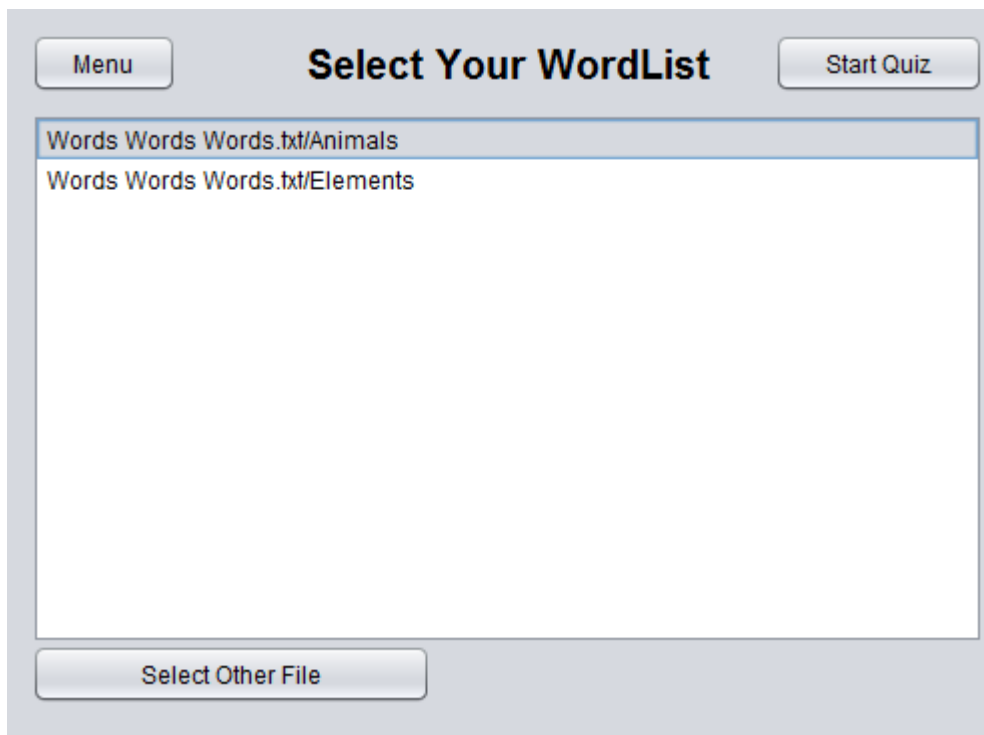


Fig. 8 A selected category

Once you have selected a category in the list, click the "Start Quiz" button (Fig. 9) to proceed to the quiz screen.

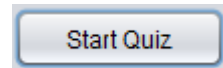


Fig. 9 Start Quiz

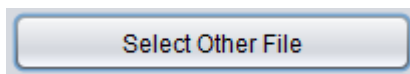


Fig. 10 New Word List Button

If you want to use a word list you or someone else has made, you can import that word list file using the "Select Other File" button (Fig. 10). Clicking this button will open up the File Chooser Window (Fig. 11). With this window you can select a file to be copied VOXSPELLs wordlist directory. All categories in that file will then be present in the category list.

The word list files follow the following format:

%Category1	➤ This line represents a category called Category1.
Word1	Category1 contains three words: Word1,
Word2	Word2, and
Word3	Word3.
%Category2	➤ This line represents a category called Category2.
Word4	Word4 and Word5 are in Category2
Word5	

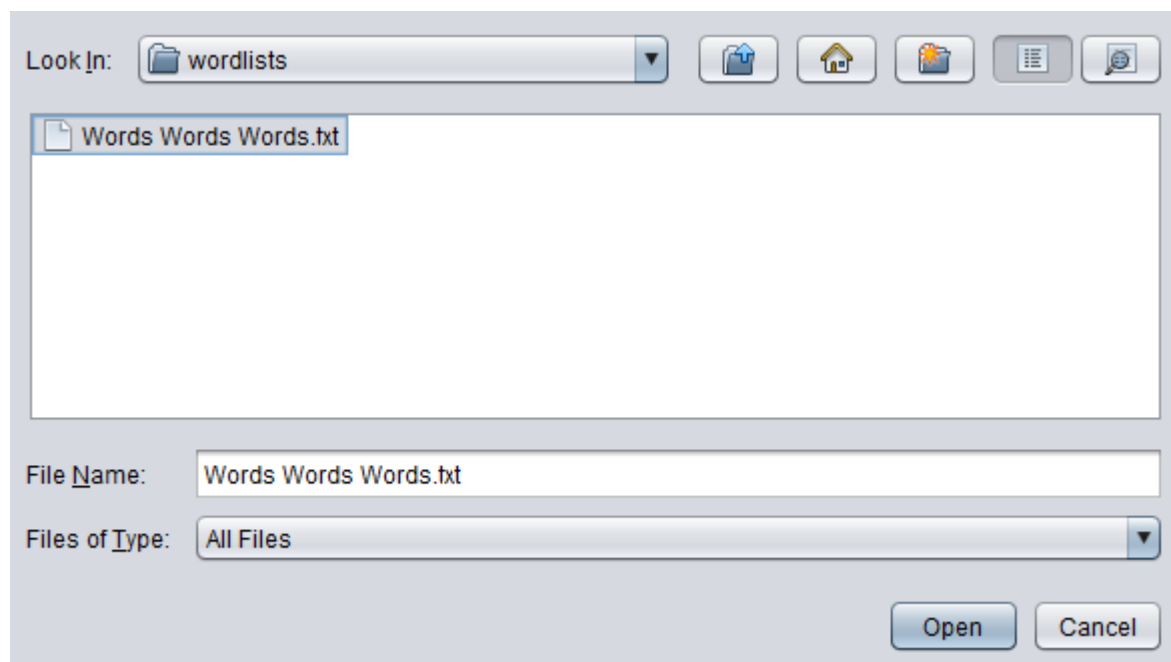


Fig. 11 File Chooser Window

Quiz Screen

This is the screen with the main function of the program. In this screen you will hear a voice saying "Please spell ___" where ___ is a word from the category you selected in the category select screen. You can then attempt to type the word into the text box (Fig. 13), then either press the enter/return key or click the "Submit" button (Fig. 16) to submit your spelling attempt.

If you want to hear the word again click the "Repeat" button (Fig. 15) or press ctrl-space.

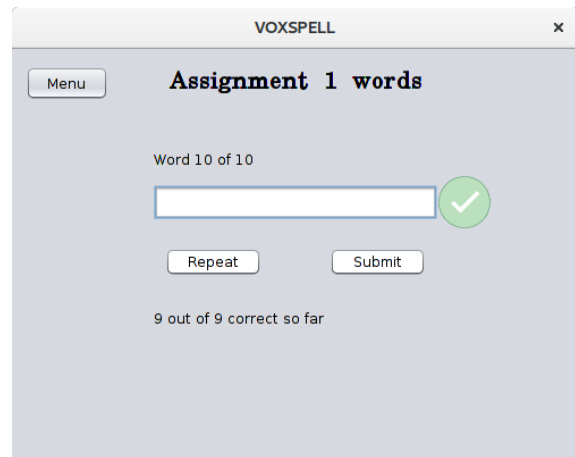


Fig. 12 Quiz Screen

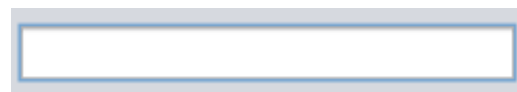


Fig. 13 Quiz Input Box



Fig. 14 Spelling Attempt Result Symbols



After attempting a word VOXSPELL will say either "correct" or "incorrect" and a



Fig. 15 Repeat Button

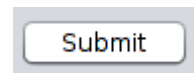


Fig. 16 Submit Button

symbol (Fig. 14) will appear beside the text input box showing you whether you spelled the word correctly or incorrectly. If you spell a word incorrectly VOXSPELL will give you one more opportunity to spell it. If you spell it incorrectly once more VOXSPELL will move on to the next word and it will be recorded that that word was incorrectly spelled. After each word the progress message above the input box and the accuracy message below the buttons will update. A quiz usually has a total of ten words, but if the category selected has less than ten words the quiz will be comprised of the entirety of that category.

End of Quiz

After all of the words in a quiz have been attempted a dialog box will appear. If you successfully completed the quiz the dialog box (Fig. 17) will prompt you to choose to return to the menu, repeat the quiz, or watch the

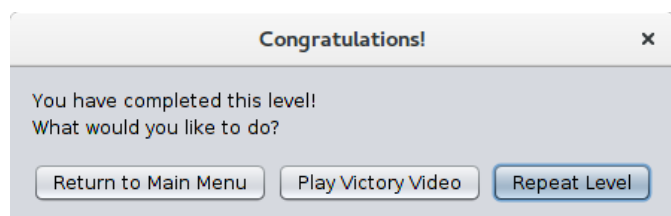


Fig. 17 Successful Quiz End Dialog Box

victory video. In order to successfully complete the quiz you must get at most one word

incorrect, and if the quiz has only one or two words, you must get all words correct. If you did not successfully complete the quiz the dialog box (Fig. 18) will only give you the options of returning to the menu, or repeating the level.

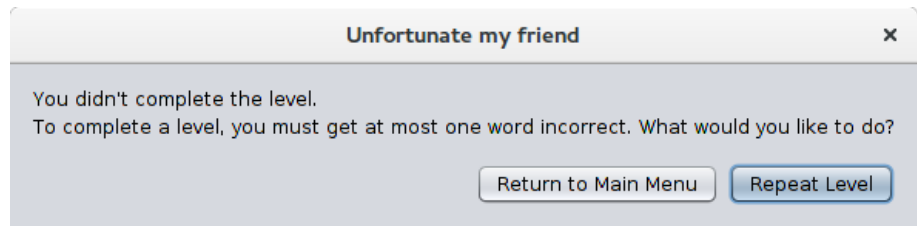


Fig. 18 Unsuccessful Quiz End Dialog Box

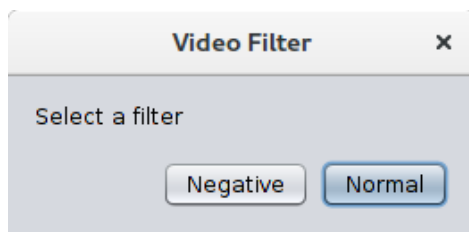


Fig. 19 Video Filter Select

If you choose to view the victory video, a dialog box will appear, prompting you to choose a filter for the video. Selecting "Normal" will play the regular video, whereas selecting "Negative" will apply a negative filter to the video before playing it. After selecting one of the options, a window will appear and

the video will begin to play. You can pause the video with the pause button. The button will then be replaced by a play button, which, upon clicking, will resume the video from where it was paused. There is also a stop button which will stop the video, allowing you to play it again from the start. Close the window with the default operating system close button.

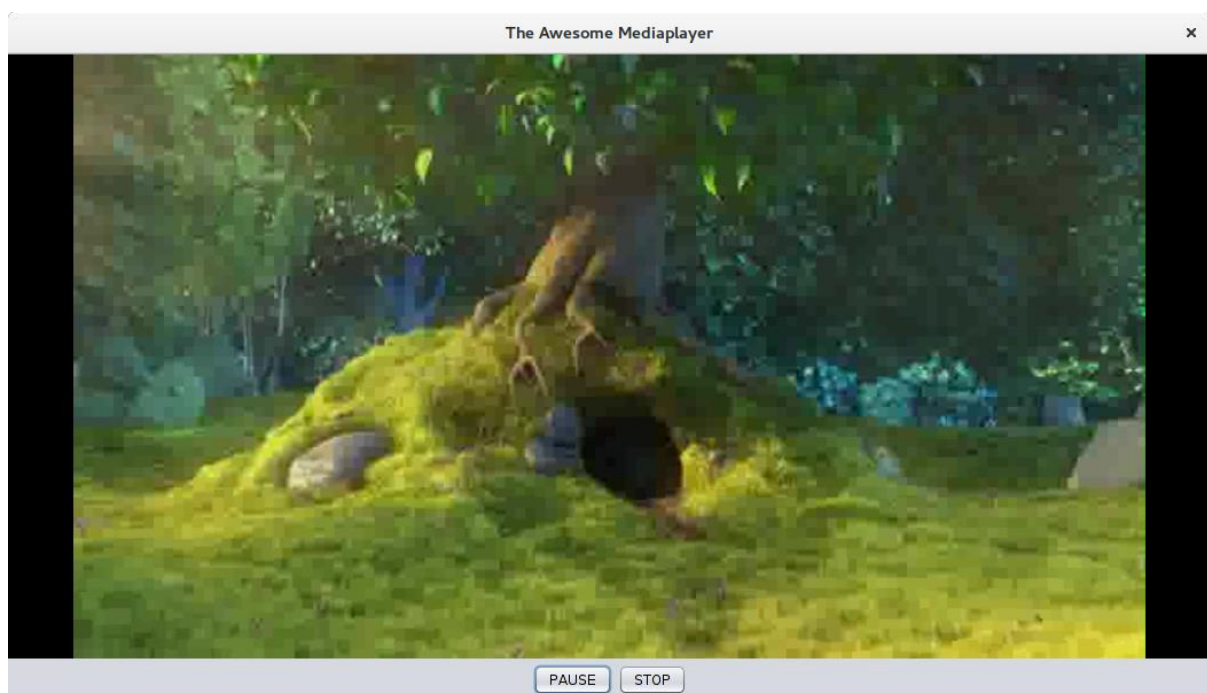


Fig. 20 Victory Video Player

Review Mode

Review mode is a type of quiz where you get quizzed on words you are less proficient at spelling. There are two criteria for words to be quizzed on in review mode: Least known words; and all words without three stars.

You can change which criterion review mode uses by clicking on the review criterion buttons (Fig. 22). By clicking on

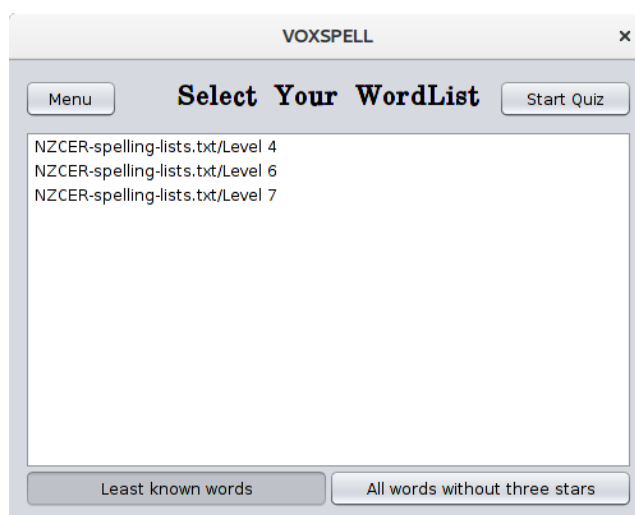


Fig. 21 Review Mode Category Select Screen

the “Least known words” button you can be quizzed on the words you have had the most trouble spelling, i.e. the words with a score of only one or less stars in the statistics screen. By clicking on the “All words without three stars” button you can be quizzed on all words with less than three stars in the statistics screen. Switching between criteria immediately changes the categories in the list to include all categories with words meeting the selected criterion.



Fig. 22 Review Criteria Buttons

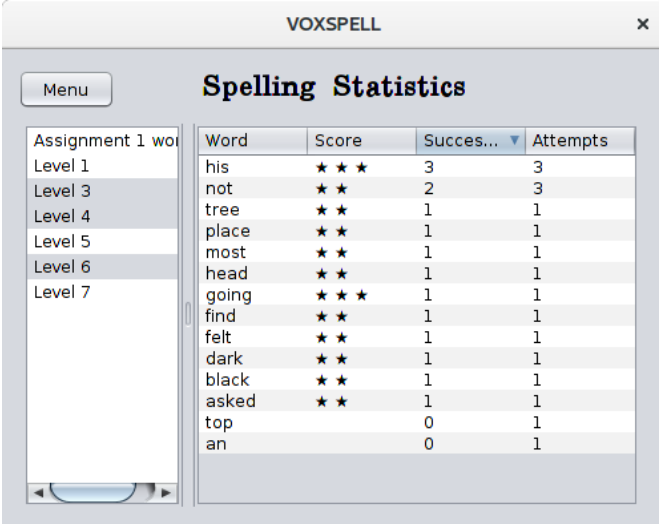
The only difference between the review mode category select and the regular category select is the criteria. The rest of the features function the same.

Once you click “Start Quiz” VOXSPELL will bring you to the review mode quiz screen. This functions the same as the regular quiz screen until quiz completion. There is no option for a victory video in review mode.

Statistics Screen

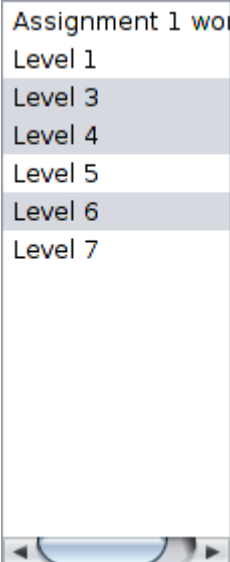
This is the screen where you can see statistics on the words you have attempted.

The List on the left of the screen (Fig. 24) shows all the categories with words you have attempted. Clicking on these categories adds and removes the attempted words of that category from the statistics



Word	Score	Succes...	Attempts
his	★ ★ ★	3	3
not	★ ★	2	3
tree	★ ★	1	1
place	★ ★	1	1
most	★ ★	1	1
head	★ ★	1	1
going	★ ★ ★	1	1
find	★ ★	1	1
felt	★ ★	1	1
dark	★ ★	1	1
black	★ ★	1	1
asked	★ ★	1	1
top		0	1
an		0	1

Fig. 23 Statistics Screen



Assignment 1 words
Level 1
Level 3
Level 4
Level 5
Level 6
Level 7

Fig. 24 Statistics List

The statistics table on the right of the screen (Fig. 25) shows statistics for the attempted words in the selected categories. For each word the table has a score, and successes count, and an attempts count. The score shows you how many times out of your most recent attempts you successfully spelled the word. The success count shows you the total number of times you have successfully spelt the word. The attempts count shows you the total number of times you have been quizzed on the word.

The bar between the list and the table can move horizontally by clicking and dragging it in order to view either the list or the table more clearly. The columns of the table can also be resized by clicking and dragging the edges between the column headers.

Word	Score	Succes...	Attempts
his	★ ★ ★	3	3
not	★ ★	2	3
tree	★ ★	1	1
place	★ ★	1	1
most	★ ★	1	1
head	★ ★	1	1
going	★ ★ ★	1	1
find	★ ★	1	1
felt	★ ★	1	1
dark	★ ★	1	1
black	★ ★	1	1
asked	★ ★	1	1
top		0	1
an		0	1

Fig. 25 Statistics Table

Settings Screen

This is the screen in which you can change various settings for the VOXSPELL program. You have the ability to change the voice used, add new word lists and clear the statistics.

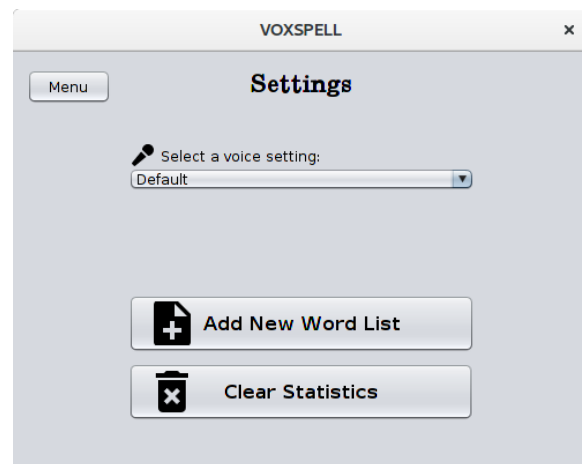


Fig. 26 Settings Screen

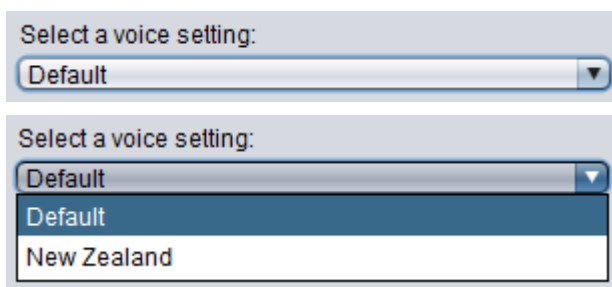


Fig. 27 Voice Settings

The first option is to select a voice setting (Fig. 27). Using this dropdown menu you can change between the default voice and the New Zealand voice. This change will take effect immediately.

Next is the option to add a new word list.

This function is also possible in the category select screen. The functionality is described in the category select section.

The final option is the "Clear Statistics" button (Fig. 28). This button will bring up a dialog box (Fig. 29) which ask for confirmation of deletion. If you



Fig. 28 Clear Statistics Button

click yes, all data in the Statistics screen will be deleted and there will be no words to review. All your word lists will remain. If you click no the dialog box closes and nothing happens.

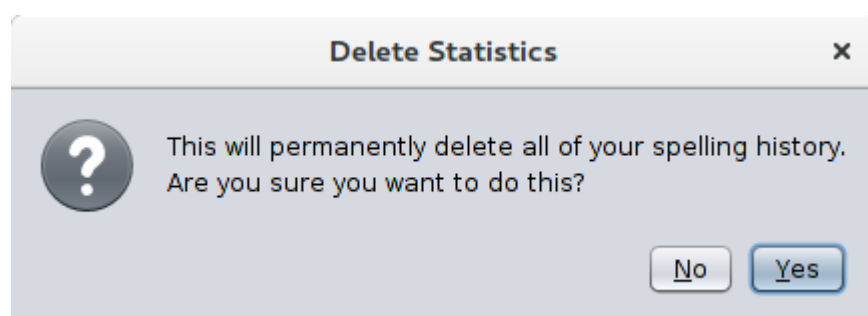


Fig. 29 Clear Statistics Dialog Box

Acknowledgements

Ray Akau' ola for assistance with the development of the VOXSPELL application.

Nasser Giacaman and Catherine Watson for lending me the skill to create VOXSPELL.

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Caprica Software for the creation of VLCJ; the media player used in VOXSPELL.

Open source icons obtained from:

<http://design.google.com/icons/>

<http://icons8.com/>

Default victory video:

Bick Buck Bunny - (c) copyright 2008, Blender Foundation / www.bigbuckbunny.org