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Date: 01/24/2024

Git Repo URL: DSC 430 - <https://github.com/Mrmachine3/DPU-DSC430.git>

Video Explanation URL:

Honor Statement

I have not given or received any unauthorized assistance on this assignment.

Top Down Design of Stem and Leaf Plot

main() function: This function invokes the top level functions that greet the user, displays a menu, reads menu selection, reads dataset into memory, computes stem and leaf list, and charts the stem and leaf plot.

greeting() function: This function simply prints the greeting to the end user.

menu() function: This function simply displays menu options available for selection

read_option() function: This function evaluates the end-user entry using if-else logic to determine which filename or if program exit option was selected

read_file() function: This function is opens the selected file and creates a variable representing a list of stored values in memory for further processing.

compute_stemleaves() function: This function generates a list of all stem and leaf values from the data set read into memory.

plot_stem() function: This function displays a text representation of the stem and leaf plot chart

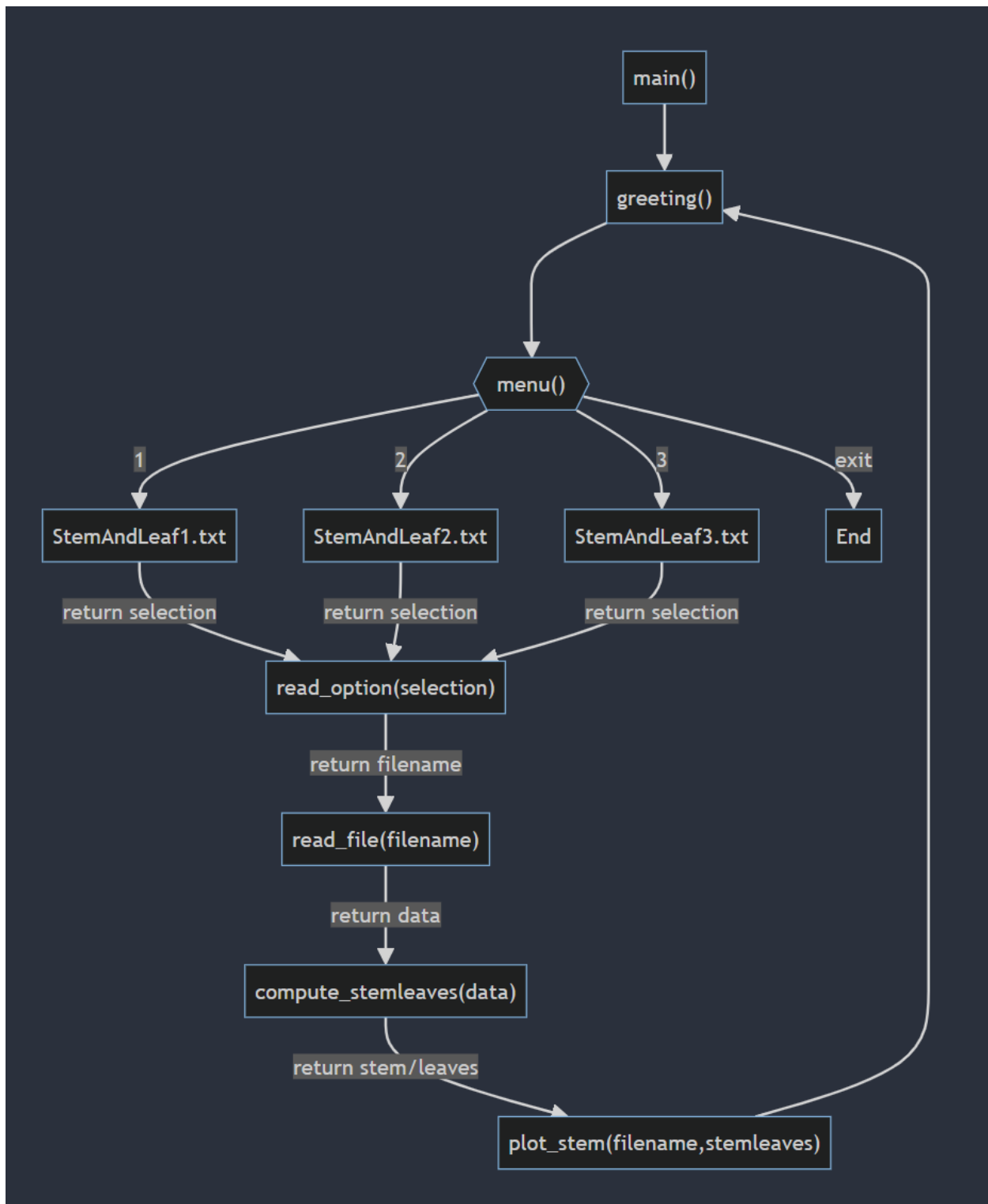


Figure 1: Stem and Leaf Plot Mermaid Diagram