EE422C Project 3 (Word Ladder) Test Plan

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Test plan summary

We did some preliminary tests on our own, but our official test cases were decided upon together. We chose four test cases that we duplicated for both modules: BFS and DFS. They tested for varying lengths or the nonexistence of ladders. We also had a special test case that ensured /quit would exit the program regardless of when it was typed.

1.
   a) Test name: Long Ladder
   b) What feature does the test cover: Makes sure a valid ladder with significant length was found between two words
   c) Expected output for a good module: Ladder between SMART and MONEY
   d) The pass/fail criterion for the test: No stack overflow, ladder has no duplicates, BFS must be 9 rungs
   e) Any comments, if any: DFS can be any reasonable length

2.
   a) Test name: Short Ladder
   b) What feature does the test cover: Makes sure a valid ladder with short length was found between two words
   c) Expected output for a good module: Ladder between MARSH and MESSY
   d) The pass/fail criterion for the test: No stack overflow, ladder has no duplicates, BFS must be 3 rungs
   e) Any comments, if any: DFS can be any reasonable length

3.
   a) Test name: Adjacent Words
   b) What feature does the test cover: Makes sure a valid ladder with no actual length was found between two words
   c) Expected output for a good module: Ladder between ADOPT and ADEPT
   d) The pass/fail criterion for the test: No stack overflow, ladder has no duplicates, BFS and DFS must be 0 rungs
   e) Any comments, if any:

4.
   a) Test name: No Ladder
   b) What feature does the test cover: Makes sure no valid ladder was found between two words

c) Expected output for a good module: There was no ladder found between ZUZIM and XEROX
d) The pass/fail criterion for the test: No stack overflow, no ladder found
e) Any comments, if any:

5.
   a) Test name: Quit Case
   b) What feature does the test cover: Makes sure a program ends when /quit is entered
   c) Expected output for a good module: None
   d) The pass/fail criterion for the test: Program actually quits
   e) Any comments, if any: /quit can be first or second word