

Test #	Requirement Purpose	Action/Input	Result	Notes
1	Test the conversion methods	Using the program, Open an image, convert to a spreadsheet, save, open and edit spreadsheet, convert back, and save again	The start image and final image (after the loop) will be the same	The editing was zeroing out pixels, clearing a channel, and switching two channels.
2	Catch blank CSV entries	Save the CSV file after having many RGB values blank	Program will turn these blank fields into zeroes	Allows clearing color channels quickly
3	Shrink an Image	Open an image, check 'Shrink', and convert the image to a CSV.	Resultant CSV should be of smaller dimensions than original image conversion.	Only works on images large enough for the size to create issues in Excel
4	Properly display image	Open an image. OR Convert a CSV to an image.	Image should display with constrained dimensions in the display area, and info should be displayed properly below in text.	
5	Catch unclear instructions in lesson 1	Give the lesson 1 plan (includes the program and images) to a novice user, ask to follow the lesson	User will be able to follow the instructions and not be stuck at a step	
6	Catch a large image before it overwhelms the memory	Load a very large image into the program ( > 10 MP)	Program will catch the size before converting and will warn the user about the size of the image	The program will automatically resize the image
7	Prevent mid file write error	Close the program while it writes the CSV	Program will disallow the close button to prevent data loss and prompt user before it is closed	If running program directly from flash drive, disconnecting it will result in an error.

8	Win 32	Run Test #1 on a Win32 system that does not have OpenCV or QT installed	Success of Test #1	
9	Win 64	Run Test #1 on a Win64 system that does not have OpenCV or QT installed	Success of Test #1	
10	Mac 32	"	Success of Test #1	
11	Mac 64	"	Success of Test #1	
12	Running from flash drive	Run test # 1 from a flash drive. All intermediate files should also be saved on the drive	Program may be loaded from a USB drive, and the students may not changed the directory	The program will give an error when the flash drive has been extracted.
13	Run program from CD	Run test # 1 from a CD, All intermediary files will be saved on the local computer	Program runs as usual	Please note that the program runs much more slowly from CD.