

## PHOTOSHOP 1: INTERFACE & LAYERS

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After opening Photoshop, you can either create a new, blank file or open an existing image.

To create a new file, go to File > New. You will be asked to give the file a name and to specify its size, resolution, and color mode.

**Size:** width and height of the image in pixels; approx. 1200 x 800 will fill an entire browser window

**Resolution:** select 72 pixels per inch for Web images; 300 ppi is fairly standard for print images

**Image Mode:** select RGB for the Web, CMYK for print

Step 1: Download an image from the Web. Some samples are available at <http://sorapure.net/images.html>.

To open an existing image, go to File > Open and select the image that you want to open. Go to Image > Image Size to see the size and resolution of the file. Go to Image > Mode to see the color mode of the image. If the image is a GIF, the color mode is “Indexed Color”; to alter the image, you need to change the color mode to RGB or CMYK.

### The Interface

The **Menu Bar** across the top of the screen has nine menus: File, Edit, Image, Layer, Select, Filter, View, Window, and Help. Some menu commands have sub-menus, indicated by an arrow next to the command. Some commands have keyboard shortcuts, as indicated next to the name of the command in the menu.

The **Toolbox** has all of the basic tools; some tools have a tiny arrow in the lower right hand corner that reveals additional options for the tool (for instance, “under” the Pencil tool is the Brush tool). Hold your cursor over each tool to see its name and its keyboard shortcut. Toward the bottom of the toolbox are color swatches showing the foreground and background colors. Clicking on one of these swatches will pop up a color selection dialog box. The tiny arrow to the top right allows you to swap foreground and background colors. The tiny black and white swatch symbol to the lower left allows you to reset the colors to the default of black foreground and white background.

The **Palettes** are arranged on the right side of the screen. More palettes are available under the Windows menu at the top of the screen. The palettes are movable and can be docked together; some palettes are grouped together by default. The most important palettes to have open for this exercise are Layers and History.

Step 2: Arrange your workspace so that you have the Layers and History palettes open, along with the Toolbox. Close all other palettes.

### Saving and File Format Options

The first time you save a file (File > Save or File > Save As), a dialog box appears with options. Under the Format menu, note that you can save the file in a variety of formats. The two formats that we’ll be working with in class are “Photoshop” and “JPEG”; their differences are very important.

- Photoshop**: this is Photoshop’s native file format (.psd extension). Saving a file in Photoshop format preserves layers and other information, allowing you to go back to the file later and make changes to the image.

- JPEG**: this is the standard format for photographs (.jpg extension). Saving a file in JPEG format will flatten all of the layers and will compress the graphic, reducing its quality somewhat. The first time you save a graphic in JPEG format, a dialog box will ask for a compression level; a higher compression level will give you a better quality graphic, but also a larger file.

The best strategy is to save your file as a Photoshop file until you’re finished working on it, and then to save the file as a JPEG. Each time you save the file as a JPEG file you lose some quality due to compression. Remember that to save a file as a JPEG, you need to select JPEG from the dropdown Format menu in the dialog box that you get when you select File > Save As.

Step 3: Save your image as a Photoshop file. Be sure to select “Photoshop” in the dropdown format menu and to give the file a name with a .psd extension. Save it on the desktop.

## **Layers**

Photoshop derives much of its power from the fact that it allows you to create images in layers. It’s very important to keep an eye on your Layers palette and to use layers effectively.

Essentially, layers are like transparent sheets; when you paint on one sheet, you can still see through the unpainted areas to the sheet below. In addition, the work you do on one layer doesn’t have any effect on the work you do on other layers. This is very helpful because you can modify parts of your graphic while leaving other parts untouched.

It’s important to know which layer you’re working on; that layer will be selected (its color will be blue) in the Layers Palette. The Layers palette lists all layers, layer sets, and layer effects in an image. You can accomplish many tasks—such as creating, hiding, displaying, copying, and deleting layers—using the buttons in the Layers palette.

- To **create a layer**, select the New Layer button (next to the trash can) in the Layers palette.
- To **name a layer**, double click on its current name (probably “Layer 1”) and type in the new name.
- To **duplicate a layer**, select the layer and drag it onto the New Layer button.
- To **delete a layer**, select the layer by clicking on it and then click on the trash can (or drag the layer into the trash can) at the bottom of the Layers palette.

Step 4: Rename the current layer from “Background” to “main”. Duplicate this layer. Note that this duplicate is automatically named “main copy”—you can rename it if you like.

As you create an image in Photoshop, it’s wise to work in layers; that is, put each item on its own separate layer. The reason for doing this is that when you apply layer styles, actions, and filters to a layer, these operations affect everything on that layer. Keeping separate parts of your graphic on separate layers gives you more control. You can make layers invisible to see what the entire graphic would look like without that layer, and you can lock layers to prevent any accidental changes from occurring:

- To **make a layer visible/invisible**, click on the eye icon to the left of the layer.
- To **lock or unlock a layer**, click on the lock icon at the top of the Layers palette.

You can also arrange layers on top of or below one another, and you can adjust the opacity of a layer so that layers beneath it are visible.

- To **move a layer** so that it appears on top of or below another layer, click on that layer and drag it to a new position in the Layers palette.
- To **adjust the opacity of a layer**, click on that layer and use the opacity scale on the top middle of the Layers palette.

Step 5: Experiment with the layer options above. After you're done, delete extra layers so that you only have one "main" layer in your Layers palette.

### **Image Size and Canvas Size**

You can change the size of the image and the size of the canvas at any time. You can also crop the image to change its size.

To change the size of the image, go to Image > Image Size, and type in the new pixel dimensions in the width and height boxes. Note that if you have "Constrain Proportions" checked, the width and height of the image will be kept proportional.

To change the size of the canvas, go to Image > Canvas Size, and type in the new pixel dimensions in the width and height boxes. Note that if you enter a size smaller than the current size, the image will be clipped/cropped. If you enter a larger size, you can use the Anchor element to indicate where you want the pixels to be added.

To crop the image, select the Crop tool in the toolbox (keyboard shortcut C). Open the Info palette if it isn't already open by going to Window > Info. In the Info palette, click on the small arrow next to the X and Y options, and select Pixels as the unit of measurement from the dropdown menu. Note that as you use the crop tool, you can see the width and height of the crop by looking at the W and H options in the Info palette.

Step 6: Experiment with the options above—image size, canvas size, and cropping.

### **Adding a Background Fill Layer**

If you increase the size of your canvas, Photoshop by default adds transparency around the existing image. You may need to add a background layer filled with color.

Step 7: In the Layers palette, add a new layer and drag it to the bottom of the layers stack, so that it's under all of the other layers.

Go to Edit > Fill, select Use Color, and select the color you want for that layer. You can fill the layer with a pattern by selecting Use Pattern. You can also add a border around the layer by going to Edit > Stroke and selected border/stroke options.

### **Filters**

Filters are used to achieve different artistic effects. Go to the Filter menu to view the categories of filters and to select from the sub-menus within each category. Note that selecting a filter will pop up a dialog box that gives you additional options for the filter. As you make selections in these dialog boxes, you can see how the image changes in response.

Step 8: Experiment with filters and their settings by applying different filters to the “main” layer of the image. Use Edit > Undo after each filter to undo what you’ve just done. Alternately, if you find a filter that you like and you’ve created an effect that you want to save, you can stop working on that layer and make another duplicate layer from the original layer for you to work on.

Note that some filters present you with a different interface than others. For now, you should avoid the Extract and Pattern Maker filters, as well as the Video filters and Distort > Displace. You should try out the Liquify filter, though, for some interesting and fairly easy effects.

### **History Palette**

You can use the History palette to undo actions you’ve taken and to revert to a previous state of an image. If it’s simply your most recent action that you want to delete, use the Undo command: Edit > Undo, or Control-Z (PC) or Command-Z (Mac). To delete a series of actions, use the History palette. Click the name of the state or action, and choose Delete from the History palette menu to delete that change and those that came after it. Or pull the slider, along the left side of the History palette, up to the state where you want to be.

Step 9: Continue experimenting with filters. Use the Undo command and the History palette in order to undo filter effects that you don’t like.

### **Adjustments**

Under Image > Adjustments, you have options for altering the colors in a layer. You can adjust the distribution of dark and light tones in the layer, the color balance, contrast, brightness, hue, saturation, and other color-related features. The options I use most often are Levels, Color Balance, Brightness/Contrast, and Hue/Saturation.

Step 10: Experiment with color adjustments.

### **Layer Blending Modes**

If you have different images on separate layers, you can blend them in interesting ways. To experiment with this, download another image. There are two ways to put two (or more) images in the same Photoshop file:

1. Open the second image in Photoshop. Drag the tab of one of the files off the docking bar at the top of the window so that you can see both files side by side. Then drag the layer from one file into the other file.
2. Go to File > Place and select the image to place into a Photoshop file. Hit Return, and then go to Layer > Rasterize > Smart Object.

When you have two layers, each with different images, select the top layer in the Layers palette. Then go to the Set Blending Mode dropdown menu near the top of the Layers palette (it should say “Normal”) and note the many different possible blending modes.

Step 11: Experiment with blending modes. Note that things change when you change the stacking order of images in the Layers palette. Save the image as a .psd file, and as a JPG or PNG if you like the final result.

### **Saving**

Save your work as a PSD file and as a JPG file.