SOFTENG 206 PROJECT-VOXSPELL USER MANUAL

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1.0   Introduction

1.1 VOXSPELL Specifications

This user manual is intended to help new users of VOXSPELL understand the main functionality of this spelling aid. To take advantage of all the innovative features in this application, please refer to the Table of Contents to browse through the relevant sections.

The music provided in this application is all self-recorded original material, and should not be redistributed without prior consent. Please send any queries about the music to the email address provided in the title page.
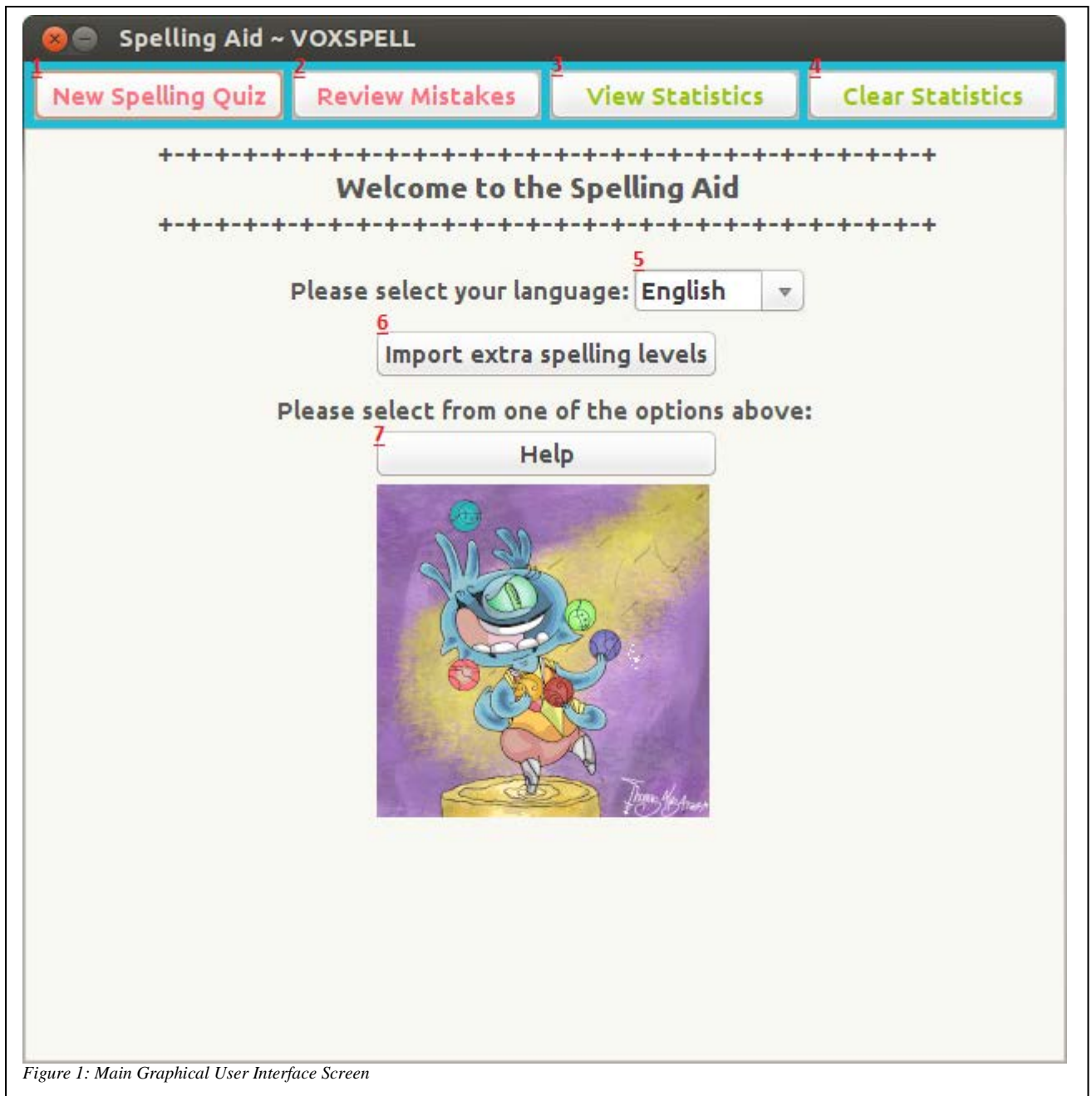
The GIF images used in this application are all open-source images retrieved from giphy.com.

Finally, the video material used for this application was sourced from the film *Big Buck Bunny*, an open source film under the Creative Commons License Attribution 3.0.

1.2 Getting Started

To start this application, please unzip the project folder from the archive file. Then, please navigate to the folder containing the jar file named "SpellingAid.jar". After that, run the command "bash execSpellingAid.sh". When running the Graphical User Interface for the first time, please be patient with the run time needed for the application to load.

2.0   Main Screen

Figure 1: Main Graphical User Interface Screen

This is the main screen of the application. Users should be able to listen to background music composed by Paganini and performed on the violin. The GIF image of the alien should be juggling five different coloured balls in the background.

1) Press New Spelling Quiz to try quizzes of 10 words in length from different difficulty levels.
2) The Review Mistakes function allows the user to try words previously failed in New Spelling Quiz.
3) The user can view the statistics of previously attempted words using the View Statistics button.
4) The Clear Statistics function clears all previous statistics on attempted words.
5) This application provides limited support for Chinese and Japanese learners. Please see the Appendix for the relevant translated screens.
6) Use the Import extra spelling levels button to try spelling user-inputted spelling words
7) Use the help function to read about the button functionality within the application.

Note: an example of a level selector for New Spelling Quiz and Review Mistakes can be seen in Sec. 12.3.

3.0   New Spelling Quiz

Figure 2: New Spelling Quiz Screen

In this mode, listen to the prompts and spell the words asked. Green words indicate a correct word, blue words indicate a faulted word, and red words indicate a failed word in a particular quiz.

1) The progress bar at the top of the screen shows the current progress in a spelling quiz.
2) The white text box can be used to type in words while listening to the spelling prompts.
3) The score for a spelling session is kept, alongside a personal best score across different sessions.
4) If the meaning of the word asked is not clear, please use this button to understand the word's context.
5) If the pronunciation of the word is not clear, please listen to the word again.
6) The user can quit a quiz at any time, but audio and video rewards will not be available.
7) Users can change from the default voice into the native Auckland voice.
8) The accuracy indicator shows the current accuracy percentage for a particular level.
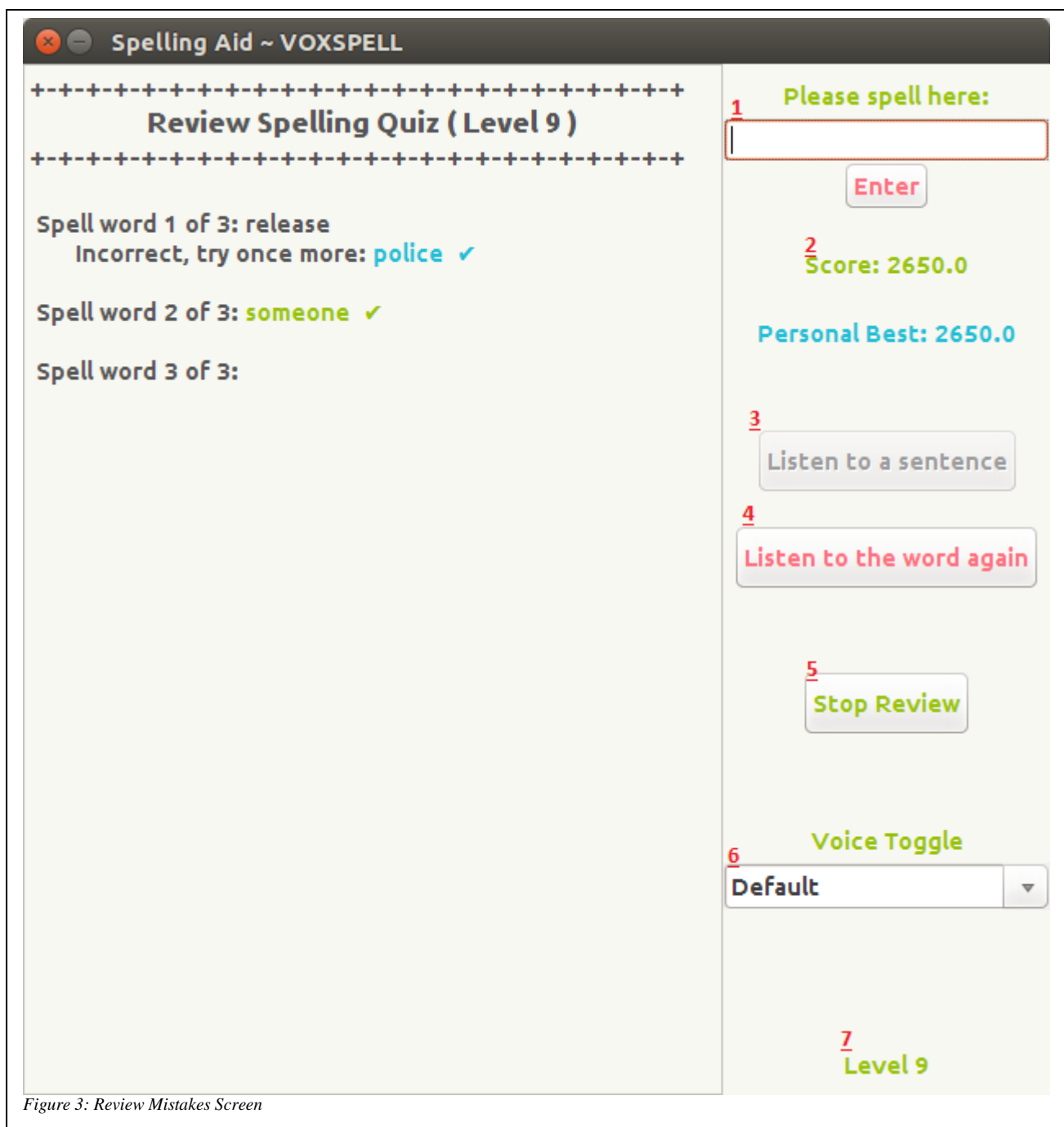
4.0   Review Mistakes

Figure 3: Review Mistakes Screen

This mode has similar functionality to the New Spelling Quiz functions, but there are a few differences. The most obvious difference is the omission of the progress bar.

1) The user can still type the tested word while the spelling prompts are heard.
2) The scores and personal best scores also update as words are attempted.
3) The 'Listen to a sentence' button is disabled as users should not get any contextual hints when reviewing failed words.
4) Users can also use the 'Listen to the word again' button to hear a word again in the review mode.
5) The review session can be terminated at any time when the spelling prompts have finished.
6) The default voice of VOXSPELL can be changed into the native Auckland voice.
7) The accuracy indicator is not relevant for the review mode, so only the current level is displayed.
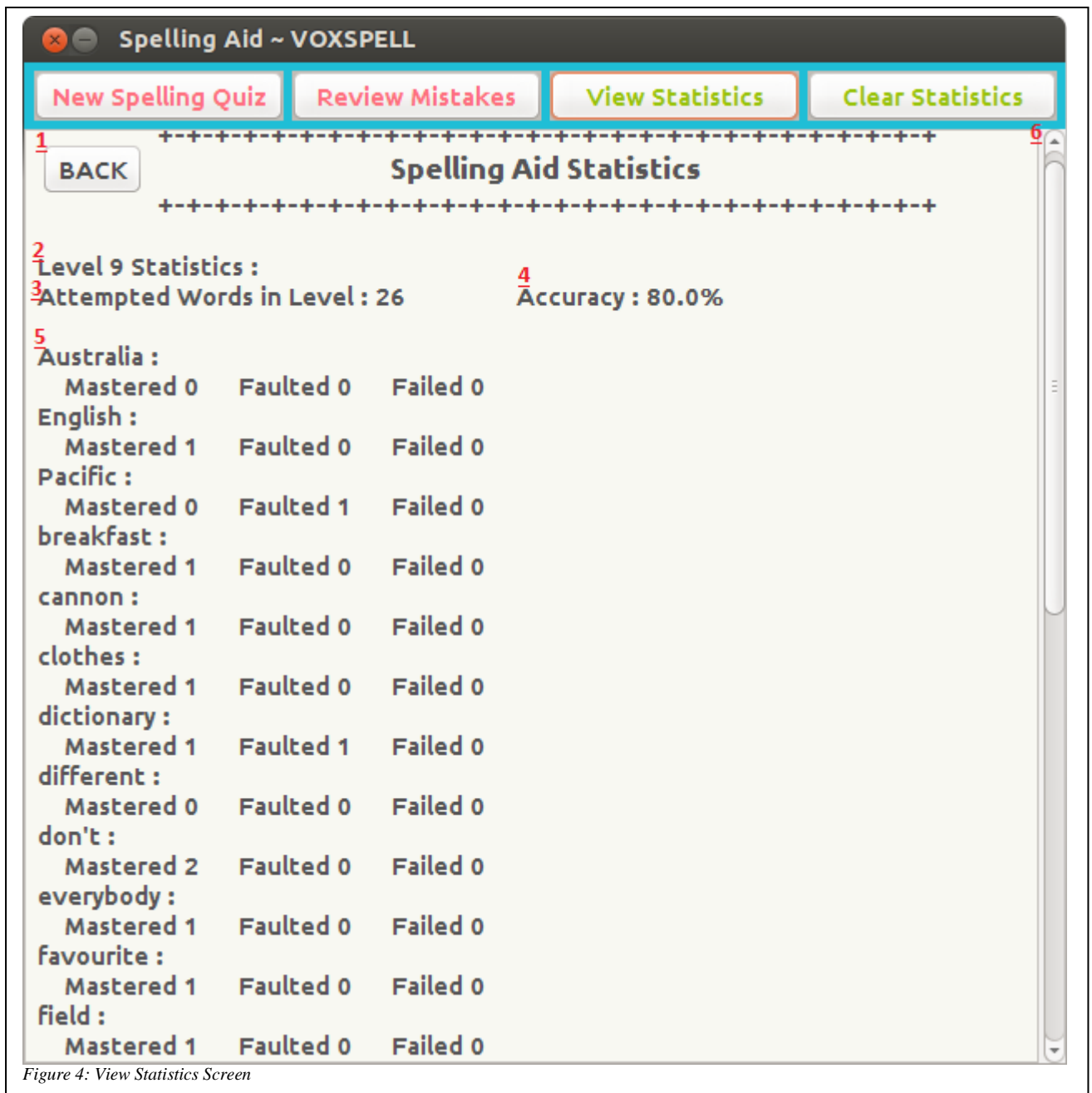
5.0   View Statistics

Figure 4: View Statistics Screen

This is the default screen displayed for spelling statistics. The relevant information from this function is explained below:

1) The back button is used to return to the Main GUI Screen.
2) The word statistics are sorted in terms of the level the spelling word is in.
3) A running count of attempted words in a level is displayed under the spelling level.
4) The accuracy rate for a level is displayed, which is also visible from New Spelling Quiz.
5) For each word in a level, the mastered, faulted and failed statistics are listed out. The words are ordered in alphabetical order for any capitalised words, followed by lower case words.
6) A scroll bar is provided for the user to see all statistics stored in the application.
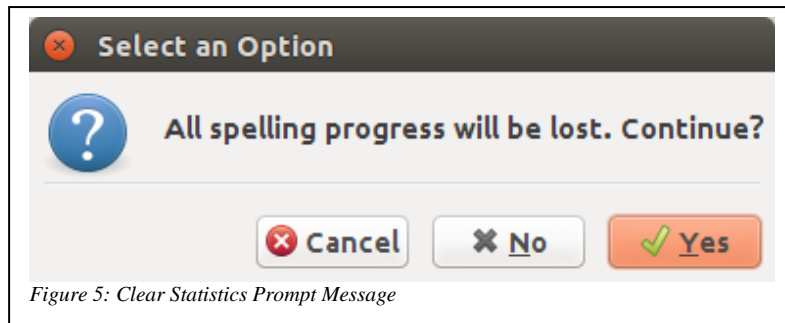
6.0 Clear Statistics

Figure 5: Clear Statistics Prompt Message

Figure 6: Clear Statistics Main Message

When the 'Clear Statistics' button is pressed from the Main GUI Screen, a textual prompt is displayed, asking the user whether to continue clearing the statistics from VOXSPELL. When the user confirms to clear all statistics, the main window with the message "All Spelling Statistics Cleared" will be shown.
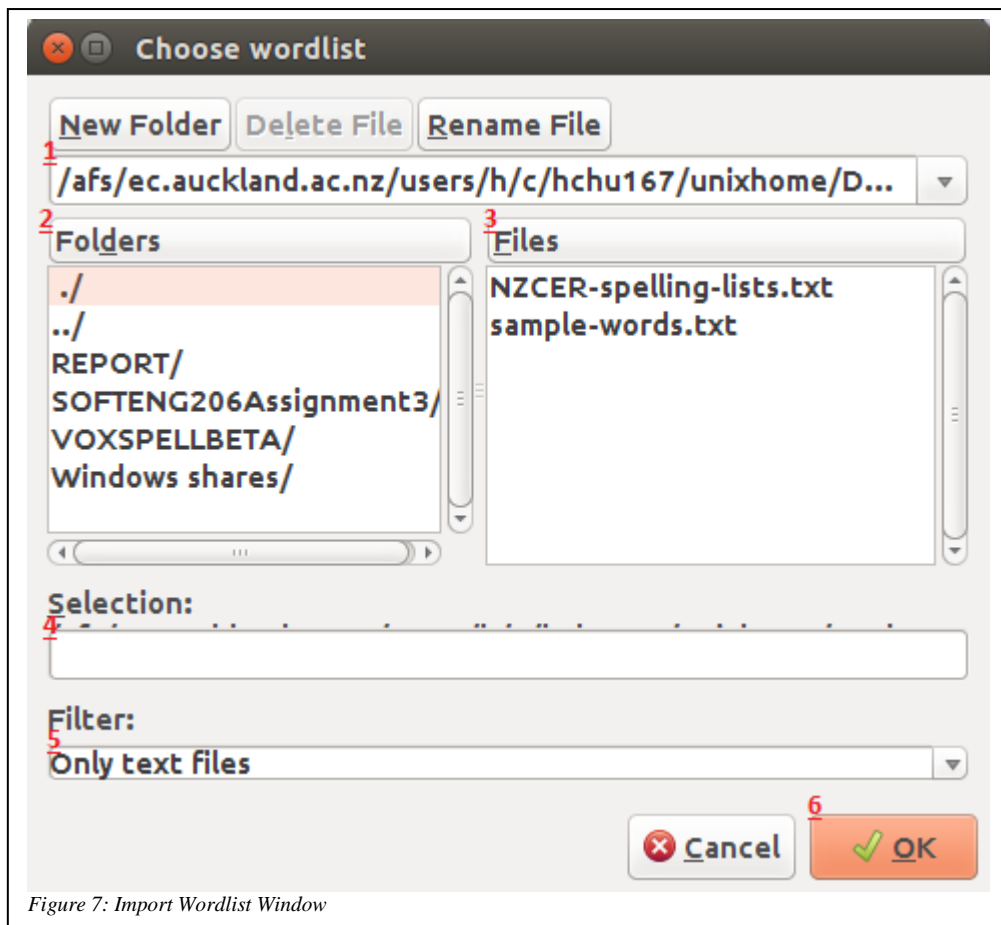
7.0 Import Extra Spelling Levels

Figure 7: Import Wordlist Window

When 'Import extra spelling levels' is selected, a window is opened that allows the user to import personal text files of spelling words and try those words in the New Spelling Quiz functionality.

An example of an acceptable text file to input words into VOXSPELL will be displayed below:

Figure 8: Example text file

1) In this drop-down box, the user can browse between different folders in the local directory.
2) Below is a list of folders that are visible in the current directory.
3) The list below contains the files eligible to be selected as a word list.
4) When a file is selected, the file will be displayed here.
5) VOXSPELL only accepts the use of text files to store word lists.
6) Press the "OK" or the "Enter" button to import the spelling list.
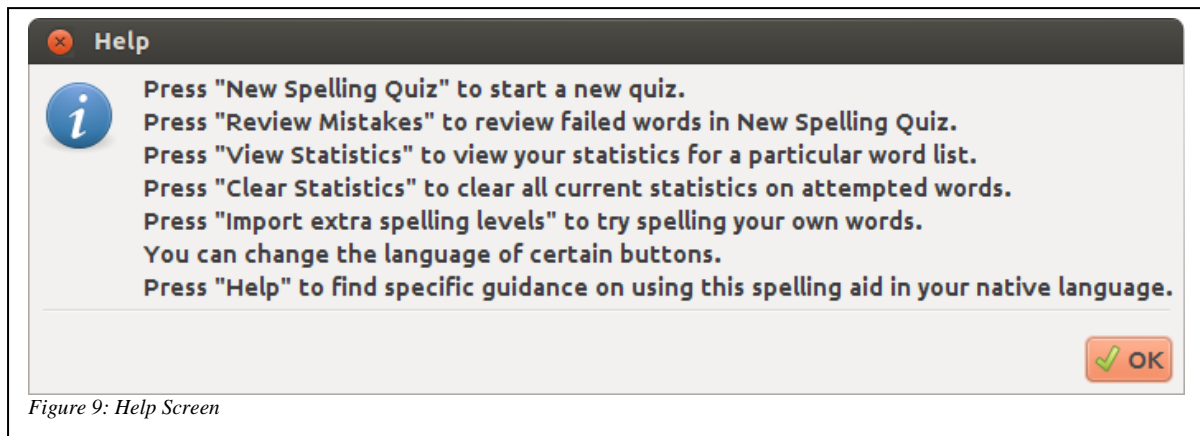
8.0 Help

Figure 9: Help Screen

Users can select the Help option from the Main GUI Screen to read a brief description of the button functionality from inside the application.
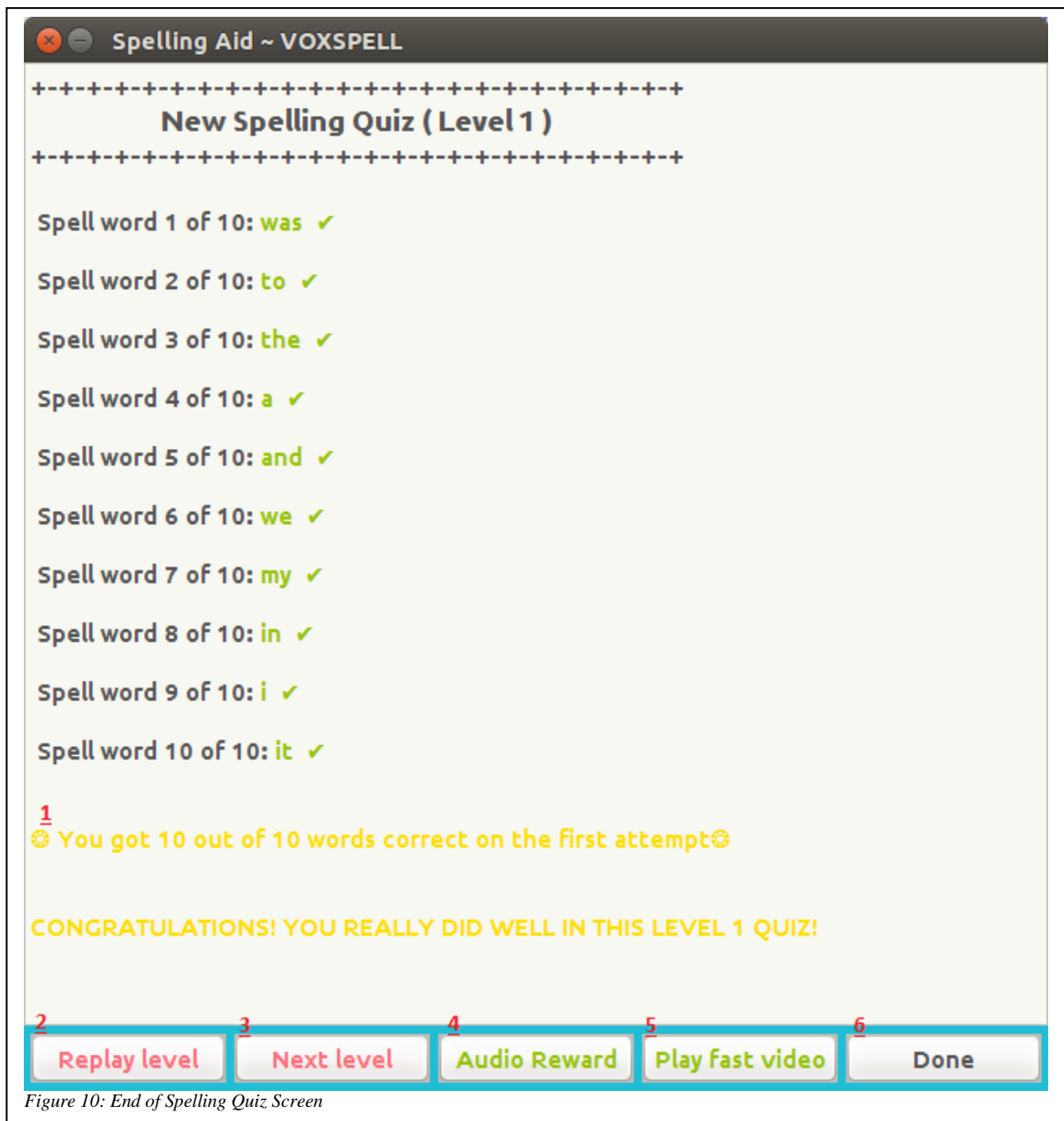
9.0 Continuing a Quiz

Figure 10: End of Spelling Quiz Screen

After word ten is completed from the New Spelling Quiz mode, options are displayed on the bottom tab:
1) The results for the current quiz are displayed, with a congratulatory message for a 10/10 result.
2) The user can try another ten words from the same spelling level.
3) After completing a quiz, the user can take a challenge and attempt the words in the next level.
4) When the user has achieved a certain score, audio rewards can be played. Note that the default functionality of this button is to play a video clip of *Big Buck Bunny*.
5) For language learners who would like to watch an edited version of *Big Buck Bunny*, the button 'Play fast video' will play the original video clip in double the speed
6) After completing a quiz, the 'Done' button navigates the user back to the Main GUI Screen.

10.0 Scoring System and Rewards

10.1 Scoring System

The score allocated for every word attempted in a spelling quiz or a spelling review is simple. 100 points are awarded for every correct word, 50 points are awarded for every faulted word, and 50 points are deducted for every failed word.

A personal best score is kept by VOXSPELL so the highest score achieved in the application will be recorded until the statistics are cleared.

10.2 Video Reward

The standard reward for achieving a result of 9/10 or better in a particular quiz enables the user to watch a video clip of *Big Buck Bunny*. The video player functionality will be explained below:
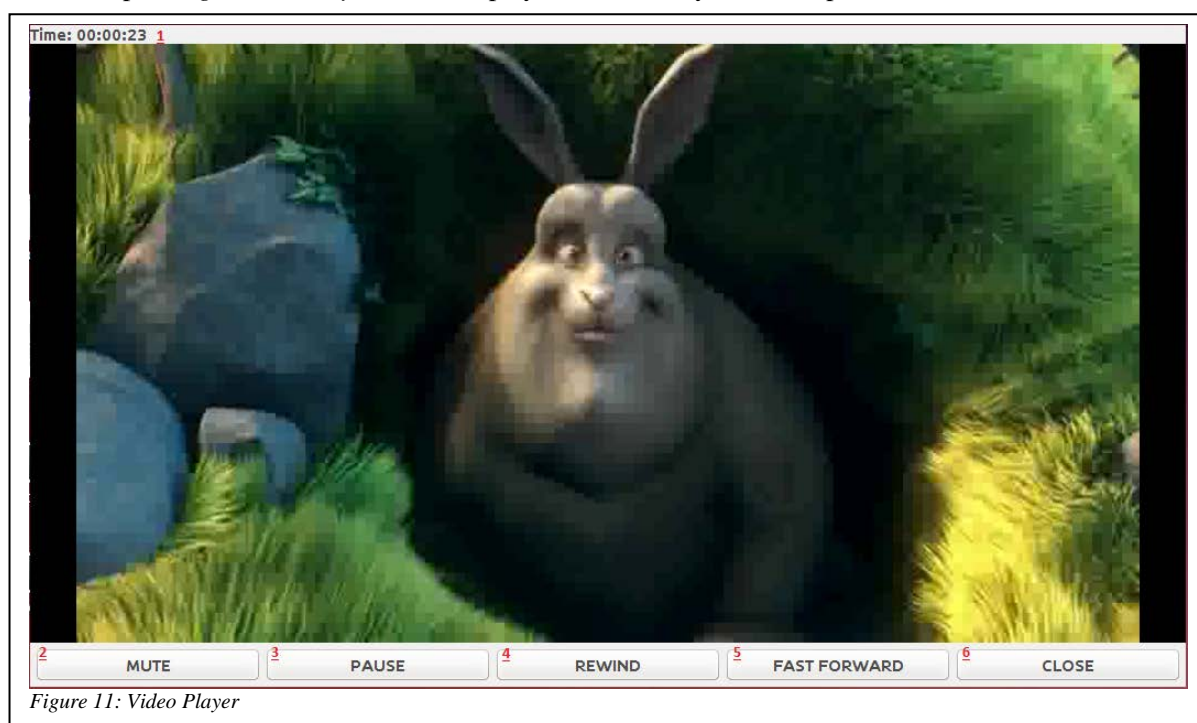

Figure 11: Video Player

1) The current time elapsed in the clip is displayed at the top of the video player.
2) Users can mute the sound of the video when the video is running.
3) Press the 'PAUSE' button to temporarily stop the playback of the video. The 'PAUSE' button will become the 'PLAY' button to allow the user to execute the video playback again.
4) Sections of the video can be replayed by pressing the 'REWIND' button
5) If parts of the video are not very entertaining, these sections can be skipped over.
6) Press the 'CLOSE' button to stop the video and return to the End of Spelling Quiz Screen.
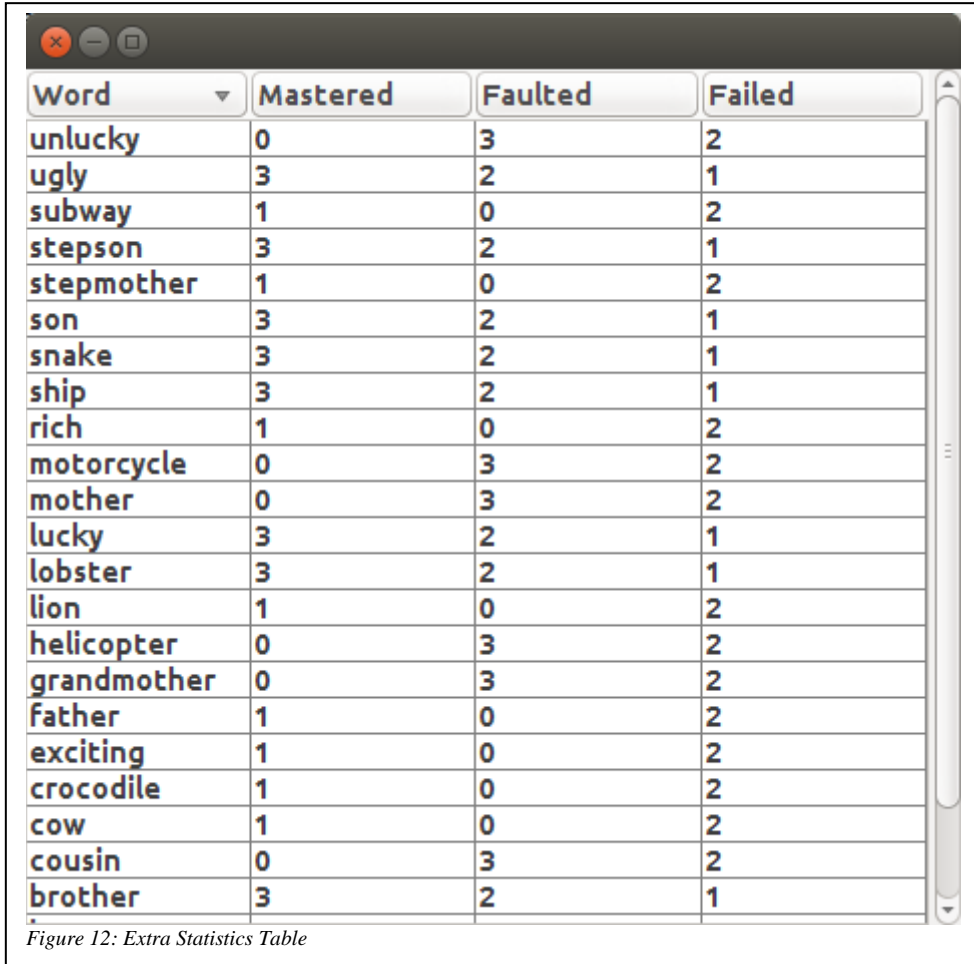
10.3 Audio Reward

There are two main audio rewards available for this application. When a score of 1000 and 5000 are achieved, a different audio reward can be played if a quiz result of 10/10 is achieved. There is a special surprise for the user that achieves a score of 10000 and exits the spelling aid.

11.0 Interesting Features

11.1 Extra Statistics

When the statistics for user imported words are shown, they are displayed in a table displaying the words and their mastered, faulted and failed statistics. All the columns of the table can be ordered in alphabetical and numerical order, or in reverse alphabetical and numerical order.

Word	Mastered	Faulted	Failed
unlucky	0	3	2
ugly	3	2	1
subway	1	0	2
stepson	3	2	1
stepmother	1	0	2
son	3	2	1
snake	3	2	1
ship	3	2	1
rich	1	0	2
motorcycle	0	3	2
mother	0	3	2
lucky	3	2	1
lobster	3	2	1
lion	1	0	2
helicopter	0	3	2
grandmother	0	3	2
father	1	0	2
exciting	1	0	2
crocodile	1	0	2
cow	1	0	2
cousin	0	3	2
brother	3	2	1

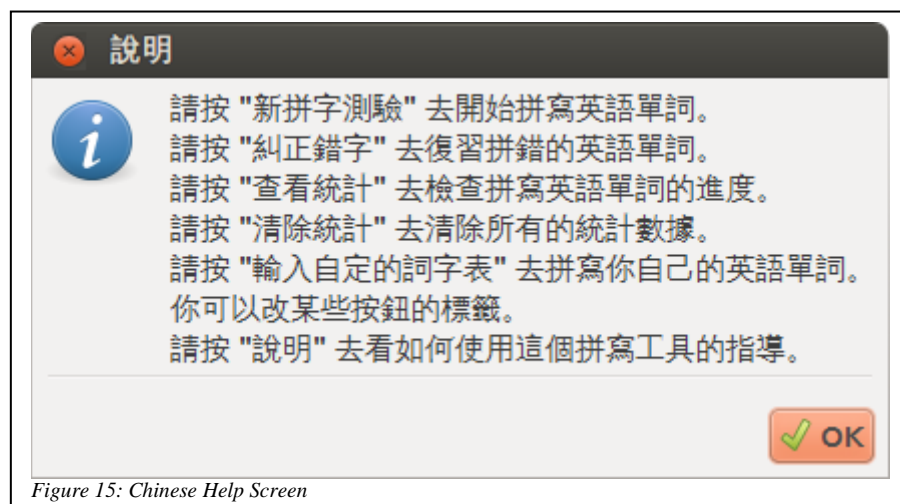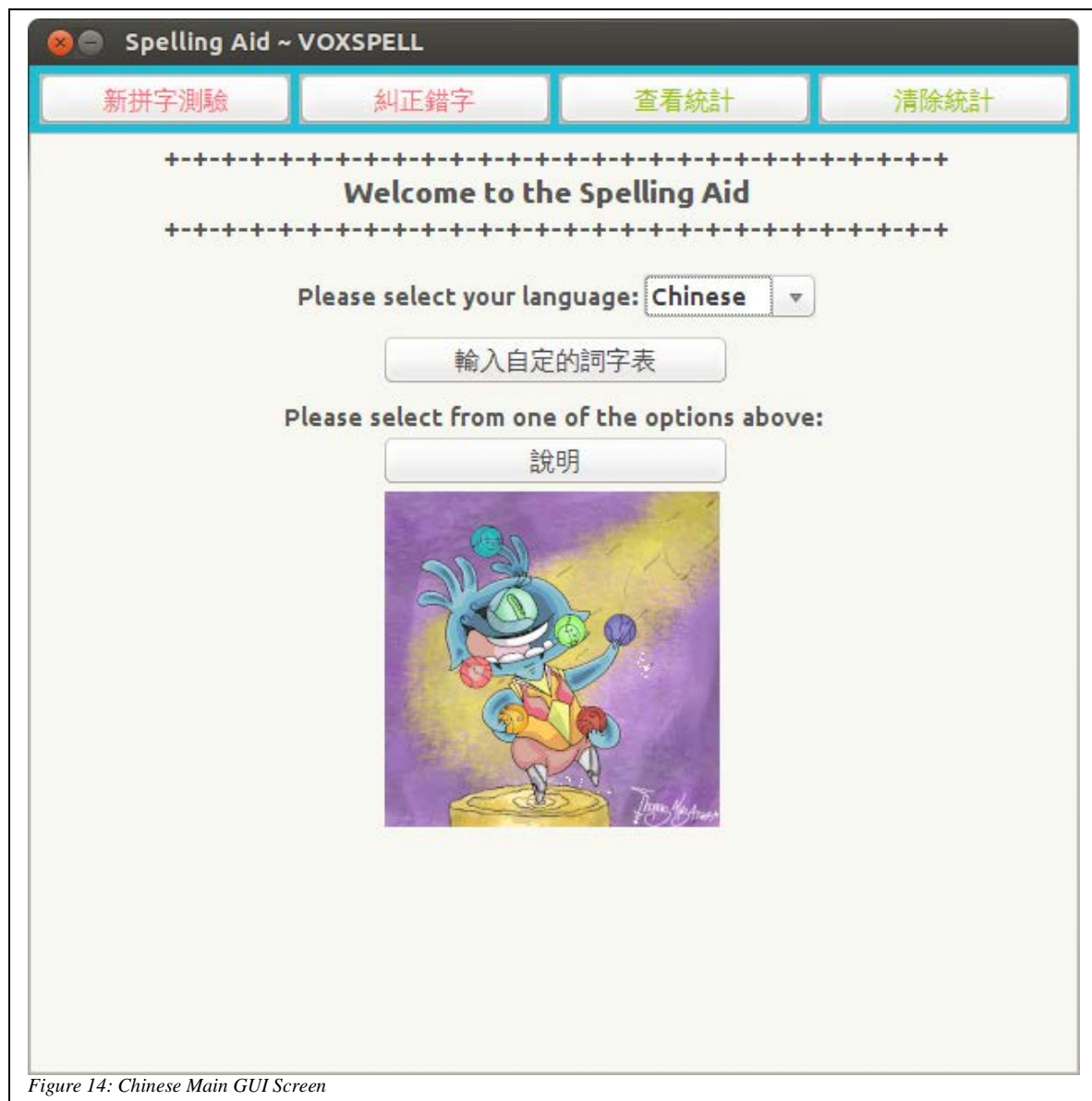*Figure 12: Extra Statistics Table*

11.2 Interesting GIF Images

When a user receives a score of 6/10 or below, or exit a quiz prematurely, the Graphical User Interface changes the GIF image from the happy juggler to a flailing imp. When this occurs, please remember to try and achieve a better score in the next quiz.

Figure 13: Flailing Imp GIF

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12.0 Appendix

12.1 Chinese Translated Screens

Figure 14: Chinese Main GUI Screen

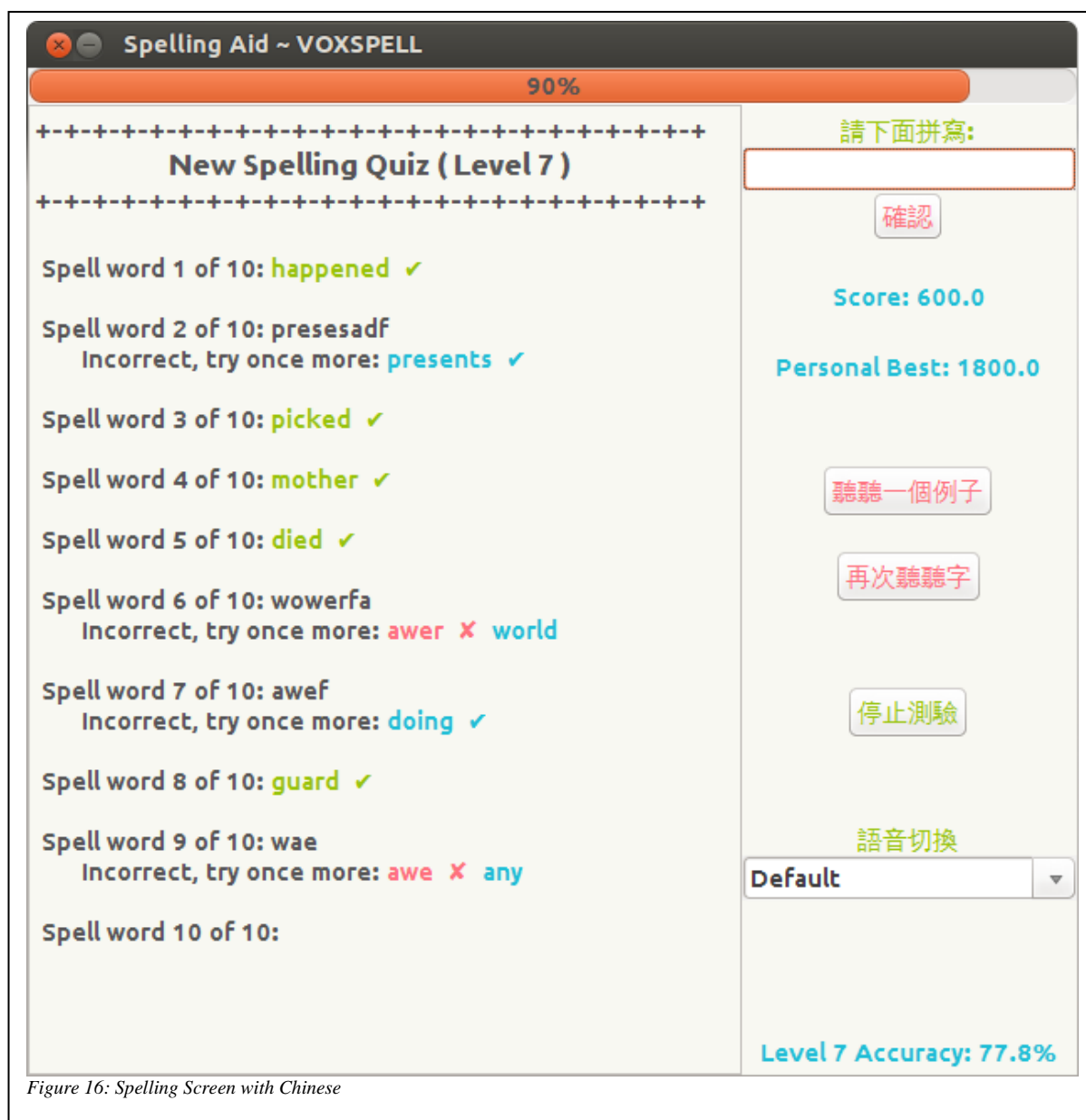
Figure 15: Chinese Help Screen

Figure 16: Spelling Screen with Chinese

Figure 17: Chinese End of Quiz Screen

Figure 18: Chinese Clear Statistics Prompt

Figure 19: Chinese Clear Statistics Main Message

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12.2 Japanese Translated Screens
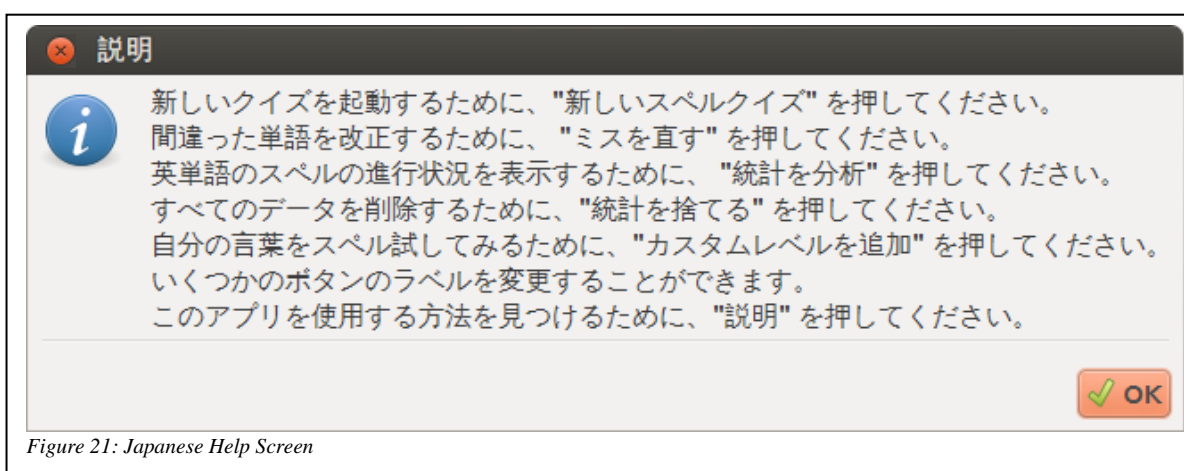

Figure 20: Japanese Main GUI Screen

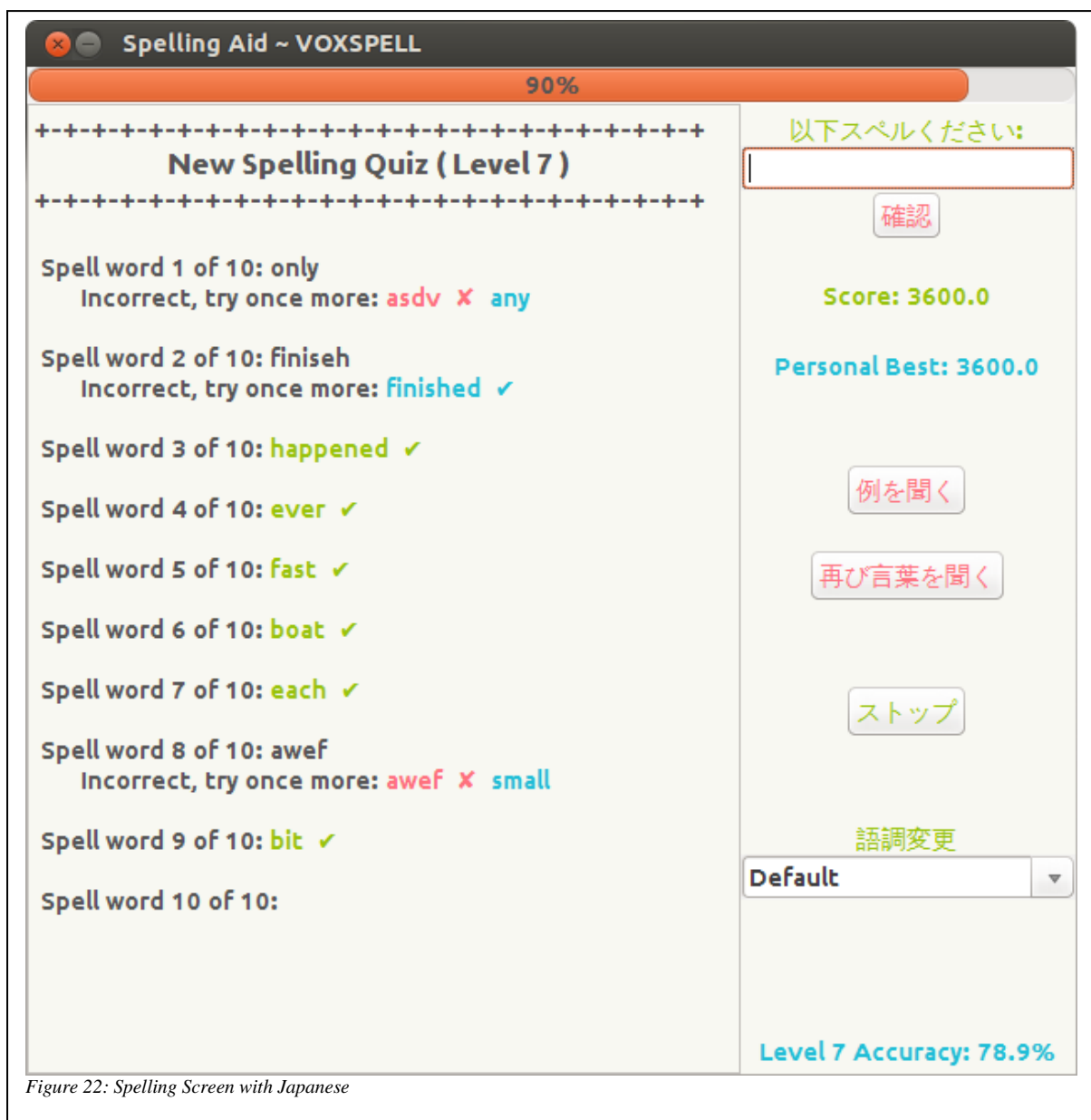*Figure 21: Japanese Help Screen*

Figure 22: Spelling Screen with Japanese

Figure 23: Japanese End of Quiz Screen

Figure 24: Japanese Clear Statistics Prompt

Figure 25: Japanese Clear Statistics Main Message

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12.3 Miscellaneous Screens in VOXSPELL

Figure 26: Level Selector with Extra Levels

Note: Press the Extra button to navigate to a custom level selector similar to Figure 27.

Figure 27: Custom Level Selector

Figure 28: Default Level Selector