Genealogical Computing Group
Special Interest Group of the
New Zealand Society of Genealogists
Southland Branch

Editing Images with Free Software – October 2008

This month I continued demonstrating the use of layers to manipulate images, with the emphases on producing images for inclusion in family tree software. I used Gimp as it is free, although all good image software support layers, and there are some new free ones (eg Paint.NET) which also have layer support. The techniques that I demonstrated apply to all packages although the tools and menus will have slightly different names. I demonstrated taking a pupils head from a class photo, enlarging it, and placing it in a oval white frame above the class.

It is important to remember that you are only working on the layer that is highlighted. It is possible to have visibility turned off on the active layer, so you cannot see what you are doing and think nothing is working until the layer is turned on and find the mess you created blind! Layers are displayed in the order they appear in the Layers window and the order can be changed. The background layer could be moved to the top, which would block out all the lower layers, so remember the order is important.

Each layers opacity is controllable and lets the lower layer show through. If the base layer is turned off a checkerboard pattern shows through. This is an alignment grid and is not in the final image. Turning off the visibility of a layer is the same as making the Opacity 0%. If you want to see the effects of opacity, use Bucket Fill to replace the background image with white (after you have copied the image to a new layer). You then can zoom the opacity up and down to get the desired effect.

Using the various selection tools, inverting the selection and deleting the surrounding image in effects makes the surrounding image transparent. (Technically the details of all pixels for each layer are stored in "Channels" for each colour with opacity called the Alpha Channel).

Edit School Photo with Gimp

1. After loading in image duplicate layer
   a. Open Layers Pallet (Ctr L)
   b. Right click on Background Layer
   c. Click on duplicate button
   d. Select new layer and open Edit Layer Attribute pallet and rename it to "Photo"
2. To make the Background Layer white
   a. Select "Background" Layer
   b. Make sure foreground is set to White
   c. Select "Bucket Fill"
   d. Select "Fill whole selection"
   e. Click on image
3. To select head
   a. Duplicate Photo and rename to "Insert Picture"
   b. Use "Oval Selection" tool
   c. Select head
   d. "Invert Selection"
   e. Press delete
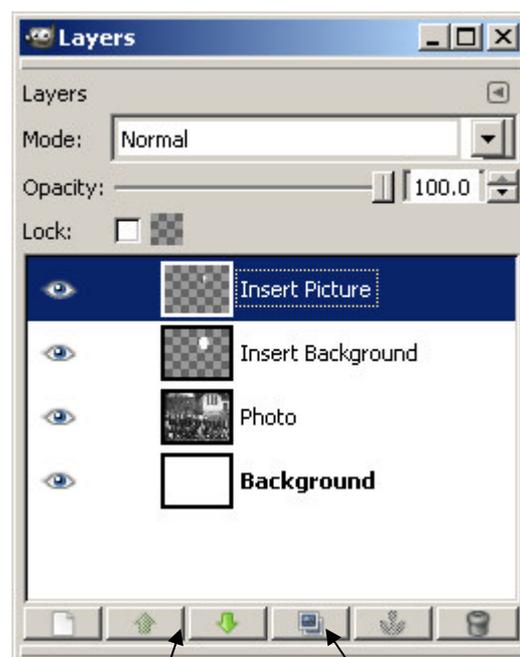
Reorder Layers   Duplicate Level

4. To increase the size of the inserted image and reposition
    a. Zoom out (25%) so you can see the area surrounding picture (bottom of main window)
    b. Select "Zoom" Tool
    c. Lock width to height (the link symbol) to stop distortion
    d. Grab image handle and drag until image in required size
    e. Grab the centre handle to reposition image to new position
    f. Select "Scale" button to process layer
5. To place a white background behind head
    a. Duplicate "Insert Picture" and rename to "Insert Background"
    b. Select "Insert Background" and make it the second layer down (click the green down arrow)
    c. Select the "Bucket Fill" tool
        i. Make sure foreground is set to White
        ii. Select "Fill similar colours"
        iii. Unselect "Fill transparent areas"
        iv. Set 'Threshold" to %100 (replaces every colour with white)
6. The picture should now look like this:-

Now save the picture in a format that supports layers if you may want to edite it. If you are happy with the results "Save As" and select the chosen format (usually .jpeg). At this stage the final photo will be reduced to a single layer.