System Test Plan: ImageEditor program

Introduction: The text in bold in the **Description** column represents the test inputs.

Test Files: (List each test file below.)

HINT: The Unix diff command may be used to tell whether or not two files are identical. For example,

```
$  diff test-files/test1Inverted.ppm test-files/exp_test1Inverted.ppm
```

Test ID	Description	Expected Results	Actual Results
testTooFewArgs Author: Dr. Balik	**$ java -cp bin ImageEditor**	Usage: java -cp bin ImageEditor {-I|-H|-G} infile outfile Program quits.	**Usage: java -cp bin ImageEditor {-I|-H|-G} infile outfile** **Program quits.**
testInvalidFlag Author: Dr. Balik	**$ java -cp bin ImageEditor -X test-files/in.ppm test-files/out.ppm**	Usage: java -cp bin ImageEditor {-I|-H|-G} infile outfile Program quits.	**Usage: java -cp bin ImageEditor {-I|-H|-G} infile outfile** **Program quits.**
testInvalidInputFileExtension Author: Dr. Balik	**$ java -cp bin ImageEditor -H test-files/in.txt test-files/out.ppm**	Invalid input file extension Program quits.	**Invalid input file extension** **Program quits.**
testInvalidOutputFileExtension Author: Dr. Balik	**$ java -cp bin ImageEditor -G test-files/in.ppm test-files/out.txt**	Invalid output file extension Program quits.	**Invalid output file extension** **Program quits.**
testInputFileAccess Author: Dr. Balik	**$ java -cp bin ImageEditor -I test-files/in.ppm test-files/out.ppm**	Unable to access input file: test-files/in.ppm Program quits.	**Unable to access input file: test-files/in.ppm** **Program quits.**
testNoOverwrite Author: Dr. Balik	Check timestamp for test-files/existing.ppm **$ java -cp bin ImageEditor -G test-files/input.ppm test-files/existing.ppm** test-files/existingFile.txt exists - OK to overwrite (y,n)?: **no**	Program quits. Timestamp for test-files/existing.ppm has not changed.	**Program quits.** **Timestamp for test-files/existing.ppm has not changed.**
testOverwrite Author: Dr. Balik	Check timestamp for test-files/existing.ppm **$ java -cp bin ImageEditor -G test-files/input.ppm test-files/existing.ppm** test-files/existingFile.txt exists - OK to overwrite (y,n)?: **yep**	Program quits. Timestamp for test-files/existing.ppm has changed.	**Program quits.** **Timestamp for test-files/existing.ppm has changed.**

Test ID	Description	Expected Results	Actual Results
testCannotCreateOutputFile Author: Dr. Balik	**$ java -cp bin ImageEditor -I test-files/ColorfulCSC116.ppm notadirectory/invert.ppm**	Cannot create output file Program quits.	**Cannot create output file** **Program quits.**
testBadInputFile Author: Dr. Balik	Delete bad_output.ppm, if it exists **$ java -cp bin ImageEditor -I test-files/bad_input.ppm test-files/bad_output.ppm**	Invalid input file Program quits.	**Invalid input file** **Program quits.**
testOnePixelInvert Author: Dr. Balik	Delete test1Inverted.ppm, if it exists **$ java -cp bin ImageEditor -I test-files/test1.ppm test-files/test1Inverted.ppm**	test1Inverted.ppm is exactly the same as exp_test1Inverted.ppm	**test1Inverted.ppm is exactly the same as exp_test1Inverted.ppm**
testTwoPixelInvert Author: Amelia Saldino	Delete test2Inverted.ppm, if it exists **$ java -cp bin ImageEditor -I test-files/test2.ppm test-files/test2Inverted.ppm**	test2Inverted.ppm is exactly the same as exp_test2Inverted.ppm	**test2Inverted.ppm is exactly the same as exp_test2Inverted.ppm**
testThreePixelInvert Author: Amelia Saldino	Delete test3Inverted.ppm, if it exists **$ java -cp bin ImageEditor -I test-files/test3.ppm test-files/test3Inverted.ppm**	test3Inverted.ppm is exactly the same as exp_test3Inverted.ppm	**test3Inverted.ppm is exactly the same as exp_test3Inverted.ppm**
testTwoPixelHighContrast Author: Amelia Saldino	Delete test4HighContrast.ppm, if it exists **$ java -cp bin ImageEditor -H test-files/test4.ppm test-files/test4HighContrast.ppm**	test4HighContrast.ppm is exactly the same as exp_test4HighContrast.ppm	**test4HighContrast.ppm is exactly the same as exp_test4HighContrast.ppm**
testTwoPixelHighContrastNewColor Author: Amelia Saldino	Delete test5HighContrast.ppm, if it exists **$ java -cp bin ImageEditor -H test-files/test5.ppm test-files/test5HighContrast.ppm**	test5HighContrast.ppm is exactly the same as exp_test5HighContrast.ppm	**test5HighContrast.ppm is exactly the same as exp_test5HighContrast.ppm**
testTwoPixelHighContrastDiffColor Author: Amelia Saldino	Delete test6HighContrast.ppm, if it exists **$ java -cp bin ImageEditor -H test-files/test6.ppm test-files/test6HighContrast.ppm**	test6HighContrast.ppm is exactly the same as exp_test6HighContrast.ppm	**test6HighContrast.ppm is exactly the same as exp_test6HighContrast.ppm**
testTwoPixelGreyScaleRedGreen	Delete test7GreyScale.ppm, if it exists	test7GreyScale.ppm is exactly the same as exp_test7GreyScale.ppm	**test7GreyScale.ppm is exactly the same as exp_test7GreyScale.ppm**

Author: Amelia Saldino	$ **java -cp bin ImageEditor -G test-files/test7.ppm test-files/test7GreyScale.ppm**		
testTwoPixelGreyScale ComplexColor Author: Amelia Saldino	Delete test8GreyScale.ppm, if it exists $ **java -cp bin ImageEditor -G test-files/test8.ppm test-files/test8GreyScale.ppm**	test8GreyScale.ppm is exactly the same as exp_test8GreyScale.ppm	**test8GreyScale.ppm is exactly the same as exp_test8GreyScale.ppm**
testTwoPixelGreyScale Unchanged Author: Amelia Saldino	Delete test9GreyScale.ppm, if it exists $ **java -cp bin ImageEditor -G test-files/test9.ppm test-files/test9GreyScale.ppm**	test9GreyScale.ppm is exactly the same as exp_test9GreyScale.ppm	**test9GreyScale.ppm is exactly the same as exp_test9GreyScale.ppm**

Test ID	Description	Expected Results	Actual Results
testInvertLargeFile Author: Dr. Balik	Delete InvertedCSC116.ppm, if it exists $ **java -cp bin ImageEditor -I test-files/ColorfulCSC116.ppm test-files/InvertedCSC116.ppm**	InvertedCSC116.ppm is exactly the same as exp_InvertedCSC116.ppm	**InvertedCSC116.ppm is exactly the same as exp_InvertedCSC116.ppm**
testHighContrastLarge File Author: Dr. Balik	Delete HighContrastCSC116.ppm, if it exists $ **java -cp bin ImageEditor -H test-files/ColorfulCSC116.ppm test-files/HighContrastCSC116.ppm**	HighContrastCSC116.ppm is exactly the same as exp_HighContrastCSC116.ppm	**HighContrastCSC116.ppm is exactly the same as exp_HighContrastCSC116.ppm**
testGreyScaleLargeFile Author: Dr. Balik	Delete GreyScaletCSC116.ppm, if it exists $ **java -cp bin ImageEditor -G test-files/ColorfulCSC116.ppm test-files/GreyScaleCSC116.ppm**	GreyScaleCSC116.ppm is exactly the same as exp_GreyScaleCSC116.ppm	**GreyScaleCSC116.ppm is exactly the same as exp_GreyScaleCSC116.ppm**