USING PAINT.NET TO PREPARE PHOTOS FOR UPLOADING TO THE INTERNET

Instructions written by Olen B. Soifer, 06-22-2008, modified 1-15-2009

About Paint.NET: This is a program that does much of what similar, expensive programs do, such as Adobe PhotoShop©, but at a much lower cost…It's totally free! In addition to photo-editing and retouching, it has features that allow the user to do various artistic adjustments. Download it from from www.paint.net. This is, by the way, a completely different, much more sophisticated program than the Microsoft program called "Paint", which it was written to replace for those who find MS Paint to be too basic.

Objective of photo editing:

> To crop pictures to appropriate shape & eliminate crookedness; Manipulate photos to be a particular, or maximum, width or height. Adjust photos for color balance, brightness, contrast and sharpness; Eliminate "red eye" and speckles; Rename and save the photo as a new, smaller file with sufficient quality, but not excessive file size (leaving the original file intact). Does that sound complicated? It's not: Believe it or not, except for extensive retouching, editing a photo should take you no more than about a minute per photo!

Preliminary Steps and Hints:

1. **Download** the Paint.NET program to your "desktop" & click to **install** it

2. Create a new "working" folder and copy the photos that you want to edit into it. By doing that, you won't have to worry about ruining the original files. Or, you can open a picture and immediately save it under a new name, when you start editing, so that the original is not changed.

3. **Open** the Paint program by clicking the "desktop" icon the installation created. (Remember, this is not the original Windows Paint program.)

4. To **get rid of some clutter**, it is best, at first to click the "X's", at the top right of the various "tool boxes", to close them down. For now, you can use the tool "drop-down" which is located in the main tool bar at the top of your screen. Each time you want to use a tool, click the drop-down and select the tool you want. Or, leave the one tool bar, with two arrows toward the top, open.

5. **Toolbox in the way?** After opening a photo and choosing a tool, the toolbox will often open up right in the front of the middle of the photo you are working on. As with any Windows "dialog box", you can move it by clicking on its top blue bar. "Click and hold" the bar. Then drag the box out of the way and then release the mouse button. You do not usually need to see the whole picture…just enough so that you can see the effect that your adjustment is having.

6. **UNDO:** Don't worry about making mistakes. First of all, your changes are not permanent until you save the file. Second, you can always click "Edit", then "Undo" to back up thru many of the changes you made. In a worst-case scenario, you can recopy your original photo file into your working folder, or close the copy you are working on WITHOUT SAVING, and open the disk copy of it again.

A note about file size versus image size: Digital cameras produce picture files as large as 3 megabytes or more. A file that large contains much more picture information than is needed to fill a computer screen with a clear image. The computer rarely needs more than 100-150 kilobytes (which is .1 to .15 megabytes). Don't confuse image size (in inches) with file size (measured in kilobytes or megabytes). You can have a huge file that produces a fuzzy or blurred image and a small file that produces a crystal-clear image.

STEP BY STEP:

1) **Open** the working photo file that you want to edit by clicking FILE, OPEN and then browsing for the file you want. To preserve the original file unmodified, click SAVE AS and choose a new file name.

2) **Zoom** in if necessary: If the picture that opens is too small, click the tool drop-down and click on the magnifying "zoom" tool. Move your mouse cursor over the picture and click to enlarge the picture. Left-clicking while make it smaller. Another way is to click VIEW & ZOOM (fit) TO WINDOW.

3) **Rotate** the picture if it is tilted: Click LAYERS and then drag the toolbox (by clicking and holding the top colored bar) so that you can see enough of the picture to do your work. DRAG the short thick bar in the right part of the zoom circle up or down to rotate the picture. You can also click the little up or down arrows by the rotate angle box to rotate clockwise or counter-clockwise. If you need to, click RESET to start over. Use the horizon, vertical building edges, sign posts or trees as a guide. While some trees do lean, if given a chance to "see" the sun, most trees grow vertically.

4) **Auto-Adjust** the colors and color balance: Click ADJUSTMENTS and then AUTO-LEVEL. Sometimes the Auto-Level will do most things right, but yield a phot that's too "contrasty", intense or dark or, on the other hand, too light. (You will correct that in the next step.) However, if the color adjustment is not to your taste, just click "Edit-Undo".

5) **Contrast, Brightness & Saturation** adjustments: Click ADJUSTMENTS and then BRIGHTNESS/CONTRAST/SATURATION. Here you can make changes is you disagree with what the program did with its auto adjustments. You can fine-tune it to your own taste by dragging the toolbox over so you can see more of the picture, and then adjusting brightness, contrast or color saturation (or more) by moving the "sliders" back and forth. Remember, you can start over at any time by clicking "cancel" or "undo" individual changes you make. The program will, by the way, remember your settings for the next photo, which may or may not be good for it. .

6) **Crop the picture** to select the portion of the picture you want in you final result. Click the tool drop-down and select the top, "rectangle select" tool. With your mouse, click and drag to select a rectangle that includes the part of the picture you want to use. Did you make a mistake? Just start over and redraw another rectangle until you have selected the part of the photo you want to use.

7) **Crop** the picture: Click IMAGE and then "CROP TO SELECTION". The part of the picture outside of the selected area will vanish, leaving you only with the part you that you have selected.

8) **Resize** the photo: Click IMAGE and then RESIZE. Make sure "Resolution" is set to 96 DPI. That is about as detailed as you need for a good picture display on a computer screen. (Use the little up/down arrows to change it if necessary.) Make sure "Maintain aspect ratio" is checked. This will ensure that the pictures proportions remain correct when you adjust the height or width. Now, look at the height and width shown. If either is larger than 10 inches, set the larger one to 10, and you are done. You can also work this by adjusting the "pixel" width or height. If either the width or height is greater than 900 pixels, set the larger one to 900. Next, look at the width. If it is more than 900, make it 900.

   NOTE: To maintain the proportions, the program will change the width or height when you change the other setting. Your goal is to have a picture that is a maximum of 900 dots wide or high, or about 10 inches wide by 8 inches high. At 96 DPI, dots per inch, 900 x 800 pixels is close to 10" x 8"…perfect for computer viewing. In addition to reducing large pictures, you can enlarge small pictures, but the results are not usually satisfactory. Keep enlarging adjustments to a minimum.

   Some of the adjustments, above, cause the file to lose some detail, but the resizing loses the most detail. That is why this step is taken last. The results are usually very satisfactory if done in this order.

9) **Saving** your work: Click FILE and SAVE or FILE and SAVE AS (See Below*). You will see a "Save Dialog Box" open. Make sure that the file type is "JPEG" and click "OK". A new dialog box will open. Move it toward one side, if necessary to see more of the picture.

10)
11)
> 1) *You can either just click FILE and SAVE which will replace your file with your edited photo...Or, you can click FILE and SAVE AS to create a new photo file and leave the original. Remember, if you copied your first originals to a working folder, those originals remain in the original folder as back-ups.

Now, look at the file size displayed above the picture. You want it to be no more than 150KB maximum, and between 75-100KB is, almost always, perfectly adequate. Move the "Quality Slider" back and forth to achieve the right file size. You will see that you must reduce the file size by a large amount before you will notice the quality decreasing. 80% on the slider is usually just right for picture quality and optimum file size.

12) **Finalize your work.** Does everything look fine? **CLICK "OK"** and you're done. That wasn't so hard, was it?

13) PAT YOURSELF ON THE BACK, AND GO GET SOME MILK & COOKIES!

14) **Now...Are you ready to Exit, or do you want to do another picture?**

   a) **Are you finished?** Click FILE/EXIT.

   b) **Want to edit another picture?** Click FILE/CLOSE and DON'T SAVE...you already saved it. Then, open another file by clicking FILE/OPEN and browsing for the next file that you want to work on. Save it under a new name so you will not modify the original...and *Go to Step Two*.

ADDITIONAL FEATURES YOU CAN TRY:

As with other corrections, like auto-adjust, any of the following features should be used before resizing and cropping a photo.

"Red-Eye" Correction: Do you have pictures in which the people (or pets) have "Red-Eye" from the camera flash? You can eliminate it by selecting the eye area, of an eye with a red spot, using the round, dashed circle selection on the tool bar, and then clicking EFFECTS, PHOTO, RED EYE REMOVAL. The tool settings will determine how effective the removal is.

SHARPEN: If a picture is slightly blurred, try this: Click EFFECTS, PHOTO, SHARPEN. You can only sharpen a picture so much without degrading the quality, rather than improving it. But, with some photos, the improvement can be significant.

SOFTENING PORTRAITS: Usually you would want to sharpen pictures, but some photos (especially portraits) can look good if softened (slightly blurred). Try this by clicking EFFECTS, PHOTO, SOFTEN PORTRAIT.

SPECKLE REDUCTION: Old pictures often show speckles, almost like dust, fine scratches, etc. You can often improve the quality of such a picture by clicking EFFECTS, NOISE, REDUCE NOISE. Play around with the settings, which determine how small a speck must be in order for it to be removed. If you make the settings too inclusive, you will remove large specks, but also other detail. Don't be afraid to "play around"...you can always click CANCEL or UNDO.

Artistic Effects: There are a number of other artistic effects you can accomplish without actually being an artist. There are some examples at the end of the sample photo editing demonstration that follows. Use your imagination!

Color to B&W; B & W to Sepia: Try these effects under the ADJUSTMENTS tab. B & W photos almost always look better when turned into "SEPIA" prints.

Photo retouching: If you have old photos with scratches, missing areas that you do not want to cure by cropping, etc, Paint.NET can be used to retouch the problem areas. There is a tool to copy a good area to an adjacent bad or missing area. You can also zoom in and literally draw to fill in scratches, recreate missing areas, etc. Make no mistake about it…this is art, more than technical editing...and it can take awhile. But, if you are careful, the results can be amazing.

HERE IS AN EXAMPLE, START TO FINISH:

This example uses a photo of cousin Beverly and Diane that had some problems and was further, intentionally, "messed up". Now, we have a picture of a couple of girls that were obviously enjoying a nice day (until they discovered the area was chigger infested!)

But the picture itself is very poor and has "seen better days"! [In this example, the rotating and cropping was done before the quality adjustments, but it is best to do the adjustments first, in most cases.]

As it starts out, it looks like the photographer didn't compose the shot correctly…it is off-center and the camera was tilted. Plus, there is a lot of uninteresting background that adds nothing to the picture. The photo is "washed out" with poor contrast and color balance. Finally, the picture was treated badly. It is missing a corner and someone did a poor job of trimming off its border (see the lower right).

Steps to improving the image:

Rotate it…using the horizon and the vertical tree (not the left-hand one, which is leaning) as a guide. *(If you must rotate an image and also crop it to size, it is best to rotate it first because the rotation will result in white spaces around the edge if you crop it first..If you crop it first, then rotate it, more white space will return and you will have to crop it again...and you may not have enough of the central image left!)*

Crop it…to remove the uninteresting background, the damaged edges and the extra white areas that were added by the poor scan and the rotation. The result is a more interesting, composed picture.
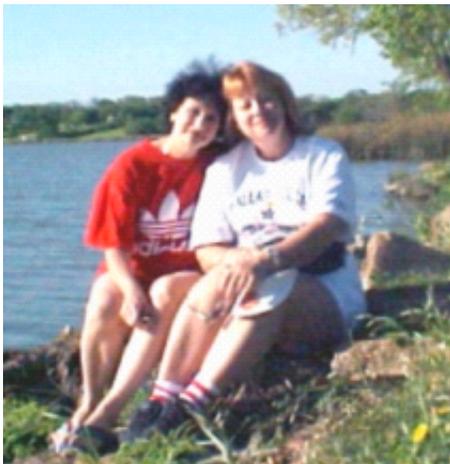
Auto-Adjust the colors and color balance (1-step method used here. There are other, more technical methods, but usually "one click" will work well.) You can also adjust brightness and contrast, but usually the auto-adjust tool does everything in a satisfactory manner.
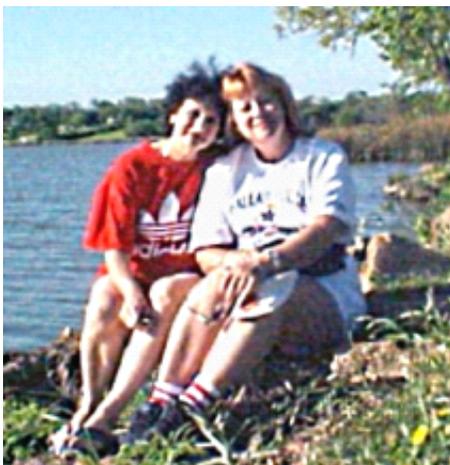
Sharpen it. You must choose a balance between sharpening enough, and over-sharpening (which results in excess contrast that is not correctable with the contrast adjustment tool). To show the effect, this photo has been sharpened a bit too much. But a little sharpening was appropriate for the previous frame.

ARTISTIC OPTIONS:

Black & White

Sepia

Oval/Vignette

Pencil Sketch

(All of the above artistic options can be accomplished with only 1 or 2 additional steps)

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