

Project SG2 for Keith Miller @ CS4500

SG2 (Group 5) Developers:

Caleb Jacobs, Cynthia Brown, De'Ja Thompson,
Dheaven Hill and Gabe Jackson

- No major revisions for design document started and completed on 11/10/2025 by De'Ja Thompson

Pseudocode:

DISPLAY welcome message and explain SG2 features

Initialize lists for files, seen filenames, and queries

REPEAT

 Prompt user for a .txt file

 IF invalid or duplicate THEN display error

 ELSE extract lowercase words, count total and distinct

 store file data and display summary

UNTIL user stops or 10 files added

IF no files loaded THEN end program

DISPLAY table of filenames, totals, and distinct counts

REPEAT

 Ask user for a word to search

 FOR each file display how many times word appears

 Record search results

UNTIL user stops

DISPLAY summary of all searched words

Assign each file a number in order added

Build concordance mapping each word to all file-line-word locations

Sort words alphabetically and write concordance to screen and CONCORDANCE.TXT

Create word statistics for total counts and file appearances

Generate three extra lists:

 1. Top ten words with total occurrences and number of files

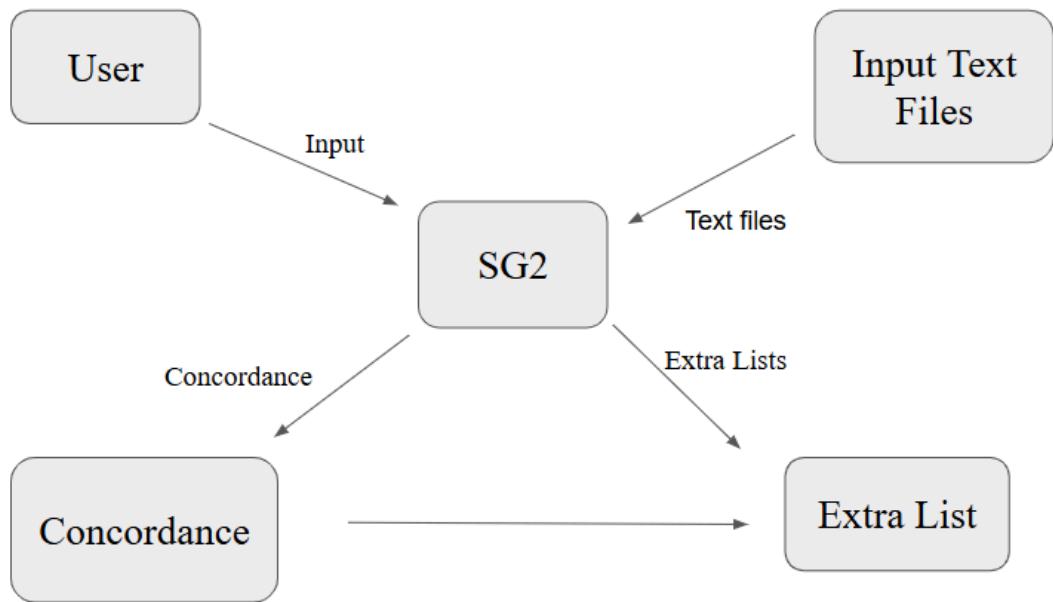
 2. Words appearing in all files

 3. Words appearing only in one file with its file number

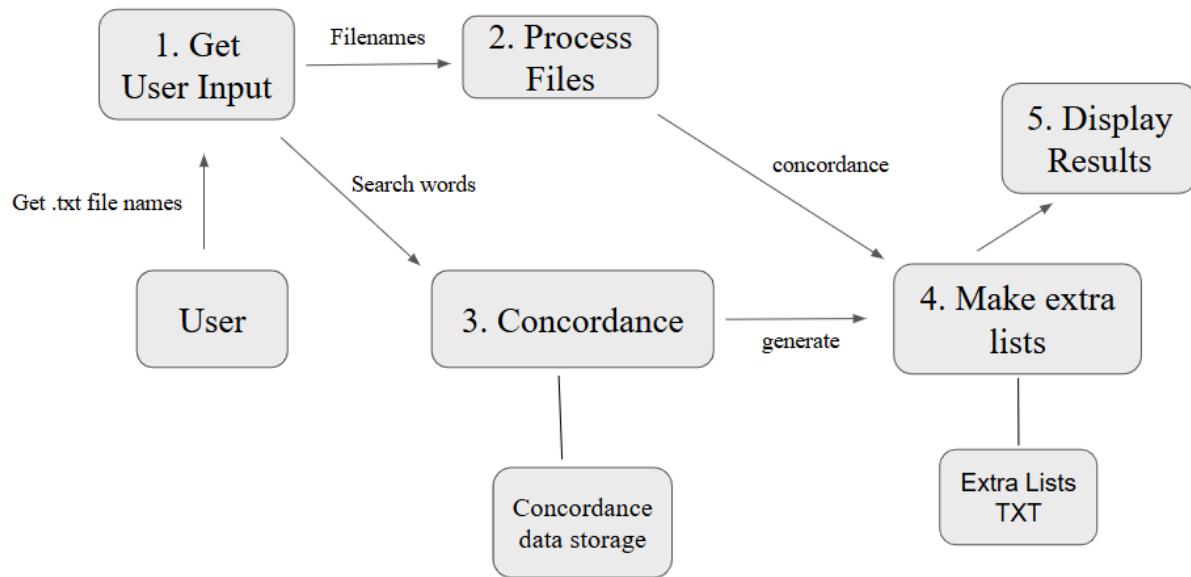
Write all lists neatly formatted to screen and ExtraLists.txt

DISPLAY completion message and end program

SG2 Level 0 Data Flow Diagram



SG2 Level 1 Data Flow Diagram



SG2 Static Graph

