

# Black Box Test Plan: ImageViewer program

**Test Files:** ncstate.txt, missingImage.txt, misc.txt

The text in bold in the **Description** column represents the test inputs to the program. You can stop program execution by pressing Ctrl+C.

Test ID	Description	Expected Results	Actual Results
testNoCommandLineArgs  Author: Dr. Balik	\$java -cp bin ImageViewer	Usage: java -cp bin ImageViewer filename	Usage: java -cp bin ImageViewer filename
testTwoCommandLineArgs  Author: Dr. Balik	\$java -cp bin ImageViewer test-files/ncstate.txt test-files/missingImage.txt	Usage: java -cp bin ImageViewer filename	java -cp bin ImageViewer test-files/ncstate.txt test-files/missingImage.txt
testNonexistentFile  Author: Dr. Balik	\$java -cp bin ImageViewer test-files/no_such_file.txt	Unable to access input file: test-files/no_such_file.txt	Unable to access input file: test-files/no_such_file.txt
testImageMenu  Author: Dr. Balik	\$ java -cp bin ImageViewer test-files/ncstate.txt  (Ctrl+C to stop execution)	Image Viewer - Please choose an image to view (or 4 to quit).  1 - Mr. Wuf at NC State 2 - NC State Memorial Belltower 3 - Daniels Hall - Home of CSC 116! 4 - Quit the program  Image:	Image Viewer - Please choose an image to view (or 4 to quit).  1 - Mr. Wuf at NC State 2 - NC State Memorial Belltower 3 - Daniels Hall - Home of CSC 116! 4 - Quit the program  Image:
testQuit  Author: Dr. Balik	\$java -cp bin ImageViewer test-files/ncstate.txt  Menu is displayed  Image: <b>4</b>	Goodbye!  Program exits	Goodbye!  Program exits

testInvalidImageNumber  Author: Dr. Balik	<code>\$java -cp bin ImageViewer test-files/ncstate.txt</code>  Menu is displayed  Image: <b>8</b>  (Ctrl+C to stop execution)	Invalid image number  Menu is displayed	Invalid image number  Menu is displayed
testDisplayImageAndOptionMenu  Author: Dr. Balik	<code>\$java -cp bin ImageViewer test-files/ncstate.txt</code>  Menu is displayed  Image: <b>1</b>  (Ctrl+C to stop execution)	Mr. Wuf is displayed in DrawingPanel  Please enter an option below.  G-rey scale H-igh contrast N-egative  Option:	Mr. Wuf is displayed in DrawingPanel  Please enter an option below.  G-rey scale H-igh contrast N-egative  Option:
testGreyScale  Author: Dr. Balik	<code>\$java -cp bin ImageViewer test-files/ncstate.txt</code>  Menu is displayed  Image: <b>1</b>  Option menu is displayed  Option: <b>g</b> (Ctrl+C to stop execution)	Mr. Wuf is redisplayed in DrawingPanel in grey scale	Mr. Wuf is redisplayed in DrawingPanel in grey scale
testMissingImage  Author: Dr. Balik	<code>\$java -cp bin ImageViewer test-files/missingImage.txt</code>  Menu is displayed  Image: <b>4</b>	Talley Student Center missing image file: images/talley.png  Image Viewer - Please choose an image to view (or 5 to quit).  1 - Mr. Wuf at NC State 2 - NC State Memorial Belltower 3 - Daniels Hall - Home of CSC 116! 4 - Talley Student Center 5 - Quit the program  Image:	Talley Student Center missing image file: images/talley.png  Image Viewer - Please choose an image to view (or 5 to quit).  1 - Mr. Wuf at NC State 2 - NC State Memorial Belltower 3 - Daniels Hall - Home of CSC 116! 4 - Talley Student Center 5 - Quit the program  Image:

<div>testEmptyInputFile</div> <div>Author: Christine Park</div>	<div>\$ java -cp bin ImageViewer test-files/empty.txt</div> <div>Image Viewer - Please choose an image to view (or 1 to quit).</div> <div>1 - Quit the program</div> <div>Image: <b>1</b></div>	<div>Goodbye!</div> <div>Program exits.</div>	<div>Goodbye!</div> <div>Program exits.</div>
<div>testNegativeLowerCase</div> <div>Author: Christine Park</div>	<div>\$java -cp bin ImageViewer test-files/ncstate.txt</div> <div>Menu is displayed</div> <div>Image: <b>2</b></div> <div>Option menu is displayed</div> <div>Option: <b>n</b> (Ctrl+C to stop execution)</div>	<div>NC State Memorial Belltower is displayed in negative.</div>	<div>NC State Memorial Belltower is displayed in negative.</div>
<div>testNegativeUpperCase</div> <div>Author: Christine Park</div>	<div>\$java -cp bin ImageViewer test-files/ncstate.txt</div> <div>Menu is displayed</div> <div>Image: <b>1</b></div> <div>Option menu is displayed</div> <div>Option: <b>N</b> (Ctrl+C to stop execution)</div>	<div>Mr. Wuf at NC State is displayed in negative.</div>	<div>Mr. Wuf at NC State is displayed in negative.</div>
<div>testHighContrastLowerCase</div> <div>Author: Christine Park</div>	<div>\$java -cp bin ImageViewer test-files/ncstate.txt</div> <div>Menu is displayed</div> <div>Image: <b>2</b></div> <div>Option menu is displayed</div> <div>Option: <b>h</b> (Ctrl+C to stop execution)</div>	<div>NC State Memorial Belltower is displayed in high contrast.</div>	<div>NC State Memorial Belltower is displayed in high contrast.</div>

testHighContrastUpperCase  Author: Christine Park	<code>\$java -cp bin ImageViewer test-files/ncstate.txt</code>  Menu is displayed  Image: <b>3</b>  Option menu is displayed  Option: <b>H</b> (Ctrl+C to stop execution)	Daniels Hall - Home of CSC116! is displayed in high contrast.	Daniels Hall - Home of CSC116! is displayed in high contrast.
testGreyScaleUpperCase  Author: Dr. Balik	<code>\$java -cp bin ImageViewer test-files/ncstate.txt</code>  Menu is displayed  Image: <b>1</b>  Option menu is displayed  Option: <b>G</b> (Ctrl+C to stop execution)	Mr. Wuf is redisplayed in DrawingPanel in grey scale	Mr. Wuf is redisplayed in DrawingPanel in grey scale
testImageFilterInvalidOption	<code>\$java -cp bin ImageViewer test-files/ncstate.txt</code>  Menu is displayed  Image: <b>3</b>  Option menu is displayed  Option: <b>b</b>	Invalid option.  Image Viewer - Please choose an image to view (or 5 to quit).  1 - Mr. Wuf at NC State 2 - NC State Memorial Belltower 3 - Daniels Hall - Home of CSC 116! 4 - Talley Student Center 5 - Quit the program  Image:	Invalid option.  Image Viewer - Please choose an image to view (or 5 to quit).  1 - Mr. Wuf at NC State 2 - NC State Memorial Belltower 3 - Daniels Hall - Home of CSC 116! 4 - Talley Student Center 5 - Quit the program  Image:

<div>testImageMenu</div> <div>misc.txtfile</div> <div>Author: Christine Park</div>	<div>\$java -cp bin ImageViewer test-files/misc.txt</div> <div>(Ctrl+C to stop execution)</div>	<div>Image Viewer - Please choose an image to view (or 5 to quit)</div> <div>1 -Somewhere over the rainbow...</div> <div>2 -Have a great day!</div> <div>3 -Is it time for lunch?</div> <div>4 -Too cute for words...</div> <div>5 - Quit the program</div> <div>Image:</div>	<div>Image Viewer - Please choose an image to view (or 4 to quit)</div> <div>1 -Somewhere over the rainbow...</div> <div>2 -Have a great day!</div> <div>3 -Is it time for lunch?</div> <div>4 -Too cute for words...</div> <div>5 - Quit the program</div> <div>Image:</div>