

## Black Box Test Plan: ConnectFour

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**Date:**

**Introduction:** Each test case below assumes the ImageEditor program is running and that the instructions for running the program have been displayed for the user. The text in bold in the Description column represents the test inputs to the program. You can stop program execution by pressing clicking the “X” button in upper right hand corner of window.

**Test Files:** N/A

### Test Cases

Test ID	Description	Expected Results	Actual Results
testStartProgram  Author: Nick Struckmeyer, Patina Herring, Jmeah Clarke	Console open  <b>java ConnectFour</b>	Dialog box with dropdown list selector opens prompting user for the required connect size (4-8), player names, and number of human players (1 or 2)	Dialog box with dropdown list selector opens prompting user for the required connect size (4-8), player names, and number of human players (1 or 2)
testSelectGameBoardSize4	Program started	Gameboard opens with a size of 8 rows and 8 columns	Gameboard opens with a size of 8 rows and 8

<p>Author: Nick Struckmeyer, Patina Herring, Jmeah Clarke</p>	<p>Dialog box with dropdown list selector opened prompting user for the required connect size (4-8) and number of human players (1 or 2)</p> <p><b>user selects 4</b></p> <p><b>user selects Single Player</b></p> <p><b>user types “morty” in Player 1 name field</b></p>		<p>columns</p>
<p>testSelectGameBoardSize5</p> <p>Author: Nick Struckmeyer, Patina Herring, Jmeah Clarke</p>	<p>Program started</p> <p>Dialog box with dropdown list selector opened prompting user for the required connect size (4-8) and number of human players (1 or 2)</p> <p><b>user selects 5</b></p> <p><b>user selects Single Player</b></p> <p><b>user types “morty” in Player 1 name field</b></p>	<p>Gameboard opens with a size of 10 rows and 10 columns</p>	<p>Gameboard opens with a size of 10 rows and 10 columns</p>
<p>testSelectGameBoardSize6</p> <p>Author: Nick Struckmeyer, Patina Herring, Jmeah</p>	<p>Program started</p> <p>Dialog box with dropdown list selector opened prompting user</p>	<p>Gameboard opens with a size of 12 rows and 12 columns</p>	<p>Gameboard opens with a size of 12 rows and 12 columns</p>

Clarke	<p>for the required connect size (4-8) and number of human players (1 or 2)</p> <p><b>user selects 6</b></p> <p><b>user selects Single Player</b></p> <p><b>user types “morty” in Player 1 name field</b></p>		
<p>testSelectGameBoardSize7</p> <p>Author: Nick Struckmeyer, Patina Herring, Jmeah Clarke</p>	<p>Program started</p> <p>Dialog box with dropdown list selector opened prompting user for the required connect size (4-8) and number of human players (1 or 2)</p> <p><b>user selects 7</b></p> <p><b>user selects Single Player</b></p> <p><b>user types “morty” in Player 1 name field</b></p>	Gameboard opens with a size of 14 rows and 14 columns	Gameboard opens with a size of 14 rows and 14 columns
<p>testSelectGameBoardSize8</p> <p>Author: Nick Struckmeyer, Patina Herring, Jmeah Clarke</p>	<p>Program started</p> <p>Dialog box with dropdown list selector opened prompting user for the required connect size (4-8) and number of human</p>	Gameboard opens with a size of 16 rows and 16 columns	Gameboard opens with a size of 16 rows and 16 columns

	<p>players (1 or 2)</p> <p><b>user selects 8</b></p> <p><b>user selects Single Player</b></p> <p><b>user types “morty” in Player 1 name field</b></p>		
<p>testSelectColumn1</p> <p>Author: Nick Struckmeyer, Patina Herring, Jmeah Clarke</p>	<p>Program started</p> <p>Dialog box with dropdown list selector opened prompting user for the required connect size (4-8) and number of human players (1 or 2)</p> <p><b>user selects 4</b></p> <p><b>user selects Single Player</b></p> <p><b>user types “morty” in Player 1 name field</b></p> <p>8 x 8 Gameboard is displayed, starts on P1’s turn.</p> <p><b>P1 selects column 1</b></p>	<p>P1’s token appears in the 4th row, 1st column (square in the lower left hand corner of grid)</p>	<p>P1’s token appears in the 4th row, 1st column (square in the lower left hand corner of grid)</p>
<p>testSelectColumn2</p> <p>Author: Nick Struckmeyer, Patina Herring, Jmeah Clarke</p>	<p>Program started</p> <p>Dialog box with dropdown list selector opened prompting user for the required connect size</p>	<p>P1’s token appears in the 4th row, 2nd column (1 right of square in the lower left hand corner of grid)</p>	<p>P1’s token appears in the 4th row, 2nd column (1 right of square in the lower left hand corner of grid)</p>

	<p>(4-8) and number of human players (1 or 2)</p> <p><b>user selects 4</b></p> <p><b>user selects Single Player</b></p> <p><b>user types “morty” in Player 1 name field</b></p> <p>8 x 8 Gameboard is displayed, starts on P1’s turn.</p> <p><b>P1 selects column 2</b></p>		
<p>testP1WinsGrid4_1</p> <p>Author: Nick Struckmeyer, Patina Herring, Jmeah Clarke</p>	<p>Program started</p> <p>Dialog box with dropdown list selector opened prompting user for the required connect size (4-8) and number of human players (1 or 2)</p> <p><b>user selects 4</b></p> <p><b>user selects Two Players</b></p> <p><b>user types “morty” in Player 1 name field</b></p> <p><b>user types “grandpa” in Player 2 name field</b></p>	<p>Dialog box appears with message “morty is the winner!” with option to reset game, continue or quit.</p>	<p>Dialog box appears with message “morty is the winner!” with option to reset game, continue or quit.</p>

	<p>8 x 8 Gameboard is displayed, starts on P1's turn.</p> <p><b>P1 continuously chooses first column</b></p> <p><b>P2 selects column 2 (x2)</b></p> <p><b>P2selects column 3 (x1)</b></p>		
<p>testP1WinsGrid4_2</p> <p>Author: Nick Struckmeyer, Patina Herring, Jmeah Clarke</p>	<p>Program started</p> <p>Dialog box with dropdown list selector opened prompting user for the required connect size (4-8) and number of human players (1 or 2)</p> <p><b>user selects 4</b></p> <p><b>user selects Two Players</b></p> <p><b>user types "morty" in Player 1 name field</b></p> <p><b>user types "grandpa" in Player 2 name field</b></p> <p>8 x 8 Gameboard is displayed, starts on P1's turn.</p> <p><b>P1 selects column 1</b></p>	<p>Dialog box appears with message "morty is the winner!" with option to reset game, continue or quit.</p>	<p>Dialog box appears with message "morty is the winner!" with option to reset game, continue or quit.</p>

	<b>P2 selects column 1</b> <b>P1 selects column 2</b> <b>P2 selects column 2</b> <b>P1 selects column 3</b> <b>P2 selects column 3</b> <b>P1 selects column 4</b>		
testP2WinsGrid4_1  Author: Nick Struckmeyer, Patina Herring, Jmeah Clarke	Program started  Dialog box with dropdown list selector opened prompting user for the required connect size (4-8) and number of human players (1 or 2)  <b>user selects 4</b>  <b>user selects Two Players</b>  <b>user types “morty” in Player 1</b> <b>name field</b>  <b>user types “grandpa” in Player</b> <b>2 name field</b>  8 x 8 Gameboard is displayed, starts on P1’s turn.  <b>P1 selects column 1</b> <b>P2 selects column 2</b> <b>P1 selects column 2</b> <b>P2 selects column 3</b>	Dialog box appears with message “grandpa is the winner!” with option to reset game, continue or quit.	Dialog box appears with message “grandpa is the winner!” with option to reset game, continue or quit.

	<b>P1 selects column 3</b> <b>P2 selects column 4</b> <b>P1 selects column 4</b> <b>P2 selects column 5</b>		
testUserSelects1Human  Author: Nick Struckmeyer, Patina Herring, Jmeah Clarke	Program started  Dialog box with dropdown list selector opened prompting user for the required connect size (4-8) and number of human players (1 or 2)  <b>user selects 4</b>  <b>user selects Single Player</b>  <b>user types “morty” in Player 1</b> <b>name field</b>  8 x 8 Gameboard is displayed, starts on P1’s turn.  <b>P1 selects column 1</b>	P1’s token appears in the 4th row, 1st column (square in the lower left hand corner of grid).  P2’s token appears in random cell at bottom or above another token	P1’s token appears in the 4th row, 1st column (square in the lower left hand corner of grid).  P2’s token appears in random cell at bottom or above another token
testGameStatsContinue  Author: Nick Struckmeyer, Patina Herring, Jmeah Clarke	After 1 game is completed the user hits <b>continue</b>	Game board is reset to all empty spaces. The stats update to reflect 1 game played and the player who won	Game board is reset to all empty spaces. The stats update to reflect 1 game played and the player who won
testGameStatsReset  Author: Nick Struckmeyer,	After 1 game is completed the user hits <b>reset</b>	Dialog box appears with options for next game - user may click either OK or	Dialog box appears with options for next game - user may click either OK



Patina Herring, Jmeah Clarke		Cancel	or Cancel
testEndGameResetCancelReset  Author: Nick Struckmeyer, Patina Herring, Jmeah Clarke	<p>After 1 game is completed the user hits <b>reset</b></p> <p>Options window appears, user clicks <b>cancel</b></p> <p>End of Game prompt appears, user clicks <b>reset</b></p>	Dialog box with dropdown list selector opens prompting user for the required connect size (4-8), player names, and number of human players (1 or 2)	Dialog box with dropdown list selector opens prompting user for the required connect size (4-8), player names, and number of human players (1 or 2)