

Adjusting Images

Download the image gears.jpg off the class website

Save image as a psd file

Go to File..> Save As

..>Choose Photoshop from the Format pulldown

Now you can manipulate the file using all the Photoshop tools.

Color Mode

First of all we're going to check that the image is using the right color Mode.

Go to Image..>Mode..> and make sure the RGB is ticked.

Rotate and crop

We need to rotate the image so that it is horizontal. To do this we will go to the Image Menu and choose Rotate Canvas ..>arbitrary

This brings up a dialog box that asks us how to rotate the canvas. Put 18 degrees in the window, and then click the CCW (counter clockwise radio button).

Next, I'd like to get rid of all the white space around the image. Go to the toolbox and choose the crop tool. Draw a box around the part of the image THAT YOU WANT TO Keep. When we hit enter, or pick another tool, that will finish the crop.

Adjusting the contrast (tonal range)

The tonal range represents the amount of contrast, and is determined by the difference in values -- in practical terms, that means looking at how the pixels are distributed from the darkest (black) to the lightest (white). This image isn't too bad, but I would like to decrease the contrast a bit, so that it is not so dark on the one side.

Choose Image..>Adjustments..>Levels to open the Levels dialog

Ensure the Preview box is checked, and then move the dialog over so that you can see the image while you work.

The weird looking thing is called a histogram, and it shows the shadow (black triangle), highlights (white triangle)

and midtones (grey triangle). Ideally, the histogram should start at with the black and white triangles. If not, then move them over so the point where the lightest colors and darkest colors begin.

Adjusting midtones

This image is actually not too bad, but you'll see by playing with the triangles that we can make the image a bit lighter by moving the midtones towards the black triangle. If we move it towards the white, then it darkens a bit.

Finally, when you're done, click OK to apply the changes. Afterwards, choose Image.>Histogram to view the new tonal range. It should extend to the entire range of the histogram. Choose OK and save.

(Note on auto contrast.)

Replacing colors in an image

Sometimes you may want to replace the colors in an image. To do this, you will use the Replace Color command.

Select the rectangular marquee tool and draw a selection around the whole image.

Chose Image.> Adjustments.> Replace Color to open the Replace Color dialog box

By default, the Selection are of the Replace Color dialog box shows a black rectangle, showing what you've selected.

Okay, see the three eyedropper tools in the box? One selects a color, another selects additional colors, and the third removes the color from the selection.

Use the first (single-color) tool to click anywhere in the red background of the image. You'll notice that now the black part of the is much smaller.

Use the eyedropper plus tool (the middle one) to select other tones of the red wall until the entire shap is highlighted in white in the dialog box. You should see the gears looking almost like a photo negative.

Adjust the tolerance level by dragging the fuzziness slider to 80 or so. This controls the amount to which related colors are included.

If you have selected any parts of the gears, use the eyedropper-minus tool (right side) to remove them from the black area in the dialog box.

Now, in the transform area of the Replace Color dialog box, replace the color. You can either use the color picker, or you can use the sliders under hue, saturation and lightness to change the values. I'm going to use the picker.

Click OK. To apply the changes.

Fixing flaws in the image

Okay, now we're going to repair a little damage to the image. There is a flaw in the big gear on the right side. I'd like to use the Clone Stamp Tool to fix that. First, zoom in so the flaw is easier to see.

Now, click the Clone Stamp Tool (fifth down on the left of toolbox)

Go to the tool properties menu and change the brush size to 5 pixels.

This tool takes a sample of an image and replaces another part with the sample. Put the clone tool in a region of the picture next to the flaw, but not on it. (You will be able to see the size of your brush, so make sure the flaw isn't within the circle.)

Now, hold down the ALT key and click once. This samples the colors right next to the flaw.

Bring the tool over top of the flaw now, and click once. The sample should be placed overtop the flaw.

Repeat this process, sampling right next to the flaw, and then using that sample to replace the white line. Whenever you do this, it's important to make sure the tool is small enough that you don't get too much variation in the colors, or it will be obvious that you fixed it.

Save the file when you're done.

Saving for the web

Okay, now we're going to turn this into art that we can use on the web. First, let's go to the "save for web" feature under the file menu.

Click on the four up tab so you can see three previews and the original image. We'll try, low, medium and high jpgs from the preset optimizations. (In the pulldown under the "done" button.) As you can see, the medium and low jpgs don't look very good, but the high is quite a big file (approximately 25k or 10 seconds to download).

The other solution here is to make the image size a bit smaller.

Click the cancel button and return to the Photoshop image.

Under Image, go to Image Size..> this will bring up the image size dialog that will allow us to reduce the physical size of the image before we compress it.

Okay, I'm going to make this 250 pixels wide. (I usually am most concerned about the width of the image, as that is the real estate I have to be most concerned about when I'm designing web pages. Keep in mind that many screens are only 800 pixels wide, so even 250 pixels is a pretty big picture.)

After I've changed the size to 250, I'll click okay.

Now, return to File..>Save for web

We should have the same presets showing in the preview, and you can see that high is now under 14k. This is a much better size, so I will click the "save" button.

And we're done.

At this point you could save the psd file again (if you want to retain the smaller image size) or you may wish to simply close the file so that you have more resolution available to you if you decide to use the picture at a larger size later.