EE422C Project 3 (WordLadder) Test Plan

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Test Plan Summary

1. testBFSvsBFS
   a. ^
   b. Testing to make sure that the length of the ladder for a random combination of words is equal starting from either of the 2 input words
   c. Initializing was done before all the tests to counter heap overflow
   d. Expected: Ladders output and length of ladders output next to each other
   e. Ladder lengths were all equal
   f. No comments
2. testDFSvsBFS
   a. ^
   b. Testing to verify that BFS always finds the shortest ladder and that DFS is either equal to or greater in terms of ladder length
   c. Initializing was done before all the tests to counter heap overflow
   d. Expected: Ladders output and length of ladders output next to each other
   e. BFS ladder length was always shorter or equal to DFS ladder length
   f. No comments
3. testDFSvsBFS2
   a. ^
   b. Testing to verify that BFS and DFS ladders either both have no length or both have a length greater than 0
   c. Initializing was done before all the tests to counter heap overflow
   d. Expected: Ladders output and length of ladders output next to each other
   e. BFS and DFS ladder lengths were always either equal to 0 or not equal to 0
   f. No comments
4. testKeyboardInput
   a. ^
   b. Testing to verify that keyboard input works with our algorithms
   c. Initializing was done before all the tests to counter heap overflow
   d. Expected: Ladders output
   e. Ladders were output correctly
   f. No comments
5. testFileInput
   a. ^
   b. Testing to verify that file input works with our algorithms
   c. Initializing was done before all the tests to counter heap overflow
   d. Expected: Ladders output
   e. Ladders were output correctly

   f. No comments
6. testParse
   a. ^
   b. Testing to verify that returns correct values for file and keyboard input
   c. Initializing was done before all the tests to counter heap overflow
   d. Expected: Words returned
   e. Brings in the correct words
   f. No comments
7. testGetWordLadderBFS
   a. ^
   b. Testing to verify that BFS returns expected value
   c. Initializing was done before all the tests to counter heap overflow
   d. Expected: Ladders output
   e. Ladders were output correctly
   f. No comments
8. testGetWordLadderDFS
   a. ^
   b. Testing to verify that DFS returns expected value
   c. Initializing was done before all the tests to counter heap overflow
   d. Expected: Ladders output
   e. Ladders were output correctly
   f. No comments
9. testPrintLadder
   a. ^
   b. Testing to verify that it prints correctly
   c. Initializing was done before all the tests to counter heap overflow
   d. Expected: Ladders output
   e. Ladders were output correctly
   f. No comments