

## Wordsearch Test Plan

Test	Purpose	Input	Expected Output
1	No file name entered	(none)	<i>Error message:</i> no file name obtained from user
2	File not found	<i>Enter file name:</i> missingFile	<i>Error message:</i> File missingFile could not be opened
3	Boundary condition: row dimension less than minimum	Puzzle: 0 2	<i>Error message:</i> Rows must be between 1 and 20, inclusive, but is 0
4	Boundary condition: row dimension greater than maximum	Puzzle: 21 2	<i>Error message:</i> Rows must be between 1 and 20, inclusive, but is 21
5	Boundary condition: column dimension less than minimum	Puzzle: 2 0	<i>Error message:</i> Columns must be between 1 and 20, inclusive, but is 0
6	Boundary condition: row dimension greater than maximum	Puzzle: 2 21	<i>Error message:</i> Columns must be between 1 and 20, inclusive, but is 21
7	Bad data: # of rows	Puzzle: A 2	<i>Error message:</i> Puzzle file must contain the numberOfRows and numberOfColumns, followed by numberOfRows strings and numberOfColumns characters, e.g. 2 3 abc def
8	Bad data: # of columns	Puzzle: 2 A	<i>Error message:</i> Puzzle file must contain the numberOfRows and numberOfColumns, followed by numberOfRows strings and numberOfColumns characters, e.g. 2 3 abc def
9	Bad data: not enough rows	Puzzle: 3 3 abc def	<i>Error message:</i> Puzzle file must contain the numberOfRows and numberOfColumns, followed by numberOfRows strings and numberOfColumns characters, e.g. 2 3 abc def
10	Bad data: not enough columns	Puzzle: 3 3 ab de gh	<i>Error message:</i> Puzzle file must contain the numberOfRows and numberOfColumns, followed by numberOfRows strings and numberOfColumns characters, e.g. 2 3 abc def



			the at 2,17 SE the at 3,1 NE the at 3,1 E the at 3,1 SE the at 3,17 NE the at 3,17 E the at 3,17 SE the at 4,1 NE the at 4,1 E the at 4,1 SE the at 4,17 NE the at 4,17 E the at 4,17 SE the at 5,1 NE the at 5,1 E the at 5,1 SE the at 5,17 NE the at 5,17 E the at 5,17 SE the at 6,1 NE the at 6,1 E the at 6,1 SE the at 6,17 NE the at 6,17 E the at 6,17 SE the at 7,1 NE the at 7,1 E the at 7,1 SE the at 7,17 NE the at 7,17 E the at 7,17 SE the at 8,1 NE the at 8,1 E the at 8,1 SE the at 8,17 NE the at 8,17 E the at 8,17 SE the at 9,1 NE the at 9,1 E the at 9,1 SE the at 9,17 NE
--	--	--	--

			the at 9,17 E the at 9,17 SE the at 10,1 NE the at 10,1 E the at 10,1 SE the at 10,17 NE the at 10,17 E the at 10,17 SE the at 11,1 NE the at 11,1 E the at 11,1 SE the at 11,17 NE the at 11,17 E the at 11,17 SE the at 12,1 NE the at 12,1 E the at 12,1 SE the at 12,17 NE the at 12,17 E the at 12,17 SE the at 13,1 NE the at 13,1 E the at 13,1 SE the at 13,17 NE the at 13,17 E the at 13,17 SE the at 14,1 NE the at 14,1 E the at 14,1 SE the at 14,17 NE the at 14,17 E the at 14,17 SE the at 15,1 NE the at 15,1 E the at 15,1 SE the at 15,17 NE the at 15,17 E the at 15,17 SE the at 16,1 NE the at 16,1 E the at 16,1 SE
--	--	--	--

			the at 16,17 NE the at 16,17 E the at 16,17 SE the at 17,1 NE the at 17,1 E the at 17,1 SE the at 17,17 NE the at 17,17 E the at 17,17 SE the at 18,1 NE the at 18,1 E the at 18,1 SE the at 18,17 NE the at 18,17 E the at 18,17 SE the at 19,1 NE the at 19,1 E the at 19,17 NE the at 19,17 E the at 20,1 NE the at 20,1 E the at 20,17 NE the at 20,17 E
13	Minimum rows, maximum columns; word ends at edge	Puzzle: 1 20 thecowjumpedoverthem  Word: them	t h e c o w j u m p e d o v e r t h e m  them at 1,18 E
14	Maximum rows, minimum columns; word starts at edge	Puzzle: 20 1 t h e c o w	t h e c o w j u

		j u m p e d o v e r t h e m  Word: cow	m p e d o v e r t h e m  cow at 4,1 S
15	Words start at corners	Puzzle: 5 4 catc aaaa tttt aaaa catc  Word: cat	c a t c a a a a t t t t a a a a c a t c  cat at 1,1 E cat at 1,1 SE cat at 1,1 S cat at 1,4 S cat at 1,4 SW cat at 5,1 N cat at 5,1 NE cat at 5,1 E cat at 5,4 N cat at 5,4 NW
16	Words end at corners, edges	Puzzle: 5 4 tcat	t c a t a a a a c c a t a a a a

		aaaa ccat aaaa tcat  Word: cat	t c a t  cat at 1,2 E cat at 1,2 SE cat at 3,1 N cat at 3,1 S cat at 3,2 NE cat at 3,2 E cat at 5,2 NE cat at 5,2 E
17	Searching for longer word stops at edge	Puzzle: 5 4 catc aaaa tttt aaaa catc  Word: catcan	c a t c a a a a t t t t a a a a c a t c  catcan not found
18	Searches all directions	3 3 <u>ttt</u> <u>tat</u> <u>ttt</u>	t t t t a t t t t  Enter a word: at at at 2,2 NW at at 2,2 N at at 2,2 NE at at 2,2 W at at 2,2 E at at 2,2 SW at at 2,2 S at at 2,2 SE