

CMP SCI 4500**SG3 – Group 2**

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Test Plan Document**Date of First Test Plan:** 12/08/25

-12/09/25 Additional tests added

-12/12/25 Final program tests added

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Build Concordance (GUI)

Expecting: Clicking “Build Concordance” should generate **Concordance.txt** and **ExtraLists.txt**

Output: Nothing happens after button press.

Issue: Button had no function binding; program did not execute concordance logic.

Fix: Added `b3.config(command=BuildConcordance_Window)` to link button action to function.

Bell 12/08/25 15:27

Close File Dialog

Expecting: “Close File” dialog lists all opened files and removes the selected one from memory.

Output: KeyError displayed after choosing file to close.

Issue: Listbox displayed formatted names, not actual dictionary keys.

Fix: Populated Listbox with `all_wordlists.keys()` to ensure valid deletion.

Bell 12/09/25 14:35

GUI Button State After File Removal

Expecting: Once all files are closed, buttons “Search” and “Build Concordance” disable automatically.

Output: Buttons remained clickable and caused crash due to missing data.

Issue: Missing post-check for empty file dictionary.

Fix: Added `if not all_wordlists: ToggleButtonsOff()` at the end of the removal function.

Bell 12/09/25 16:13

Close File Window Validation

Expecting: Warning message shown when no file is selected.

Output: Program froze when user hit “Close File” without selecting any item.

Issue: Missing selection validation before delete operation.

Fix: Added check:

```
if not selection:
    MessageUser("Please select a file to close.")
    return
```

Bell 12/09/25 21:22

Exit Program Confirmation

Expecting: Clicking “Exit” should show confirmation before closing.

Output: Window closed instantly without message.

Issue: No feedback or final confirmation message before destruction of main window.

Fix: Inserted `MessageUser("Exiting SG3 Application.")` before `mainWindow.destroy()`.

Bell 12/10/25 09:32

GUI Freeze Check During Concordance Build

Expecting: Status message appears while concordance builds.

Output: Window appeared frozen with no feedback until build finished.

Issue: Long build loop lacked intermediate user prompt.

Fix: Added `MessageUser("Building concordance... please wait.")` before processing.

Bell 12/10/25 13:11

GUI Start Up Test Incorrect Inputs

Expecting: Program should not function until usage notification is checked. Options 2-4 should not function until files are inputted.

Output: Second window is frozen until the ok button is clicked. Options 2-4 are greyed out and unusable without files. Buttons 1 & 5 still work properly.

Hill 12/12/25 12:27

File Input Test

Expecting: Program should open a pop up when clicking option 1. Correct files should be added to the list with a confirmation pop up. It should properly handle files that do not exist and display the correct notification.

Output: Program displays the correct popups both when entering correct and incorrect files. It also correctly displays a unique message when the same file is trying to be added twice. Preemptively exiting out of the prompt at any time does not result in errors. 10 file limit is not currently properly enforced.

Fix: Implemented check of `all_wordlists`:

```
if len(all_wordlists) == 10:
    messagebox.showerror('Error', "Error: Maximum files opened. Please close a file before opening a new one.")
    return
```

Hill 12/12/25 12:31, verified by Hoosech, 12/12/25 11:03

Fix By: Hoosech, 12/12/25 10:12

Word Search Test

Expecting: Program should open the proper window when 2 is selected. The proper response for words found and not found in all files. Words already searched should display a notification. Each searched word should be displayed properly with its located file

Output: Window opens properly and shows proper notification for found, not found, and already searched words. Words are correctly displayed with their information, including when it is present in multiple files. Exiting at any point cause no issues. Reopening the window after closing it seems to break the UI visually as it does not display any words. It is still functional mechanically however.

Fix: Modified for loop in SearchWords_Window function

```
for key_word, value_list in hist_word.items():
    tree.insert('', 'end', values=(key_word, "", ""))
    for child_text, child_count in value_list.items():
        tree.insert('', 'end', values=("", child_text, child_count))
```

Hill 12/12/25 12:46, verified by Hoosech 12/12/25 11:07

Fix By: Brown, 12/12/25 10:37

File Closing

Expecting: When selecting option 4 proper window should appear. Selecting a file to remove should display the proper pop up and remove the file from memory.

Output: Window opens properly and removing a file from the window does remove it from memory. The program properly handles exiting at all points. All files being removed results in buttons 2-4 becoming unusable as intended.

Hill 12/12/25 12:51

Concordance File

Expecting: When option 4 is clicked a message should appear. The program should wait to build the file until the user clicks ok. The proper files should be generated with a list of word frequencies.

Output: The proper message is displayed and once clicked the files are generated. The generated files properly display all words and their corresponding information for all loaded files.

Hill 12/12/25 1:03

Exiting

Expecting: The exit button should display a message, waiting for the user to click ok to terminate the program. The button should function properly at all points.

Output: The exit button behaves as expected and is usable/not usable at all points it should be.

Hill 12/12/25 1:06