

CS 1033

MULTIMEDIA AND COMMUNICATIONS

Lab 2: Image Processing

Remember to have your memory stick or a place in the cloud ready to back up your work in every lab!

Learning objectives for this lab

- Open, create new, save files in Affinity Photo
- Save an image as either a .jpg or an Affinity file (.afphoto)
- Locate the various tools and panels in the Affinity interface
- Zoom in and out of an image
- Adjust the brightness and colours of an image
- Change the canvas background to a solid colour or gradient
- Add text to the canvas and set its size, colour, alignment, etc.
- Add shapes and lines to the canvas
- Move text, shapes and line to different locations on the canvas
- Place text on top of a shape
- Rename layers in the Layer panel to make them descriptive
- Hide, un-hide layers, and re-order layers
- Delete layers in the Layers panel
- Add outlines and borders to text, images, or the entire canvas
- Re-create an entire graphic using the tools taught here

Introduction

Image processing, or imaging, is an important skill in working with multimedia. This involves loading and editing pictures and creating your own graphics from primitive elements (shapes, lines, text, etc.). Photoshop is a common program for such imaging but there are many other options that work just as well! Affinity Photo is a powerful program that can do virtually everything that Photoshop can do. We will be using this program for this course.

Read over the glossary and follow the Starting Affinity Photo instructions below before starting the activities.

Glossary

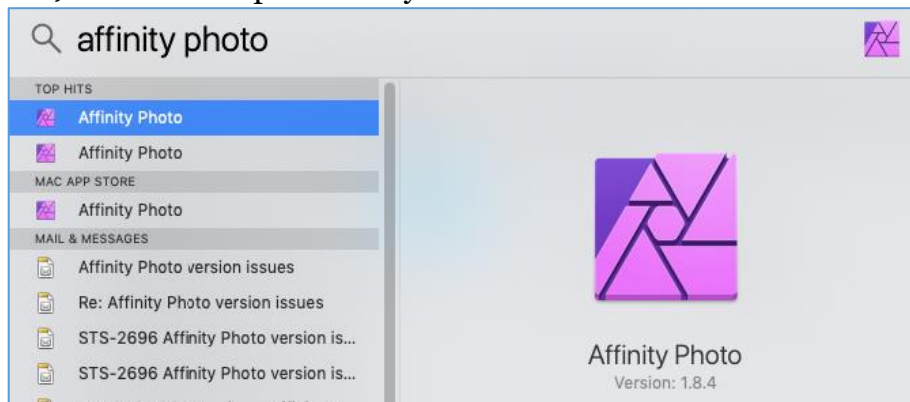
bounding box	the rectangle that fully encapsulates a shape, text, or other element, usually shown as a light blue border when the element is selected
canvas	main area on which graphics are added and drawn
opacity	level of transparency; alpha is another term for this
thumbnail	small image to give a preview of the actual image or effect

Activity 1

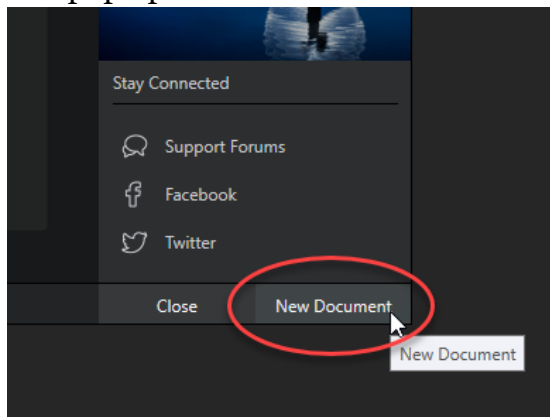
Starting and Navigating the Affinity Software

In this activity you will learn how to open Affinity, create a new document, and how to navigate the program.

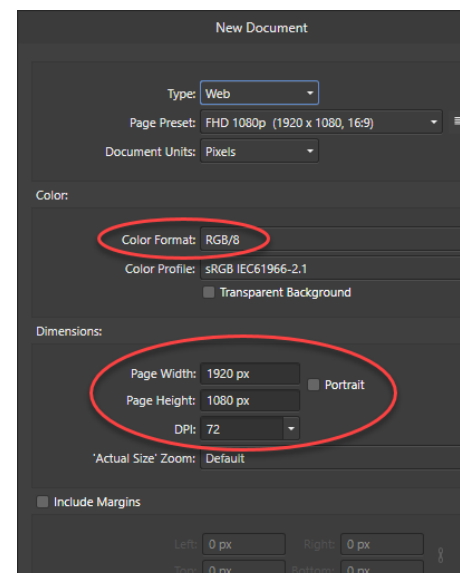
1. Use the Spotlight Search tool (magnifying glass at the top right of the Mac's menu bar) to find and open Affinity Photo.



2. When the program first opens, it usually brings up a pop up window with tutorials and other resources. Click New Document in the lower right corner of this pop up window

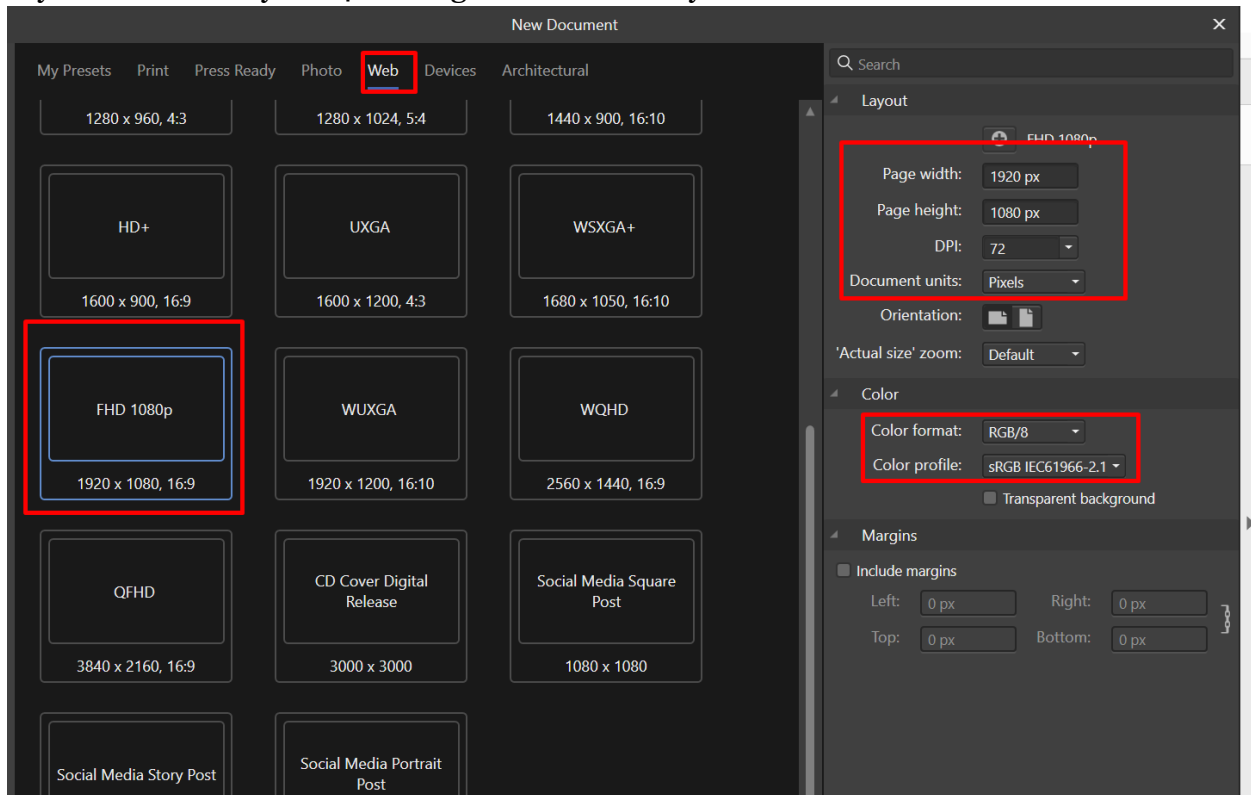


3. This will create another pop-up window. This one asks you to enter details about the document you want to create, like size, resolution, colour mode, etc. Most of these settings are fine as they are so don't bother changing them. However, some of our activities may require you to change the Color Format, Page Width, Page Height, and/or DPI. These 4 properties are circled in red here:

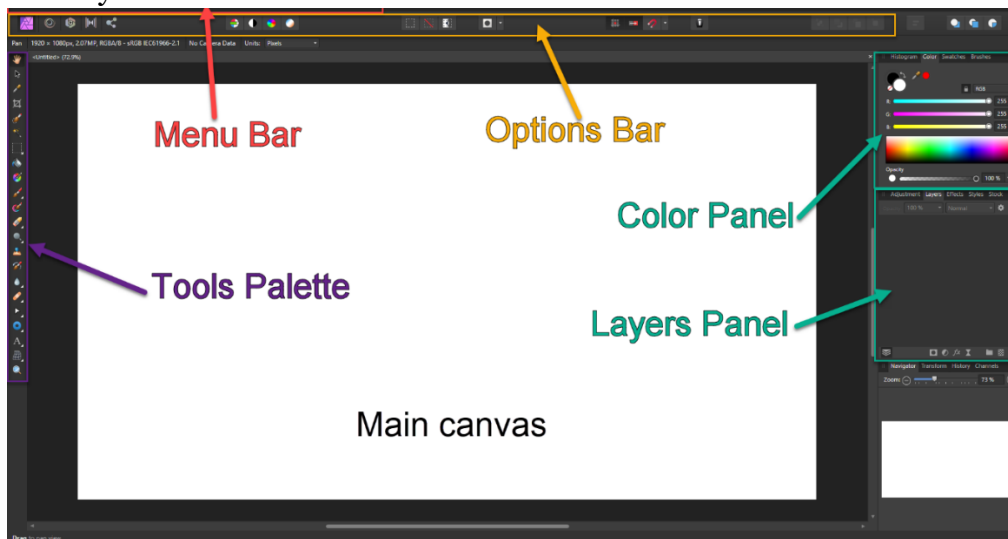


For now, leave these values as is and push OK.

4. If you have Affinity 1.8.4 and higher this is what you will see. Push 'Create':

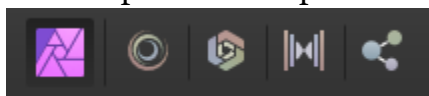


5. Refer to the image below for an overview of the different panels and menus in the Affinity interface.

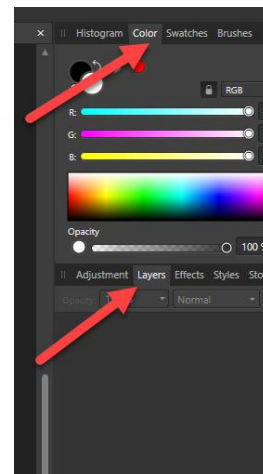


Read these important notes regarding the interface:

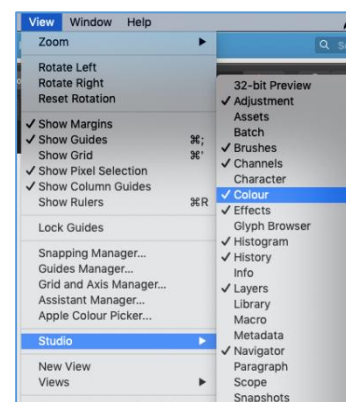
The left part of the Options Bar contains a series of "Persona" icons:



Changing the Persona will affect the overall interface by changing which tools and panels are shown. For certain purposes, one persona may be helpful over another. But for this course, we will stay on the default *Photo Persona* (the pink icon). If you accidentally click into another Persona, click the Cancel button to return to the Photo Persona mode. Look to the right of the screen and you will see the Color Panel and the Layers Panel. You will be using these 2 panels a lot of the time while working on your images. Both the Color Panel and Layers Panel are parts of panel groups that contain tabs to switch between panels:



- If one of these side panels is ever accidentally removed or hidden, you can re-open it by clicking View > Studio and then selecting the missing panel. This screenshot shows how to re-open the Color panel for example.



Activity 2

Basic image processing

In this activity, you will learn how to open an existing image, switch between images, zoom in and out of an image and how to modify the colours of an image.

1. Switch out of the Affinity program and click on Finder on the Mac dock.
2. Navigate to your **cs1033** folder on your memory stick (it should have been created last week) and create a folder called **labo2**. Within that, create a sub-folder called **images**.
3. Open: <http://www.csd.uwo.ca/~bsarlo/cs1033/labs/lab02/images/>. Download these files into **cs1033/lab02/images**.

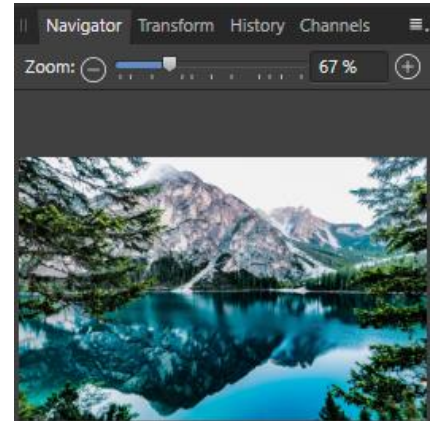


4. In Affinity at the menu bar on the top, click File > Open. In the Open window, navigate to your memory stick and then to **cs1033/lab02/images** and open *nature.jpg*.
5. Notice that this is opened in a new tab, not replacing or removing the empty canvas that was previously created.



They use tabs similar to modern browsers so you can easily switch between different documents as needed. We'll just work on *nature.jpg* in this activity so stay in this tab.

6. At the bottom right, below the Layers panel, you should see a panel called Navigator.
7. Drag the Zoom slider back and forth to change the zoom levels. Drag it all the way to 1000% (the maximum). You can actually see each individual pixel at this zoom level! Bring it back down to a reasonable level, around 50-70%.



8. Near the top middle, look for 4 coloured circle icons in the Options Bar.



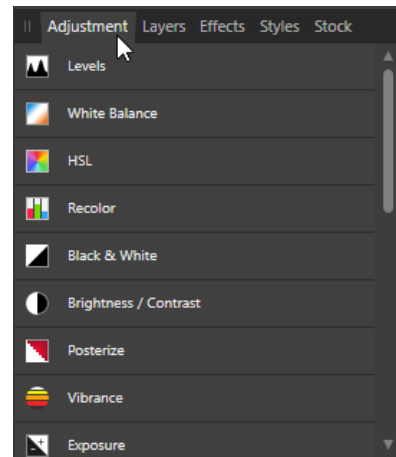
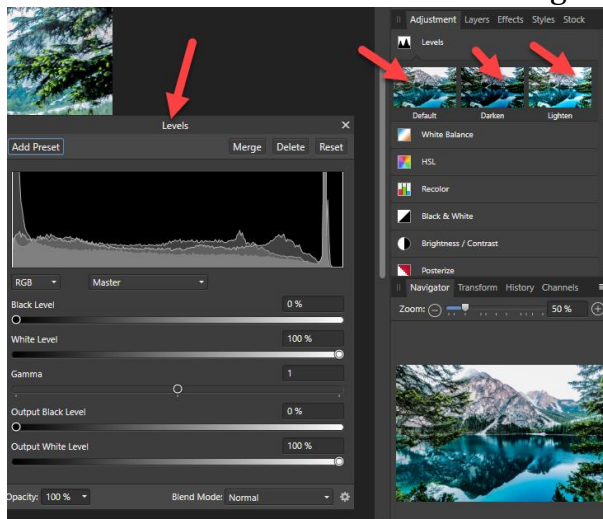
They are used for automatic image colour adjustments. In order from left to right, they are: Auto Levels, Auto Contrast, Auto Colors, Auto White Balance.

9. Hover over the Auto White Balance icon and look closely at the white sky after you left-click (click) your mouse. The sky becomes yellowish from this adjustment. If you missed it, press Command+Z to undo the action and then try it again while closely watching the white sky. Once you see it, hit Command+Z to return to the original image again.

Tip: this activity involves a lot of experimenting with different effects and colour adjustments. There are built-in ways to reset or remove the settings to then bring the image back to its original look. However, if you ever have trouble removing an applied effect, just close the tab **WITHOUT** saving it and then re-open the original image.

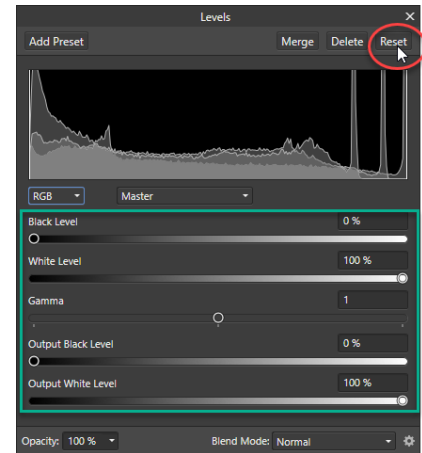
10. The Layers panel is part of a bigger panel group. Find and select the Adjustments panel in this same group.

11. Click on Levels and notice that it expands to reveal three thumbnails as well as creating a pop-up window with various colour level settings:

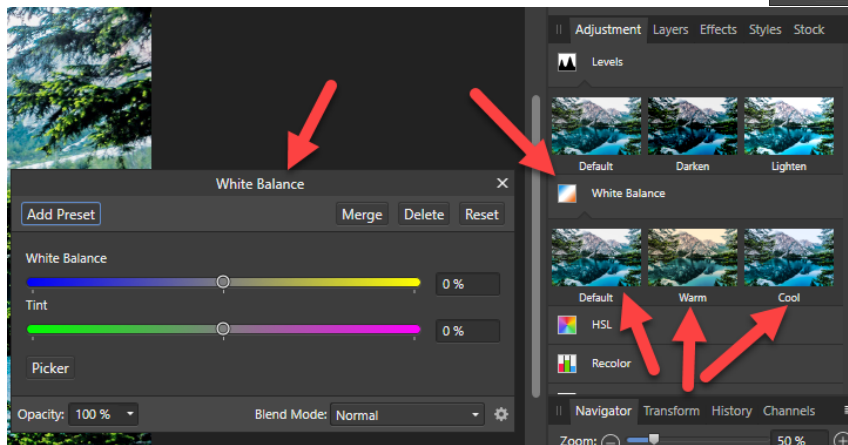


- Click on the Darken thumbnail and then the Lighten one. Click the Default thumbnail to revert to the original image.
- Experiment with the sliders in the window for Black Level, White Level, Gamma, Output Black Level, and Output White Level.

- c. Revert to the original level settings, by clicking the Reset button in the upper right corner of this Levels window.



12. Click on the White Balance adjustment.



Just like the Levels adjustment, this one will reveal a few thumbnails in the expanded panel and create a pop-up window with setting sliders.

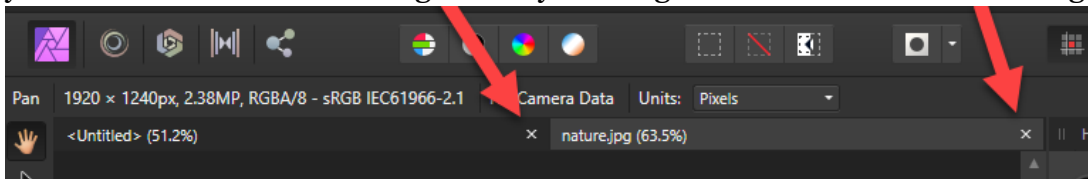
- a. The thumbnails are similar to Instagram filters: Warm and Cool colour schemes added to the image. Click each of them and then hit Default to revert to the original image again.
 - b. Experiment with the White Balance and Tint sliders in the pop-up window.
 - c. Remove the settings by hitting the Reset button.
13. The next adjustment is called HSL which stands for: Hue/Saturation/Lightness. Select it and again you will see some thumbnails show up and a pop-up window. Experiment with all of these options to see the psychedelic colours! Then revert (Reset) to the original image.
 14. Skip the next 2 adjustments and select Brightness / Contrast. Experiment with the given thumbnails and pop-up window sliders.
 15. There are numerous other adjustments in the list but we just tried some of the most important ones. Scroll down the list and experiment with any 3 other adjustments that sound interesting to you. Remember to Reset or Delete or Ctrl Z them after each one. Remember that if you can't get back to the original image after playing with the adjustments, just close the image without saving it and reopen it.

Activity 3

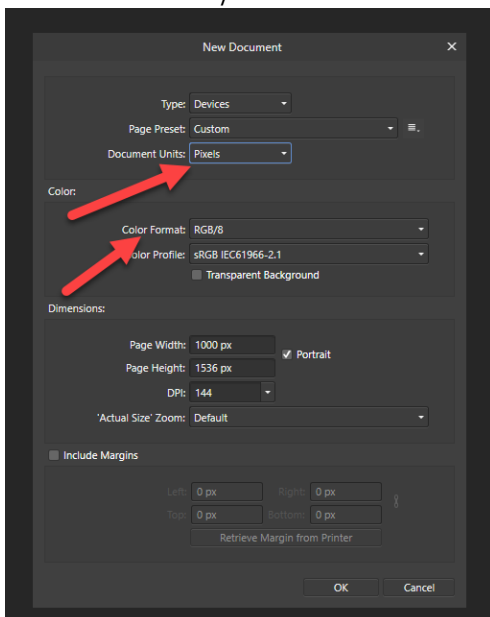
Creating graphics

In this activity, you will learn how to create your own graphics onto an empty canvas. This will include adding colours, text, lines, and various shapes onto a document.

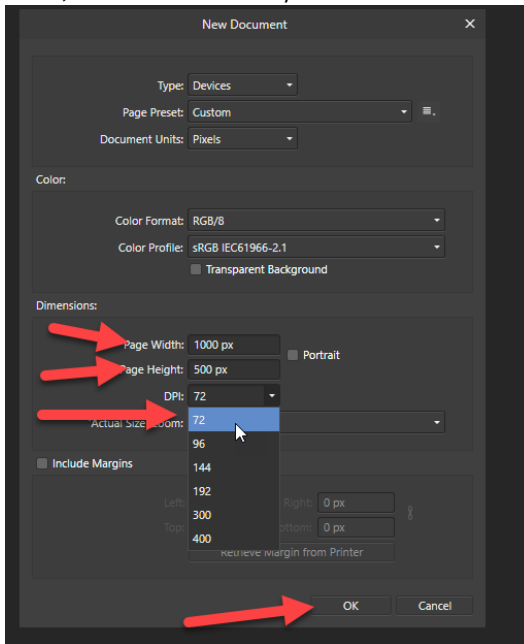
1. Close any file tabs currently open in Affinity, i.e. nature.jpg and the first canvas you created WITHOUT saving them by clicking on the X in tab for each image:



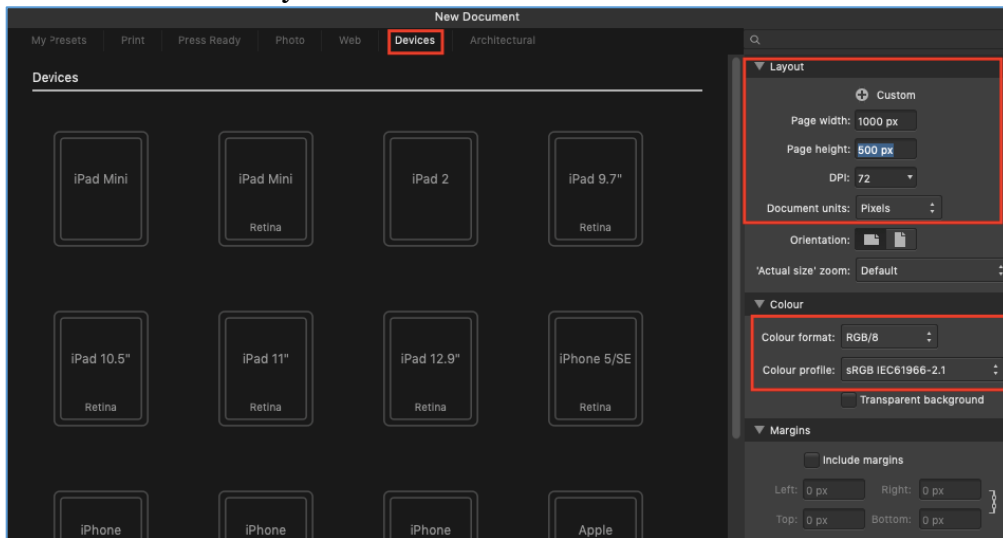
2. Create a new empty canvas by hitting File > New. In the New Document pop up window, make sure that the Document Units: is set to Pixels and set the Color Format to RGB/8



3. Set the Page Width to 1000 px, the Page Height to 500 px, set the resolution at 72 DPI, and hit the OK/Create button.

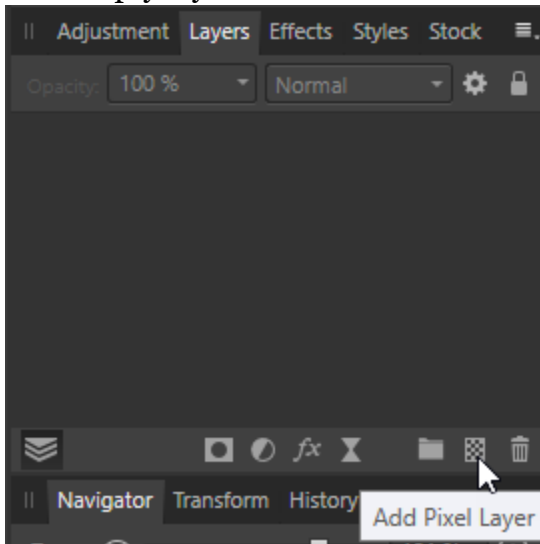


In the newer Affinity versions it would look like the below

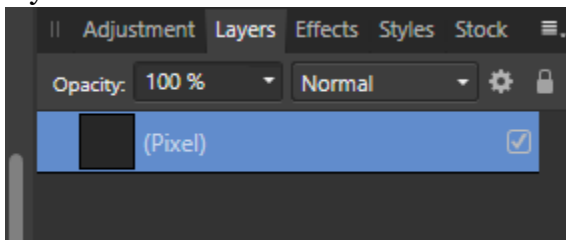


4. On the right, if the Adjustment panel is still open from before, click on Layers tab to open the Layers panel again. Notice that there are no layers currently listed there.

5. Click the little checkerboard-like icon at the bottom of the Layers panel to add a new empty layer.

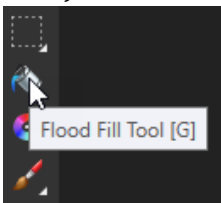


6. In the Layers panel, you will see the label "(Pixel)". This is your new background layer.



Note: each shape, colour, text, or other object you add should always be in its own layer. Do not put multiple elements in the same layer!

7. Now we can begin by adding a background colour to the canvas in this new layer. In the Tool Palette along the left side, click on the Flood Fill Tool (paint bucket icon).

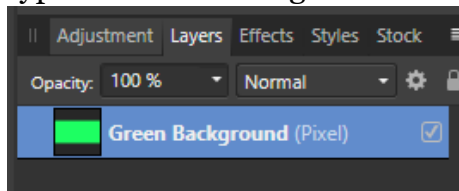


8. Make sure the Color panel is open on the right side. That panel is used to select a colour that you want to use to fill the background layer. Click on the white circle, which represents your Fill colour to be used when you draw anything on the canvas. With that circle selected, click in the green area below and notice the

circle is now green rather than white.

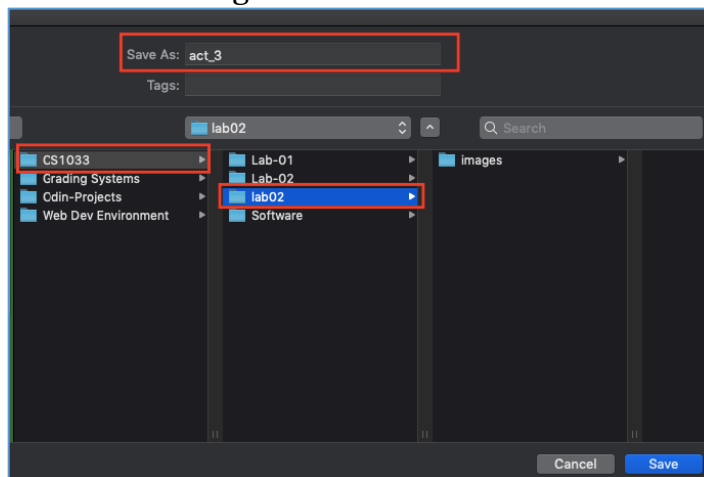


9. Click now on the canvas to fill the background with green.
10. In the Layers panel, you will see the label "(Pixel)" beside a little thumbnail of your green canvas. Click on that label and it will change to say "Name of object". Type in "Green Background" and then click out of that area.



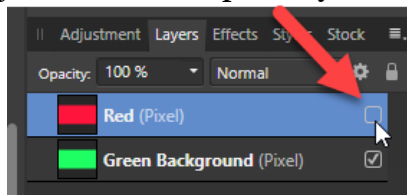
Note: you should always give an appropriate name to every layer you add. These names help you remember what is contained there, so be descriptive but also concise. You will receive marks on your assignments for picking good layer names so make sure you always remember to give your layers good descriptive names!

11. Click File > Save As. Name the file *act_3* and make sure it saves into **lab02** but not into the images subfolder

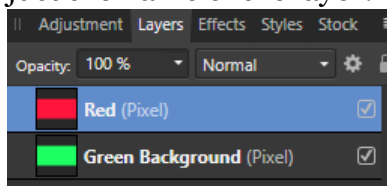


As you are working through this lab, remember to select File > Save every few minutes (or hit Command+S).

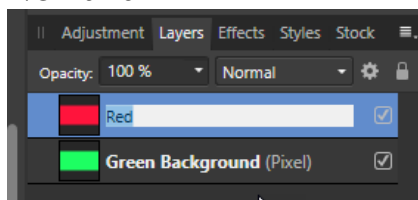
12. In the Layers panel, click on Green Background to ensure it is selected. Then add another pixel layer (click on the checkerboard icon) which will be added above the green background.
13. Change the background colour of this new layer to Red.
14. Notice beside each layer name in the Layers panel there is a checkbox. These indicate whether or not the layers are visible. Click to un-check the Red layer's checkbox to see that the red layer disappears. The layer itself is not deleted but just hidden temporarily. Click again on the checkbox to make it visible again.



15. Click down and hold the button down on the Green Background layer and drag your mouse up to ABOVE the new, Red layer. If you accidentally drop it on top of the Red layer, just press Command + Z to undo that action. Make sure you drop the Green Background layer ABOVE the Red layer. Dragging this way re-orders the layers. The order is very important! As you will see when you drop the Green background layer on top, the canvas becomes green again rather than red because Green Background is the upper layer now. Drag the Green Background layer down to the bottom to see the Red layer show up again.
16. Click on the Red layer in the Layers panel. Make sure the layer is selected and not just the name of the layer. It should look like this:

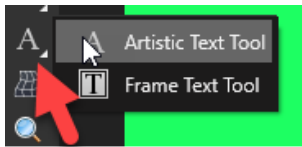


NOT this

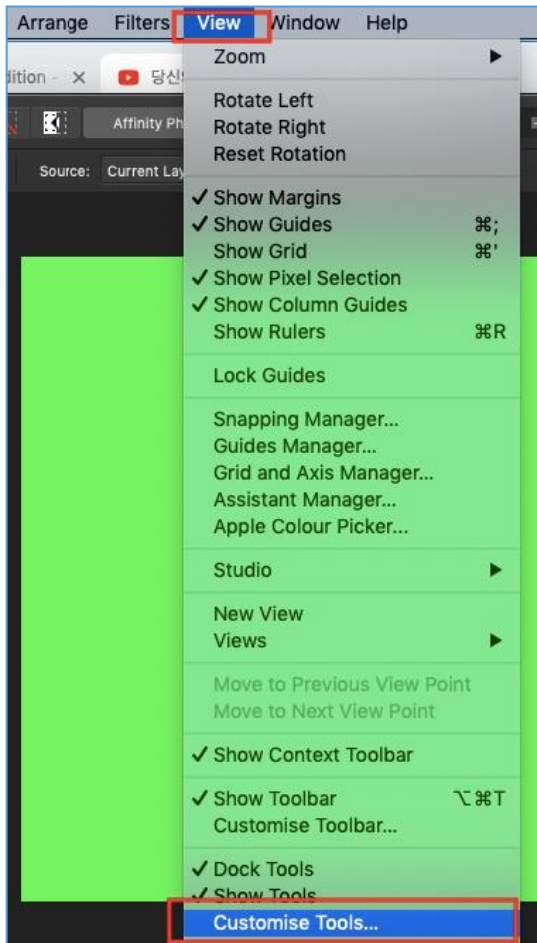


17. In the lower right corner of the Layer panel is a trash can icon. Click on it to delete this layer.

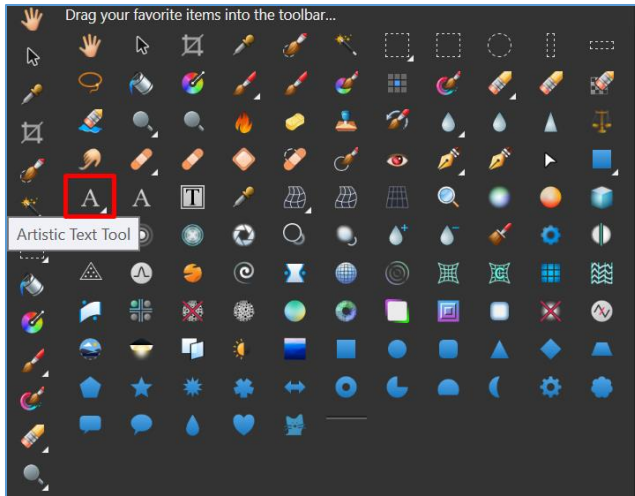
18. Click on the Artistic Text Tool (the letter A icon) from the Tools Palette along the left side of the window.



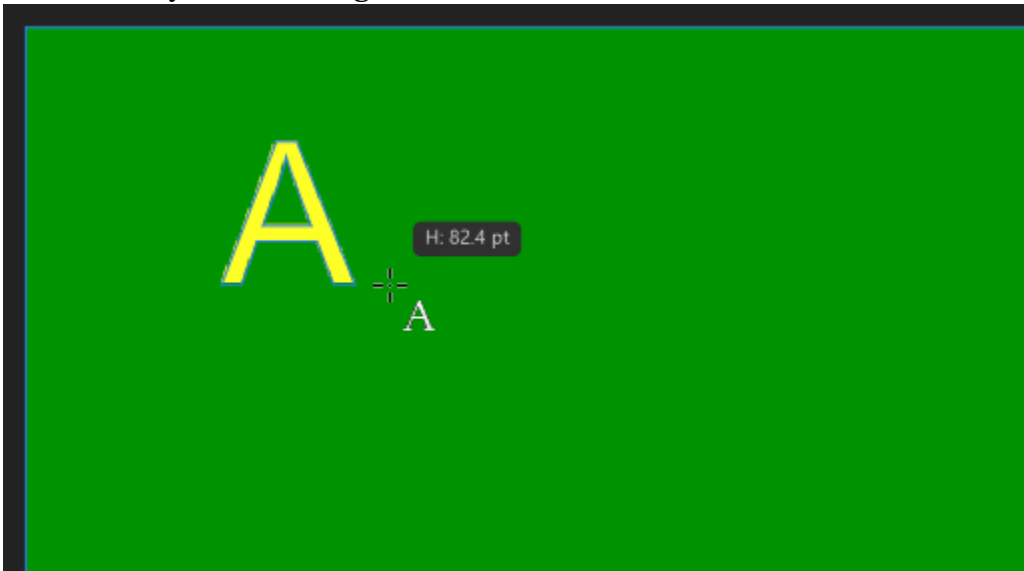
If you have Affinity Photo 1.8.4 and higher, you will not see the Artistic Text Tool on the left side. You have to click 'View>Customize Tools' on the top menu bar.



Find the 'A' with the corner arrow icon and drag it to the left side. Close Customize Tools once done.



19. In the Color panel on the right, change the Fill colour to yellow.
20. Hover your cursor over the canvas near the top. Click and drag the mouse down to create a text box of that size (the amount that you dragged down). Don't worry about the size for now, just make your font size to something reasonable that you can read as you can change the font size later.

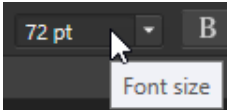


21. Type "Sunny Day Golf Course" and then click outside of the textbox. Notice in the Layers panel that a new layer has been automatically added and contains the caption "(Sunny Day Golf Course)" to match the text you typed. The name of textbox layers, by default, is given the same name as the text in the box. It is fine to keep this text as the name of the layer. At the top there are numerous settings to change the font style, size, spacing, alignment, etc. Most of these icons are very similar to those used in Word.

22. Click on the text layer there if it is not already selected. When the layer is selected, you will see a blue bounding box around the text on the canvas.



23. In the top bar, just below the Options bar, click the font size dropdown menu and select 72pt.

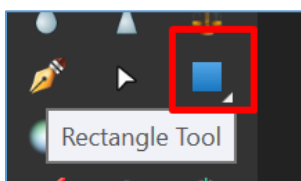


24. Hover your cursor on one of the edges of the blue bounding box around the text so that the cursor turns into a crosshair icon as shown in the image below (the red arrow is pointing to what you should see). Click there and drag the mouse around to move the text. Try to get the text roughly in the middle of the canvas horizontally but still near the top.



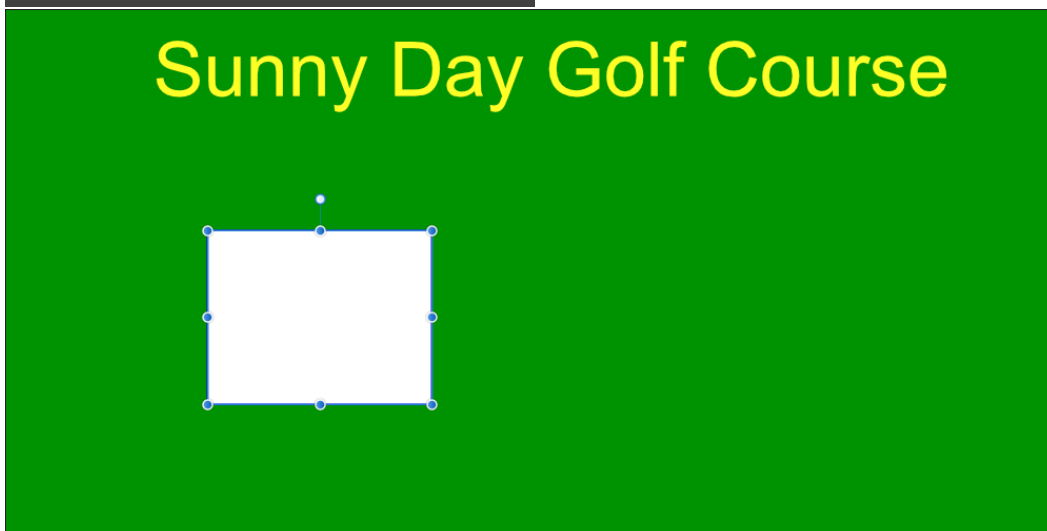
25. In the Tools Palette, immediately above the text tool you used previously, there is a blue icon that represents the many shape tools. It is probably a rectangle at this point, i.e. the Rectangle Tool. Click and hold on this icon and make sure you select Rectangle Tool

If you have Affinity Photo 1.8.4 and higher, you will not see the Rectangle Tool on the left side. You have to click 'View>Customize Tools' on the top menu bar. Find the Rectangle Tool and drag it to the left side. Close the Customize Tools window.



26. Click on the Green Background layer to make sure it is selected. You do not want the text layer selected.

27. In the Color panel on the right, select the Fill colour circle (the lower right of the 2 overlapping circles) and select white. Then click the Stroke colour circle (the upper left of the 2 overlapping circles) and select a blue colour.
28. Click down on the canvas and drag your mouse over to draw a rectangle. Notice the background colour is white and the border is blue. The Fill and Stroke colours are used respectively for these two portions of the shapes.



29. In the Layers panel, a new layer has been automatically created for the shape with the caption "(Rectangle)". Click on the label and name it "White Box".
30. Click on the Green Background layer again to make sure it is selected.
31. Select the Artistic Text Tool and then change the Fill colour to red in the Colors panel. Create a textbox near the white rectangle and write "18 holes!"

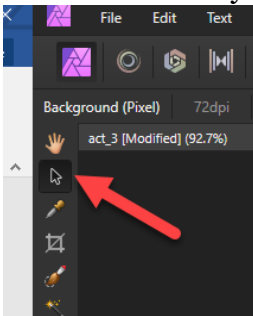


32. Move the new text over the white box. You will need to move the 18 holes text layer above the White Box layer. You may need to reduce the font size to about 36 or 48 point so that the text fits within the rectangle. Drag the text box to make it

roughly centered in the shape. It should look similar to this:

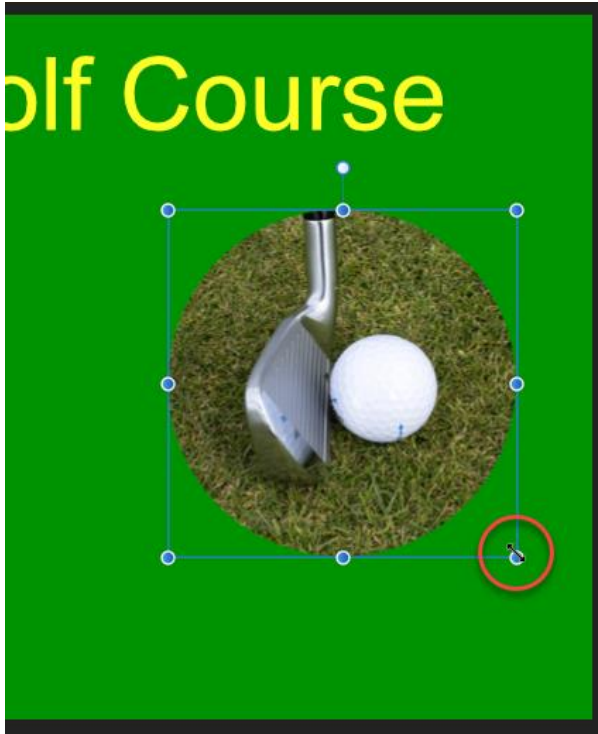


33. Save your file (File > Save)
34. Click File > Open and make sure the browse window is pointing to your **lab02/images** folder on your memory stick. Select *golf.png* and click Open. This opens the golf image in a new tab, not in the document you have been working in.
35. In the *golf.png* tab, hit Command+A to select the entire image. Then hit Command+C to copy the image. Click on the *act_3* tab with your work on the Green Background. Hit Command+V to paste the golf image on your image as a new layer
36. Click on the Move Tool (looks like an arrow) in the Tools Palette so that you can move the new layer.



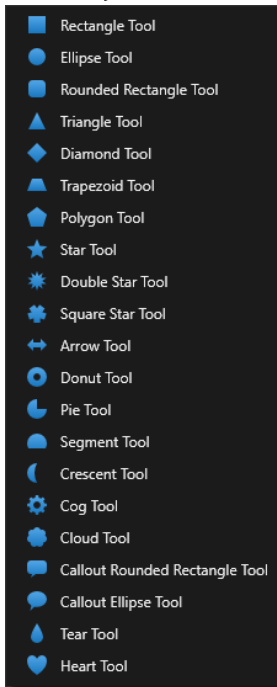
37. Drag the image over to the right side of the canvas and around the middle vertically. Hover your cursor on one of the corners of the image's bounding box so that you see a diagonal two-sided arrow icon. Click down the mouse and drag inwards to make the image smaller until it's roughly the same height as the white

box you made previously.



38. Name this layer "Golf Ball Image".

39. Look at the Rectangle Tool icon in the Tools Palette that you used earlier. There's a little white triangle in the lower right corner of the button. This is because there are several similar tools contained within that tool group. Click and hold for a second on the Rectangle Tool icon or on the white triangle to see the menu of other shape tools (if it doesn't come up right away, try holding the click for a full second).

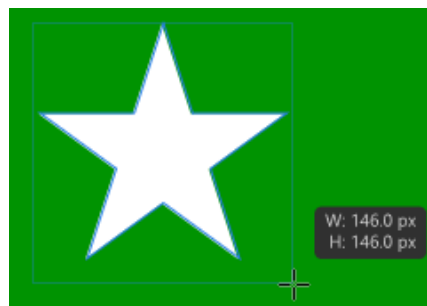


Several other buttons in the Tools Palette are also set up in this way. If you ever see a white triangle in the right corner of a tool in the Tools Palette, then that tool will have sub tools to pick from.

40. Click to expand the Rectangle Tool and then select the Star Tool.
41. Click around the middle of the canvas and drag the mouse over to draw a star. Make it very tall and skinny. Notice that it may look stretched out from some of the mouse positions. To keep it proportional and un-stretched, hold the Shift key while dragging the mouse.

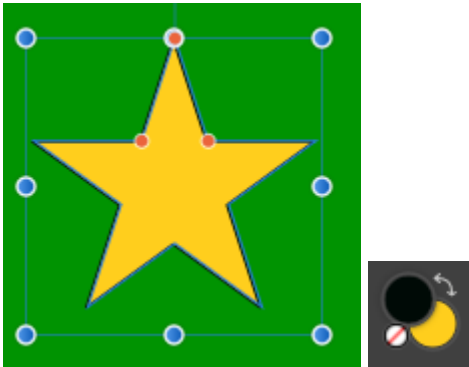


Without holding Shift

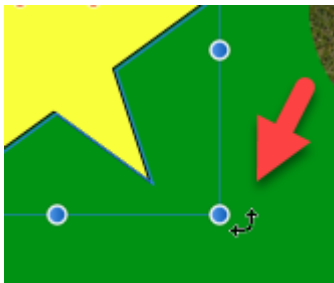


Holding Shift

42. Hit Command+ Z to get rid of your first star, click on the Star Tool again and draw another one holding the shift key down so that the star is proportional.
43. Let go of the cursor to add the star to the canvas.
44. Move the star between the white box and the picture of the golf ball
45. Rename the star layer to be *Yellow Star Shape*
46. When you created the rectangle earlier, you set the colours prior to drawing it. Colours can also be changed after drawing them. Keep the star shape selected and look at the Colors panel on the right. Change the Fill colour to yellow/orange and the Stroke colour to black.



47. With the star still selected, hover your mouse around the outside of one of the corner circles of the bounding box so that you see a curved arrow.



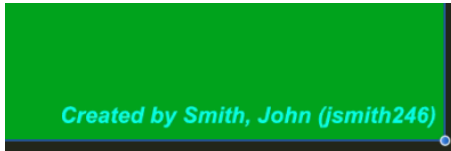
48. Hold down and drag your mouse back and forth to see the shape rotate. Rotations can be done the same way on images and text.
49. Click File > Save to save the completed file.
50. Following the same steps from before, create another Text layer using the Artistic Text Tool (the A icon) on the left side panel.
51. In the Color panel on the right, change the Fill colour to light Blue.
52. Hover your cursor over the canvas near the right-bottom. Click and drag the mouse down to create a text box of that size.
53. Type "Created by **StudentLastName, StudentFirstName (UWO ID)**" and then click outside of the textbox. For example, if your name is John Smith and you UWO ID is jsmith246 then you would type "***Created by Smith, John (jsmith246)***".
54. Click on the text layer there if it is not already selected.

55. In the top bar, just below the Options bar, click the font size dropdown menu and select 48pt. Make the font Bold and Italic by clicking on the B and I icons on the

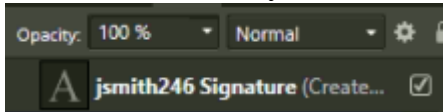


same top bar.

56. Hover your cursor on one of the edges of the blue bounding box around the text so that the cursor turns into a crosshair icon. Click there and drag the mouse around to move the text. Try to get the text roughly in the right-bottom corner of the canvas horizontally.



57. Rename this text layer to “UWO ID Signature”.



58. Click File>Save.

Activity 4

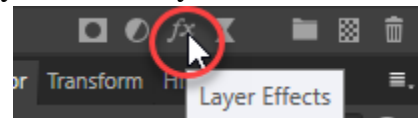
More on graphics

In this activity, you will put special effects on objects that you have drawn or added to your canvas.

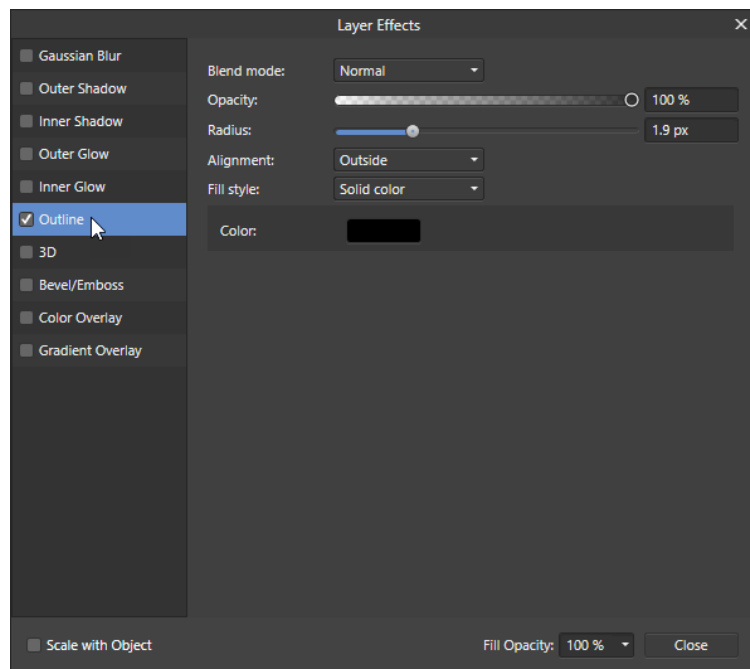
1. Keep *act_3* open, or re-open it if you already closed it. Hit File > Save As to make a duplicate copy but name this new one *act_4*.
2. Now you will be working in *act_4* which is initially the same document as *act_3* but you'll be adding new effects to spice this one up!

Borders and outlines

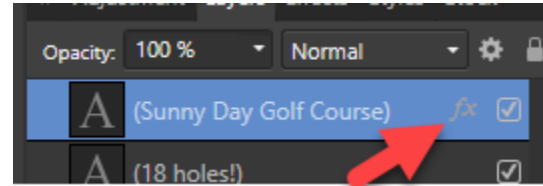
3. Using the Move Tool (the cursor icon near the top of the Tools Palette), double click on the big title text "Sunny Day Golf Course" so that you see the blue bounding box around the text (or select that text layer in the Layers Panel)
4. Click the fx button at the bottom of the Layers panel to bring up the Layer Effects pop-up window.



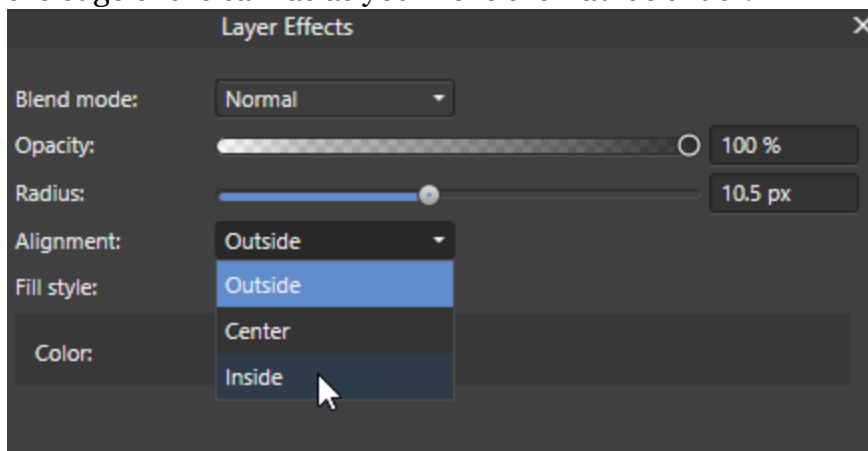
5. In the Layer Effects window, click on Outline and check the box to activate it. The Radius setting indicates the thickness of the outline so drag that slider back and forth to see the text outline grow and shrink. Set it around 2 px. Click the Close button in the lower right corner to close this Effects window.



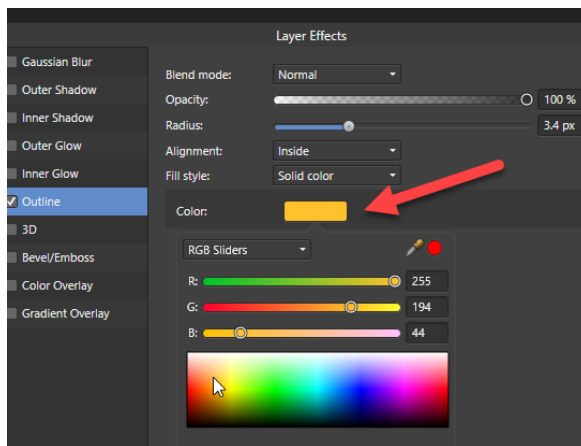
6. Notice that, in the Layers Panel, this layer now has an fx to the right of it. This indicates that it has some special effects on this layer. You can click on that fx to reopen the effects for this layer in case you ever want to edit or remove the effects.



7. Now click on the Green Background to select it and then click the fx button.
8. Select and activate the Outline effect.
9. Drag the Radius slider up to about 10 px. You don't see anything change here and this is because the outline is on the outside of the selection, which in this case is the entire canvas. This means an outline is being added but it is right around the canvas so we can't actually see it.
10. To change this so that the outline is on the inside like a border, change the Alignment menu to Inside, and you should see the black border appear around the edge of the canvas as you move the Radius slider.



11. Click on the Color picker box in the Layer Effects pop up window to bring up a colour selector and choose an orange shade for the border. Then close the Layer Effects window.



12. These borders/outlines can also be added to shapes and images. Open *golfer.png* in Affinity, select the entire image (Command+A) and push Command+C to copy it. Go back into *act_4* and push Command+V to paste the golfer image.
13. Drag the golfer picture to the lower left corner of the canvas.
14. Rename this new layer to be Golfer Image
15. Use the same procedure as above to add a black outline of 1-2 px to the golfer and save your file.



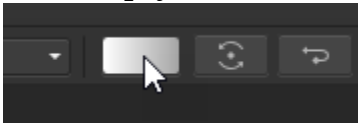
Gradients

16. Click twice or double click on the Green Background layer to select it. Click the Add Pixel Layer (Checkerboard icon) button at the bottom of the Layers panel. This will add a new layer immediately above the green background layer. Make sure this new layer is selected.

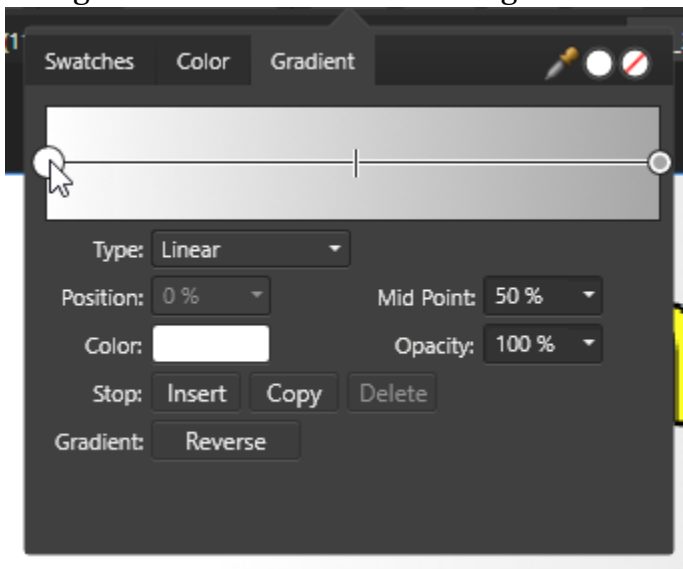
17. In the Tools Palette on the left, click the gradient tool icon which is a colour wheel with a diagonal arrow:



18. Click and hold down the mouse button somewhere on the left side of the canvas and drag the cursor across to the right while holding down the clicker. As you drag, you will see a grayscale gradient over the background. Release the button. Try this again but this time draw from bottom right side of the canvas to top left side of the canvas and then release.
19. Try this again but this time, drag from the middle left side of the canvas to the middle right side of the canvas and make sure you hold the Shift key to lock the gradient angle in to completely horizontal. Then let go near the right side to add that gradient.
20. At the top, just under the Options Bar, click the gradient rectangle icon.

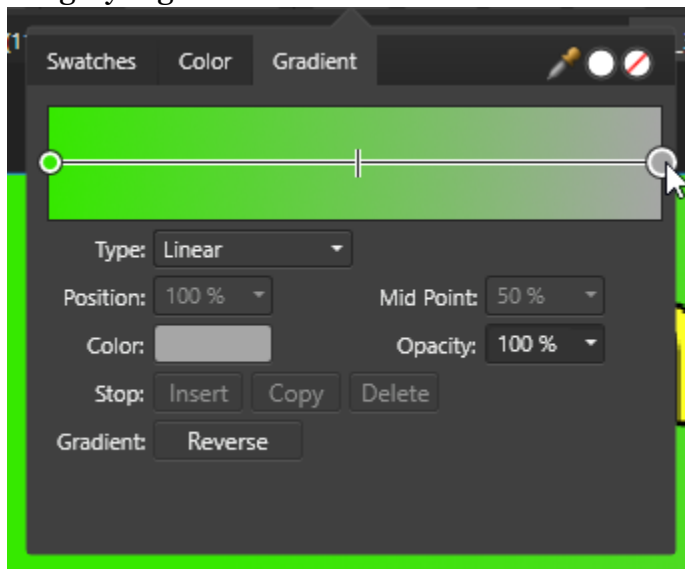


21. The window that pops up shows you the gradient settings and allows you to easily change the colours and other settings. Click on the left circle in the white region.

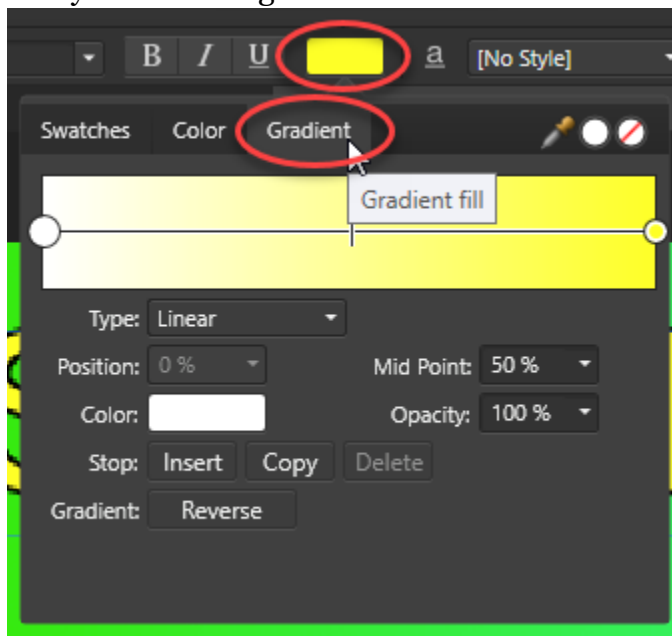


22. Now click the Color picker, currently a white rectangle, and select a green instead.

23. Click back on the Gradient settings panel and click on the right circle which is in the gray region.



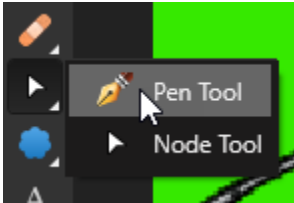
24. Go into the Color picker and this time choose a cyan/turquoise colour.
25. The main canvas background should be a horizontal gradient from green to cyan.
26. Go to the Layers panel and name this layer GreenCyan Gradient
27. Click on the title text "Sunny Day Golf Course". Along the top, under the Options Bar, you should a solid yellow rectangle beside some other text settings. Click on that yellow rectangle and then click the Gradient tab in the window.



28. For the left circle, choose yellow, and for the right circle, red.
29. Now the title text will be filled with this yellow-to-red gradient.

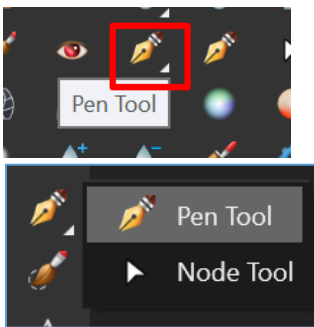
Drawing Lines

30. Look for the Node Tool (cursor-like icon) near the end of the Tools Palette along the left. Expand the tool group menu in by clicking on the little triangle and select the Pen Tool.

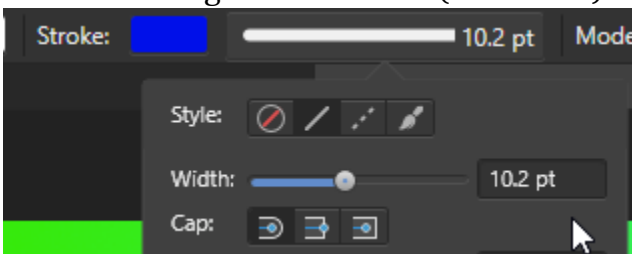


If you have Affinity Photo 1.8.4 and higher, you will not see the Node Tool that has the Pen Tool on the left side. You have to click 'View>Customize Tools' on the top bar.

Find the Pen Tool instead of the Node Tool and drag it to the left side. Close the Customize Tools window. On the left side click on the Pen Tool and select Pen tool.



31. Click just under the title text, near the "S" at the start of the title. A little square will appear there.
32. Hold Shift and move your cursor near the end of that title, just under the final "e". Holding Shift allows you to force the line to be horizontal as well as shows a guide of where the line will be drawn. Release the mouse button once the line is drawn.
33. Rename this layer with the name "Title Underline Shape".
34. At the top, under the Options Bar, click on the Stroke colour selector and choose a dark blue colour.
35. Next to the Stroke selector, you will see a line with a number after it. This will set the thickness of your line. Click on that thickness icon to bring up a little pop-up window. Change the thickness (the Width) to about 10 pt.



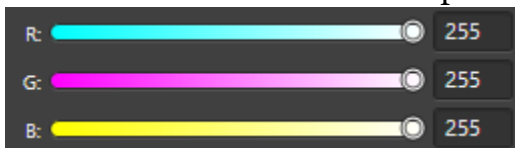
36. Now your underline should be blue and reasonably thick under the title.
37. Hit File > Save.

Activity 5

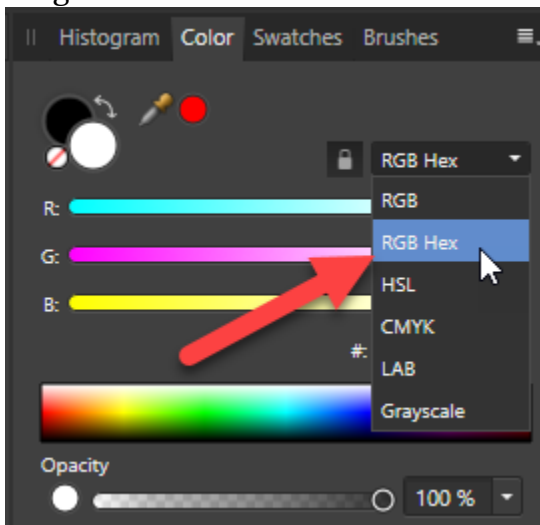
Colour formats

Virtually any work you ever do in photo editing will be done in RGB/8 mode because this represents *true colour* and it represents the mode you must use to display an image in colour ON AN ELECTRONIC DEVICE (e.g. in a website or as a screen background on a phone or a computer) However, it's good to know that other colour formats are available should you ever need to work with a different palette size. In this activity, you will get a glimpse at some other colour formats.

1. In Affinity, hit File > New to bring up the New Document window.
2. Keep the Color Format as "RGB/8" in this window and push OK/Create.
3. In the lower right corner, you will likely see the Navigator panel. Click on the Channels tab to toggle to that panel. There are 4 channels listed: Composite Red, Composite Green, Composite Blue, and Composite Alpha (alpha means opacity).
4. Take another look at the Color panel in the upper left corner.



5. In the Colors panel, click on the dropdown menu which probably says RGB by default and change it to RGB Hex. Observe the colour codes in each format as you drag a slider back and forth.

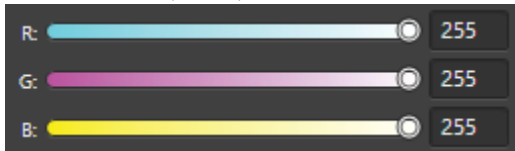


6. Hit File > New to bring up the New Document window.
7. Change the Color Format to "Gray/8" in this window and push OK/Create.

8. Look at the Channels panel now to see how it changed from the RGB mode.
9. Look at the Color panel to see the palette available in this colour mode.



10. Hit File > New to bring up the New Document window.
11. Change the Color Format to "CMYK/8" in this window and push OK/Create. This would be the mode you would use if you were going to create something that would be printed, for example business cards.
12. Look at the Channels panel now to see how it changed from the RGB mode.
13. Look at the Color panel to see the palette available in this colour mode. Notice that the "R", "G", and "B" sliders there now contain cyan, magenta, and yellow.



14. Now close all the tabs you just created without saving any of the files and close your golfing image.

Activity 6

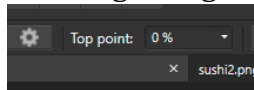
Practice

For this last activity, you must try to re-create a provided graphical image using the tools you just learned in this lab. There won't be instructions given but just a finished product that you are expected to replicate as closely as you can.

Specifications:

- 700 px by 500 px; 72 DPI; RGB/8
- The colour of the word RICE in RGB is (199, 67, 65)
- To make the triangle shape, use the Shapes Tool in the Tools Palette and select the Triangle Tool and make a right angle triangle by, below the Options Bar, set

the Top point: to 0% →



- The colour of the orange triangle in RGB is: (255, 151, 92)
- Select a Font Type/Family that you like (the image uses Berlin Sans FB Demi but you can choose a Font Type/Family of your liking)
- Estimate font sizes and border thicknesses and gradient colours.
- Change the text: *Your First Name's* to YOUR actual first name
- Use the sushi picture we gave you but use the eraser tool to remove the area above the sushi (make it transparent) and rotate the image slightly (your erasing doesn't have to be perfect, just roughly is fine!)

Image to replicate:



When you are finished, save your work as “act_6” on to your memory stick or cloud storage.

Uploading labo2 Folder

Now we are going to upload your Lab2 activities to a webserver to make sure they actually work.

1. Use the Spotlight Search tool (magnifying glass at the top right of the Mac's menu bar) to find and open FileZilla. You will be connecting to the Gaul server to upload the webpage to a webserver in order to test the webpage you just created on the World Wide Web and make sure it looks correct.
2. Enter the following information into FileZilla:
 - a. Host: `sftp://cs1033.gaul.csd.uwo.ca`
 - b. Port: 1033
 - c. Username: Your Western User ID
 - d. Password: Your Western Password
3. Click on the blue Quickconnect button.
4. When connected, you should see your labo1 folder (called a directory in FileZilla) that you created a weeks ago on the Remote side (right panel). On the Remote side (the right side), create a new directory (folder) called **labo2**. Make sure this folder has its Permissions set to 0755. This is usually the default, but if, for some reason it's different, change it to 0755 now.
5. Click into the **labo2** folder.
6. In the Local side (left panel), navigate to **cs1033/labo2**. Select all the work you've completed (affinity files and **images** folder) and drag them across to the Remote side to upload it.
7. Open a new tab in Google Chrome and check that the files are showing up as they should:
 - a. <http://cs1033.gaul.csd.uwo.ca/~youruserid/lab02/images/>
 - b. http://cs1033.gaul.csd.uwo.ca/~youruserid/lab02/act_3.afphoto
 - c. http://cs1033.gaul.csd.uwo.ca/~youruserid/lab02/act_4.afphoto
 - d. http://cs1033.gaul.csd.uwo.ca/~youruserid/lab02/act_6.afphoto

where **youruserid** is your own Western username.

Lab2 OWL Submission

1. In your Internet browser, go to <https://owl.uwo.ca> and login with your UWO username and password.
2. Go to your CS1033 OWL site.
3. On the left-side panel, click on **Week By Week**. Click on the **Week 2** button, then click on the **Lab 2** button, this will take you directly to **the Lab 2** submission area in Owl.
4. In the textbox under Submission, copy and paste your submission link which is:
 - a. <http://cs1033.gaul.csd.uwo.ca/~youruserid/lab02/images/>
 - b. http://cs1033.gaul.csd.uwo.ca/~youruserid/lab02/act_3.afphoto
 - c. http://cs1033.gaul.csd.uwo.ca/~youruserid/lab02/act_4.afphoto
 - d. http://cs1033.gaul.csd.uwo.ca/~youruserid/lab02/act_6.afphoto
5. Click on Submit.

Remember to save all your Lab02 folder on your backup memory stick or cloud storage!