# CST8130 – Data Structures

# Assignment 3 – Test Plan

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## Menu Processing

| Test# | Description of Test | Input Values | Expected Output | Actual Output | Status (Pass/Fail) |
| --- | --- | --- | --- | --- | --- |
|  | Invalid option for menu | a | Message "Input Mismatch Exception while reading user's option from main menu" | Message "Input Mismatch Exception while reading user's option from main menu" | Pass |
|  | Invalid option for menu | 11 | Message “Invalid Entry… Option should be a number between 1 and 7” | Message, “Invalid Entry… Option should be a number between 1 and 7” | Pass |
|  | Invalid option for menu upper boundary | 0 | Message “Invalid Entry… Option should be a number between 1 and 7” | Message “Invalid Entry… Option should be a number between 1 and 7” | Pass |
|  | Invalid option for menu lower boundary | 8 | Message “Invalid Entry… Option should be a number between 1 and 7” | Message “Invalid Entry… Option should be a number between 1 and 7” | Pass |
|  | Menu Option 2 | 2 | “Enter the word you want to search:” | “Enter the word you want to search:” | Pass |
|  | Menu Option 3 | 3 | “Dictionary has 0 unique words” | “Dictionary has 0 unique words” | Pass |
|  | Menu Option 4 | 4 | “Dictionary has 0 words” | “Dictionary has 0 words” | Pass |
|  | Menu Option 5 | 5 | “Program has removed all the words” | “Program has removed all the words” | Pass |
|  | Menu Option 6 | 6 | “Ignore definite and indefinite articles has been set to true” | “Ignore definite and indefinite articles has been set to true” | Pass |
|  | Menu Option 1 | 1 | “Program has read the file” | “Program has read the file” | Pass |
|  | Menu Option 7 | 7 | “Good bye.... hope to see you soon” | “Good bye.... hope to see you soon” |  |

## Adding a file

| Test# | Description of Test | Input Values | Expected Output | Actual Output | Status (Pass/Fail) |
| --- | --- | --- | --- | --- | --- |
|  | Add a file that exists in correct directory | (hard coded)  Raven.txt | “Program has read the file” | “Program has read the file” | Pass |
|  | Add a file that does not exist in correct directory | (hard coded)  test.txt | “File not found” | “File not found” | Pass |

## Search a word

| Test# | Description of Test | Input Values | Expected Output | Actual Output | Status (Pass/Fail) |
| --- | --- | --- | --- | --- | --- |
|  | Search a word with no words in dictionary | test | “test occurs 0 times” | “test occurs 0 times” | Pass |
|  | Search a word that occurs in dictionary after words have been added | beguiling | “beguiling occurs 2 times” | “beguiling occurs 2 times” | Pass |
|  | Search a word that doesn’t occur in dictionary after words have been added | mostapha | “mostapha occurs 0 times” | “mostapha occurs 0 times” | Pass |
|  | Search word that occurs with capitalisation | BEGuiling | “BEGuiling occurs 2 times” | “BEGuiling occurs 2 times” | Pass |

## Display unique words

| Test# | Description of Test | Input Values | Expected Output | Actual Output | Status (Pass/Fail) |
| --- | --- | --- | --- | --- | --- |
|  | Display unique words without any words in dictionary | N/A | “Dictionary has 0 unique words” | “Dictionary has 0 unique words” | Pass |
|  | Display unique words after adding, without ignoring articles | N/A | “Dictionary has 468 unique words” | “Dictionary has 468 unique words” | Pass |
|  | Display unique words after adding, ignoring articles | N/A | “Dictionary has 465 unique words” | “Dictionary has 465 unique words” | Pass |

## Display all words

| Test# | Description of Test | Input Values | Expected Output | Actual Output | Status (Pass/Fail) |
| --- | --- | --- | --- | --- | --- |
| a. | Display all words without any words in dictionary | N/A | “Dictionary has 0 words” | “Dictionary has 0 words” | Pass |
| b. | Display all words after adding, without ignoring articles | N/A | “Dictionary has 1154 words” | “Dictionary has 1154 words” | Pass |
| c. | Display all words after adding, ignoring articles | N/A | “Dictionary has 1073 words” | “Dictionary has 1073 words” | Pass |

## Misc

| Test# | Description of Test | Input Values | Expected Output | Actual Output | Status (Pass/Fail) |
| --- | --- | --- | --- | --- | --- |
| a. | Toggle ignoring definite and indefinite | 6 | “Ignore definite and indefinite articles has been set to true”  In menu “6. Ignore definite and indefinite articles (true)” | “Dictionary has 0 words” | Pass |
| b. | Toggle ignoring definite and indefinite | 6 | “Ignore definite and indefinite articles has been set to false”  In menu “6. Ignore definite and indefinite articles (false)” | “Dictionary has 1154 words” | Pass |
| c. | Display all words after resetting | 5 then 4 | “Dictionary has 0 words” | “Dictionary has 1073 words” | Pass |