A GIMP TUTORIAL

1 Get Started
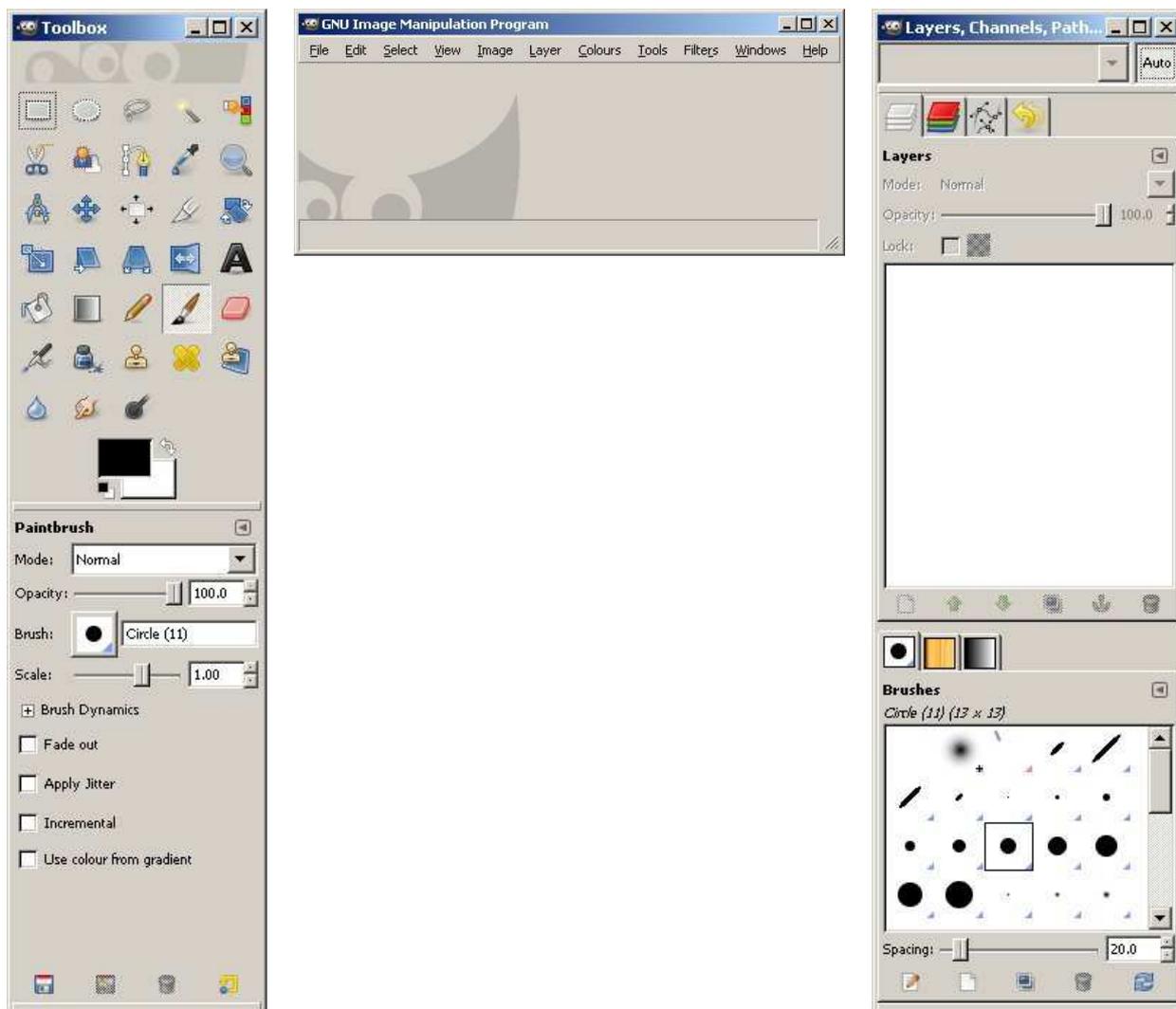
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The GNU Image Manipulation Programme (GIMP) does exactly what it says: it makes changes to images. With it you can resize and sharpen images, remove blemishes in photographs, create logos and collages, apply artistic affects, and more.

We see how to obtain GIMP and the user manual. And we get started on rotating, cropping, sharpening, saving and printing images.

1.1 Get GIMP

GIMP is shipped with Linux and is also available for Windows. Visit http://www.gimp.org/. Download GIMP first, and then the documentation (the GIMP User Manual).

Load GIMP for the first time and you will see several windows:

The Toolbox has a selection of useful tools such as Paintbrush, Eraser and Scissors. Beneath the toolbox are settings for the current tool. Here, the current tool is Paintbrush.

In the centre we have the GIMP main window. From here you can open a file for editing, get help and re-arrange your windows.

The Layers, Channels Paths... window is on the right. You can use layers to merge several images into one. Beneath this window is the Brushes window. From here you can create, delete and select from a variety of brushes.

If both the Toolbox and the Layers, Channels, Paths ... windows are too long to be shown completely within the Microsoft window, shorten them from the top and then drag them up a little.

If you move the GNU Image Manipulation Program window to the left and it hides behind the Toolbox window, you might prefer to see the active window on top.

1. choose Edit, Preferences, Window Management

2. set the Window Management Hints to Normal window for both toolbox and other docks

3. click OK

1.2 Download an Image

The images used in this tutorial come from www.geekphilospher.com.

Have a folder ready for your images. Click on the required image, read and accept the conditions, click Download, and save in your work folder.

1.3 Load an Image

One way is to:

1. right click on your image in its folder

2. choose Edit with GIMP

1.4 Edit with GIMP

The essential steps for editing with GIMP are:

1. immediately on loading, save the image in XCF format
2. make the required changes to the image
3. save the image in the chosen format.

This helps to preserve the quality of your image.
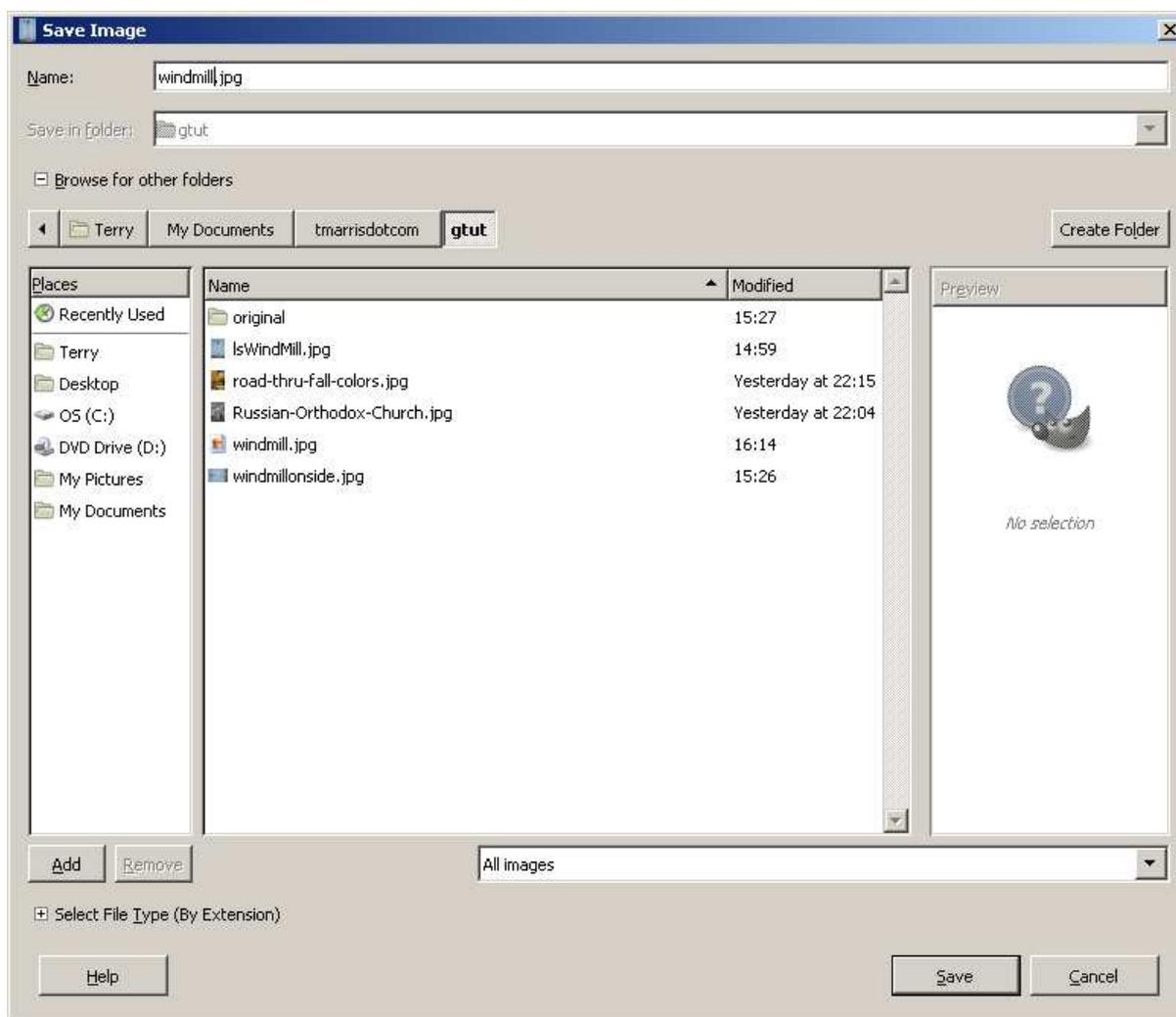
1.5 File Types

A few words on appropriate extensions:

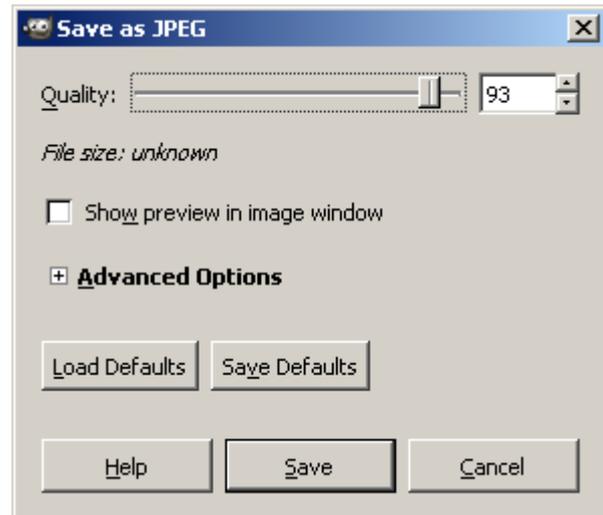| File Format	Extension	Description	Use For
XCF	**.xcf**	GIMP's native format	When opening an image for the first time, save it immediately in XCF format - allows you to make changes to the image and maintain its quality. When the amendments are finished, save the image in your chosen format.
GIF	**.gif**	Graphic Interchange Format	screen shots and computer graphics with just a few colours. Quality is lost when more than 256 colours are used.
JPEG	**.jpg**	Joint Photographic Experts Group	photographs. Note that quality e.g. sharpness is lost every time a JPEG image is opened, edited and then saved.
PNG	**.png**	Portable Network Graphic	screen shots and computer graphics.

1.6 Save an Image

We save an image as a JPEG file.

1. choose File, Save As... The Save Image window appears.

2. supply a file name along with an appropriate extension e.g. windmill.jpg

3. check that the right folder is selected

4. click Save

5. if you see the Export file window, choose Export

6. in the Save as JPEG window accept the default values, click Save

Save as JPEG

Quality: 93

File size: unknown

☐ Show preview in image window

⊞ **Advanced Options**

Load Defaults   Save Defaults

Help   Save   Cancel
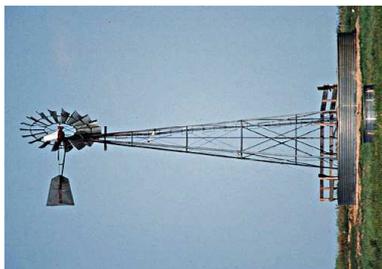
1.7 Print an Image

The process for printing an image is the same as for most documents in MS Windows.

With the image loaded in GIMP choose File, Print, OK.

1.8 Rotate an Image

We rotate an image 90º clockwise,

from this: to this:

1. open the image in GIMP and immediately save it in XCF format

2. choose Image, Transform, Rotate 90º clockwise

3. save your image, with a suitable name, in JPEG format

There are several ways to start a sequence of menu-driven actions. One is from the menu at the top of the window. Another is to right click on the image itself. You choose the method you like best.

1.9 Crop an Image

We remove unwanted edges from an image:
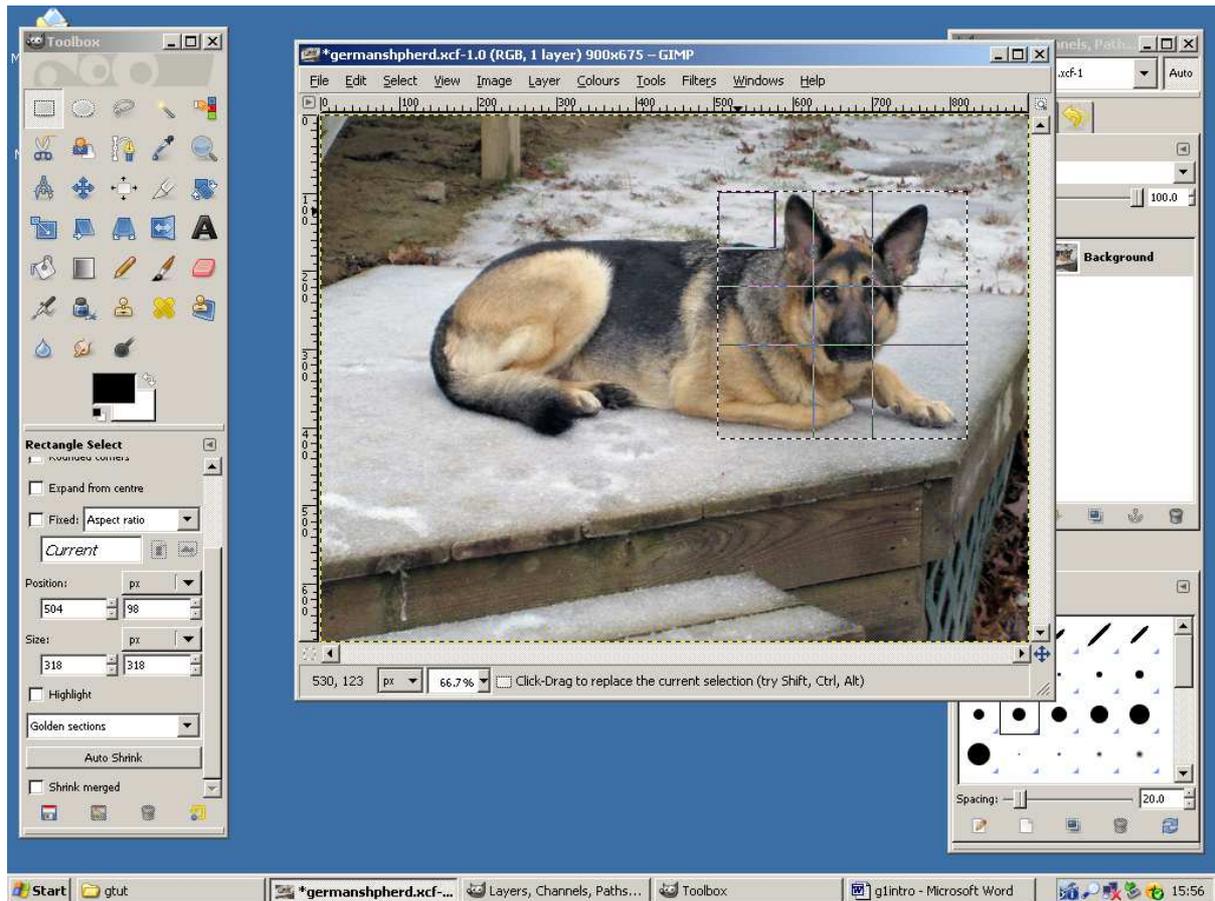
from   to
this   this

The essence of the method is:

1. open the picture in GIMP and save in XCF format
2. use the rectangle selection tool, with guidelines, to create the desired layout for the new image
3. crop the image
4. save the result as a JPEG file

We look at the method in more detail.

1. open the image in GIMP and immediately save it in XCF format

2. open the Rectangle Select tool: choose Tools, Selection Tools, Rectangle Select

3. set Guides to Golden sections. You should find this at the bottom of the Rectangle Select window.

4. position the cursor near the top left hand corner of where you want to start cropping, hold the mouse button down and drag to the bottom right hand corner. Release the mouse button. Notice the ants marching around the border of the selection.

5. Fine-tune the layout. We are looking to position the dog's right eye where two Golden Section lines cross each other. Move the cursor towards a corner - a small triangle appears. Drag the corners of the rectangle to obtain the required layout.

6. crop the image: choose Image, Crop to selection

7. halt the marching ants: click outside the rectangle

8. save the cropped image in JPEG format.

Placing an important feature at the intersections of golden section lines is sometimes used as an aid to good composition.

1.10 Sharpen an Image

Sometimes an image is more blurred than we would like. We need to sharpen it up. For example:

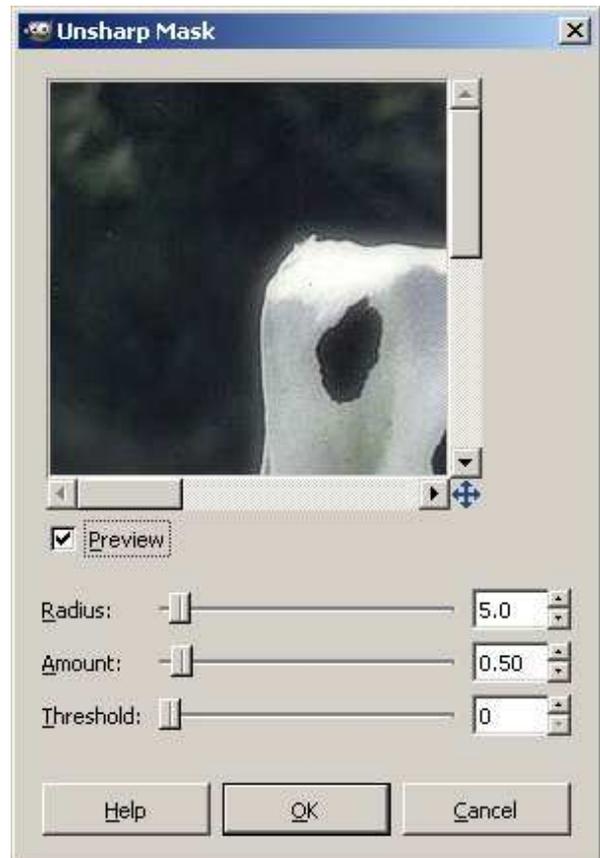from this   to this

1. load the image into GIMP and save it as an XCF file

2. choose Filters, Enhance, Unsharp mask

3. accept the default values and click OK

4. save the sharpened image in JPEG format

Do not overdo the sharpening - it looks ugly and unnatural. If you want to undo an action right click on the image and choose Edit, Undo.

Sharpening an image is always the last edit we consider making before the final save in the chosen format.

1.11 Copyright

The images we use in any way must either:

- be our own, or
- used with written permission of the owner, or
- paid for, or
- in the public domain because either:
    - its copyright term has expired, or
    - it has been put there by the copyright owner

otherwise it is theft.

If our images involve recognisable people we must get their written permission before we use the picture.

Sources of free stock images in the public domain include:

- www.sxc.hu
- www.morguefile.com
- www.imageafter.com
- openphoto.net
- www.free-photobank.org

Exercises

Using appropriate images, demonstrate how to:

1. rotate an image
2. crop an image
3. sharpen an image

Bibliography

GOELKER K GIMP 2 for Photographers Rocky Nook 2007 - source of inspiration

http://www.geekphilosopher.com/GeekPhilosopher.com/photos/photos.aspx - source of images. Accessed March 2010

www.gimp.org - source of GIMP software and documentation. Accessed March 2010

http://library.leeds.ac.uk/info/200174/copyright_and_licences/115/the_basics_copyright_and _images Accessed March 2010