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*Enclara Pharmacia Coding Assessment Explanation*

The user will enter text in the textbox to the right of the “Enter Text Here:” label. When text is entered into this box then the displays of the number of palindrome words, number of palindrome sentences, and unique words will be cleared.

Once the text is completed the user will click on the “Done” button to the left of the textbox containing the text to be analyzed. Clicking the button will reset the number of palindrome words and sentences to zero. The text will be assigned to two strings, one to analyze the words and one to analyze the sentences. Both strings will remove punctuation, excluding periods, exclamation points, and question marks. The string analyzing words will then remove periods, exclamation points, and question marks. Then words will be defined by having a space before and/or after them and be added to a words list. The string analyzing the sentences will then remove spaces. Then sentences will be defined by having a period, exclamation point, or question mark after them and be added to a sentences list. Both lists will then be analyzed to determine whether each item is equal forward and backward. If the item is equal forward and backward then a count of one will be added to the corresponding word or sentence count. After all items have been counted, the words list will be analyzed to find unique words. If a word is unique then it will be given a count of one, if a word is not unique then it will increase its count by one for every additional occurrence. All information will then be displayed. The number of palindrome words and sentences will follow the corresponding “Palindrome Words/Sentences:” label. The unique words and their instances will be printed in the textbox to the right of the “Words Used:” label.

If the user wishes to find all words with a specific letter then the user will type the letter into the textbox to the right of the “Words Containing the Letter:” label. Typing in this textbox will clear the textbox below that contains words with a matching letter. Additionally, if either the textbox next to the “Enter Text Here:” label or the textbox next to the “Words Containing the Letter:” label are empty, then the search button will be disabled until these textboxes are not empty.

Once the user clicks the “Search” button to the right of the letter chosen, the text will be checked to ensure that only one character was chosen; if multiple characters were chosen then the user will be notified. Once a single character is entered in the box and the “Search” button is clicked, then the unique words will be analyzed and printed in the textbox below if they have the letter selected. If the character is not in any word or is not a letter then the user will be notified that the character does not appear in the list of words.