**Black Box Testing**

**Gameplay and word translation testing**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Settings** | **Purpose of Test** | **Output** | **Input** | **Expected Result** | **Actual Result** | **Comments** |
| **Spanish, easy difficulty, Common Nouns, easy words, from Foreign to English format.** | To test a sample combination of settings, and see if they work for a single word | casa | house | "Correct answer!" |  | Actual result was as expected, and all words worked (evidence only shown for one) |
| **Dutch, medium difficulty, Common Verbs, medium words, from Foreign to English format.** | To test a sample combination of settings, and see if they work for a single word halfway through the list | slapen | bed | "Incorrect answer" |  | Actual result was as expected, and all words worked (evidence only shown for one) |
| **German, hard difficulty, Family, Word Set 1, from Foreign to English format.** | To test a sample combination of settings, and see if they work for a single word at the end of the list |  |  |  | And, once ending: | Actual result was as expected, and all words worked (evidence only shown for one) |
| **Finnish, easy difficulty, Phrases, Set 2, from Foreign to English format.** | To test a sample combination of settings, and see if they work for a single word with unusual input | kuinka paljon on- | ?##%$ | "Incorrect Answer" |  | Actual result was as expected, and all words worked (evidence only shown for one) |
| **Italian, medium difficulty, Activities, All Words, from English to Foreign format.** | To test a sample combination of settings, and see if they work for a single word in all caps | walking | CAMMINARE | "correct answer" |  | Actual result was as expected, and all words worked (evidence only shown for one) |
| **Portuguese, hard difficulty, Pronouns, all words, from English to Foreign format.** | To test a sample combination of settings, and see if they work for a single word | you | voce | "Correct answer!" |  | Actual result was not as expected. The program does not accept unaccented equivalents of accented letters, making the English-Foreign format very difficult. |
| **Turkish, easy difficulty, Colours, all words, from Foreign to English format.** | To test a sample combination of settings, and see if they work for a single word | kahverengi | brown | "Correct Answer!" |  | Actual result was not as expected, and the suggested answer was incorrect. This suggests an error within the hard-coded translation to begin with. |

**UI and Menu Navigation testing**

|  |  |  |  |
| --- | --- | --- | --- |
| **What is being tested?** | **Expected Result** | **Actual Result** | **Comments** |
| **Language Selection** | -The frame transition animation should occur  -The frame should change to Game Selection  -The chosen language should be set |  | The Actual Result was the same as the Expected Result |
| **Game Selection** | -The frame transition animation should occur  -The frame should change to the correct Settings screen  -The correct game type should be set |  | The Actual Result was the same as the Expected Result |
| **Back Button** | -The frame transition animation should occur  -The frame should change to Game Selection if used from settings...  -...and change to Language Selection if used from the Game Selection | TO | The animation cut out halfway through, as the frame changed, but apart from that everything worked fine.  When going back from the settings, and then from the game selection to the language selection, the frame does not change. |
| **Translation Menu Button** | -The translation screen should appear  -The player must not be able to interact with the game UI  -A list of every English word in the database will be displayed  -The user should be able to translate any one of those words from and to any other language  -An error should notify the user if a word cannot be translated or if it is not in the database | TO | The Actual Result was the same as the Expected Result |
| **Return from Translation Menu** | -Returns the user to whichever screen they were previously at by disappearing the translation menu | TO | The Actual Result was the same as the Expected Result |
| **Play Game Button** | -The frame transition animation should occur  -The frame should change to the correct game screen  -All chosen settings should be in place | TO    It is shown that the correct settings are in place (these stats will **not** be shown in the final version) | The Actual Result was the same as the Expected Result |
| **Subcategory Combo box detection** | -The corresponding subcategory combo box should appear and be enabled, depending on the size of category previously chosen  -The comboBox must be disabled by default  -The comboBox must become disabled once more if no category is selected | TO    TO | The Actual Result was the same as the Expected Result |
| **Pause** | -The translation screen should appear  -The player must not be able to interact with the game UI  -Three buttons should be on the screen  -The timer, if there is one for the game, must be stopped |  | The Actual Result was the same as the Expected Result |
| **Skip Question,** | -No scoring should take place, either positive or negative  -The next word should be displayed on screen  -The game must end if no more words remain  -The round number should increase, as well as the score, should the answer be correct | TO | The Actual Result was the same as the Expected Result |
| **Answer (with the enter key)** | -The player must be scored on whether or not the answer was correct  -UI response should accurately notify them of whether or not the answer was correct. This is shown both by the words appearing above the answer, as well as the tick/X-mark next to the input text.  -If the answer was incorrect, the correct answer must be shown  -The next word should be displayed on screen  -The game must end if no more words remain  -The round number should increase, as well as the score, should the answer be correct | TO | The Actual Result was the same as the Expected Result |
| **Answer (with the onscreen button)** | -The player must be scored on whether or not the answer was correct  -UI response should accurately notify them of whether or not the answer was correct. This is shown both by the words appearing above the answer, as well as the tick/X-mark next to the input text.  -If the answer was incorrect, the correct answer must be shown  -The next word should be displayed on screen  -The game must end if no more words remain  -The round number should increase, as well as the score, should the answer be correct | TO | The Actual Result was the same as the Expected Result. However, "hermoso" is the incorrect word for "girl". The correct word would be "chica". |
| **Replay** | -The frame transition animation should occur  -Should replay the game they were previously playing with the same settings | TO    (transition)  TO | The Actual Result was the same as the Expected Result |
| **New Game** | -The frame transition animation should occur  -Returns the user to the Game Selection screen | TO    (transition)  TO | The Actual Result was the same as the Expected Result |
| **Return from Pause Menu** | -Returns the user to their game by disappearing the pause menu  -Timer must continue if previously present prior to pausing | TO | The Actual Result was the same as the Expected Result |
| **Return to Menu from Pause** | -The frame transition animation should occur  -The frame should change to Game selection | TO    (transition)  TO | The Actual Result was the same as the Expected Result |
| **Restart game from Pause** | -Returns the user to their game by disappearing the pause menu  -Words and scores and time limit are reset.  -Timer must continue if previously present prior to pausing | TO    TO | The Actual Result was the same as the Expected Result |