

Photoshop CC 2017 Essential Skills

Introduction

Photoshop is the industry-standard photo editing program from Adobe. This booklet is designed to introduce you to the essential skills you need to get started using Photoshop. These instructions were created using Photoshop CC 2017 for Windows; the Mac OS X version is similar.

Learning Objectives

- After completing the instructions in this booklet, you will be able to:
- Recognize Photoshop terminology
- Locate tools, panels, bars, and windows in the workspace
- Learn how to crop, rotate, straighten, and adjust an image
- Discover non-destructive editing techniques using layers
- Create and edit text or shapes
- Repair images using various techniques
- Use the history panel to undo any changes made to the image
- Save files in different formats

Important Terms

Basic Terms for Digital Graphics

- *Pixel*: the smallest unit of a graphic; a tiny square of color.
- *Resolution*: the PPI (pixels per inch) of a graphic. 300 ppi is recommended for print, 72 ppi for web.
- *Raster*: a type of graphic made of pixels; photographs are raster graphics.
- PPI: Pixels per inch; see Resolution.
- *Crop*: Removing part of an image.
- *Resize*: Making an image smaller as a whole, without removing any part of the image.
- *Layer*: Photoshop files can include many *layers*; the layers stack together to create the final image. Use layers to keep control over the various parts of your graphic. Layers can be rearranged, modified, hidden, or deleted.

File Formats

- *JPG*: A commonly-used file format for photos; does not support transparency.

- *BMP*: A commonly-used file format for photos; does not support transparency.
- *PNG*: A commonly-used file format for photos with transparency support.
- *PSD*: The file format for your editable Photoshop files.

Fixing Mistakes

- *Undo*: Using the function **Edit → Undo** (or the keyboard shortcut **Ctrl-Z**) will undo your last step. You can only use Undo for the single most recent action in Photoshop.



- *History*: Photoshop keeps a history of your 20 most recent edits. You can step back to any of these historical steps to undo your changes. See *page 18* for more information about History.
- *Revert*: Revert changes your file back to the last saved version, undoing all changes made since the last time you saved, with the function **File → Revert**.

Opening Photoshop

Follow these steps to launch the Photoshop program on your Windows PC:

1. Click the Windows **Start** button.
2. Click **All Programs**.
3. Click **Adobe Photoshop CC 2017**.

Opening a File

Follow these steps to open an image file after you have opened the Photoshop program:

1. Click the **File** menu at the far left of the Photoshop menu bar.
2. Click **Open**.
3. Browse to an image file on your computer and select it.
4. Click the **Open** button.

Tools & Workspace

When you open an image in Photoshop, your workspace will be laid out in the default configuration, the *Essentials* workspace (See Figure 1).

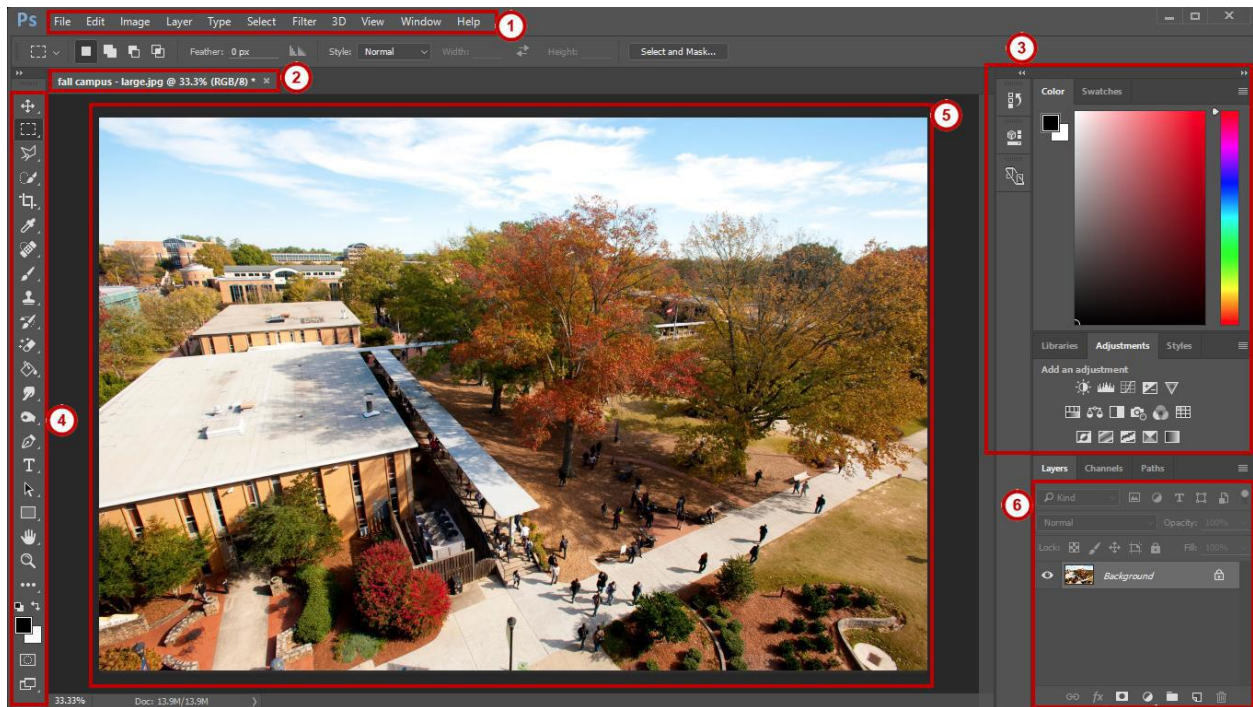


Figure 1 - Layout of Photoshop tools and Workspace

1. **Menu Bar:** File, Edit, etc. Photoshop functions (See Figure 1).
2. **Open Files:** You will have a tab for each file you have open (See Figure 1).
3. **Workspace area:** A workspace is the selection of Photoshop tools laid out on your screen for easy access. The default workspace is *Essentials* (See Figure 1).
4. **Tools panel:** Tools including move, select, type, and shapes (See Figure 1).
5. **Open image:** The open image appears here (See Figure 1).
6. **Layers Panel:** Here, you may create, edit, rearrange, and delete layers (See Figure 1).

Cropping an Image

Use the cropping tool to remove the outer parts of an image.


1. Click the **Crop Tool** in the toolbar. 
2. Your cursor changes to the **Crop tool**.
3. Click and drag to draw a box around the portion of the image you want to *keep*.



Figure 2 - Cropping an Image

4. Press **Enter** on your keyboard to complete the crop.



Figure 3 - Cropped Image

Rotating an Image

Use image rotation to turn an image in the proper direction.

1. Click **Image**, located on the *Menu* bar (See Figure 4).
2. Click **Image Rotation** (See Figure 4).
3. Choose the needed rotation amount, e.g. **90° Clockwise** (See Figure 4).

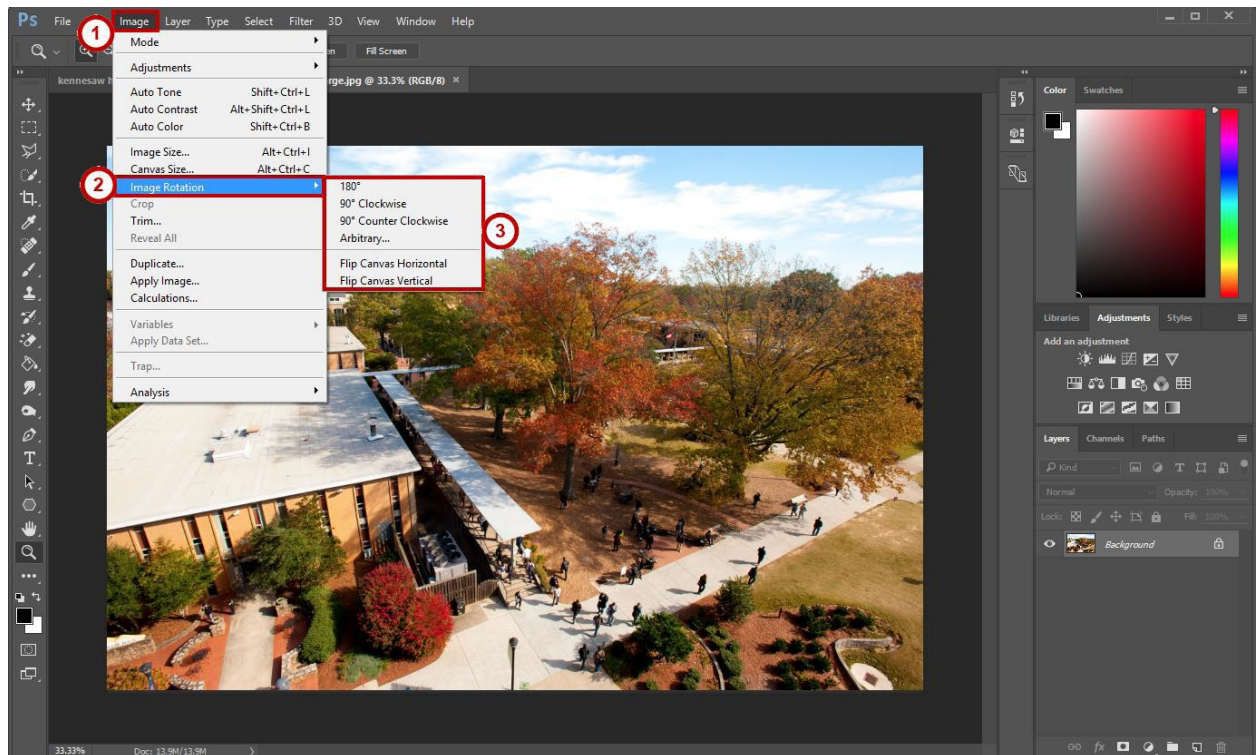


Figure 4 - Rotate an Image

Straightening an Image

The straighten tool is incredibly useful in straightening otherwise crooked or tilted images. With this tool, you can select an area of the window that should be straight and from there, Photoshop will automatically straighten the photo.


1. Click the **Crop Tool** in the toolbar. 
2. On the top menu, click the **Straighten** button.



Figure 5 - Straighten Tool

3. Your cursor changes to the *Straighten Tool*. Click and drag to draw a *horizontal line* across your image. Try using a guide from within your image that should be straight, such as the horizon or the top of a table.



Figure 6 - Straightening an Image

4. If you are not happy with the results, simply press **Ctrl+Z** to Undo, then try again.

Image Adjustments

Photoshop includes many tools for adjustments. Use the *Auto* adjustment options to quickly improve your images.

1. Click the **Image** menu in the top menu bar.
2. Click **Auto Tone**, **Auto Contrast**, or **Auto Color**.

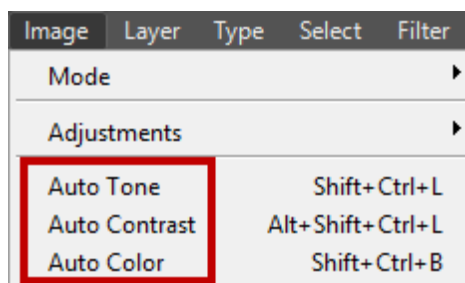


Figure 7 - Auto Adjustments

3. Photoshop adjusts the tone, contrast, or color of your image.
Use the many options in the *Image* → *Adjustments* menu to adjust your image appearance manually.

1. Click the **Image** menu in the top menu bar (See Figure 8).
2. Click **Adjustments** (See Figure 8).
3. Choose an adjustment type, such as **Brightness/Contrast** (See Figure 8).

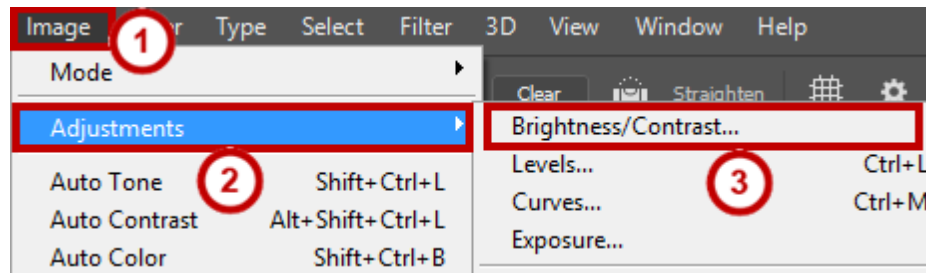


Figure 8 - Image Adjustments

4. Adjust your image using the options; in this example, brightness and contrast can be adjusted separately (See Figure 9).
5. Make sure the **Preview** box is checked to see a live preview of how the adjustments will affect your image (See Figure 9).

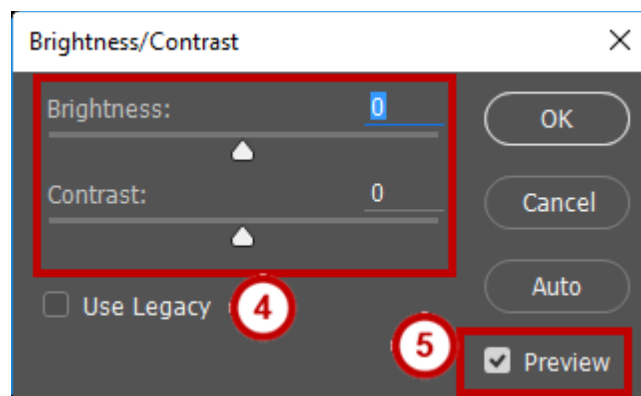


Figure 9 - Brightness/Contrast image Adjustments

6. Click the **OK** button to complete the adjustment.

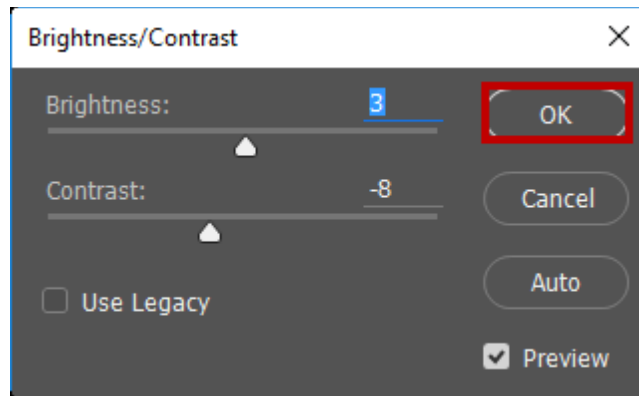


Figure 10 - Click OK

Layers

Photoshop files can include many *layers*; the layers stack together to create the image. Use layers to keep control over the parts of your graphic. Layers can be rearranged, modified, hidden, or deleted.

Background Layer

When you first open an image file, you will have a single layer: the **Background**.

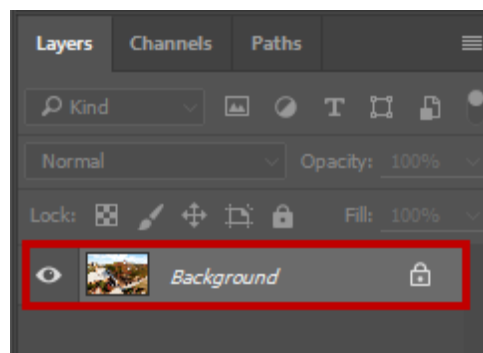


Figure 11 - Background Layer

Note: The background layer is locked, indicated by a lock icon. A locked layer cannot be edited.

Duplicating the Background Layer

In order to work with your background layer *non-destructively* (maintaining an unedited version of the original image), you will need to duplicate your background layer before you begin working.

1. Right-click the **Background** layer in the *Layers* panel (See Figure 12).
2. Choose **Duplicate Layer** (See Figure 12).

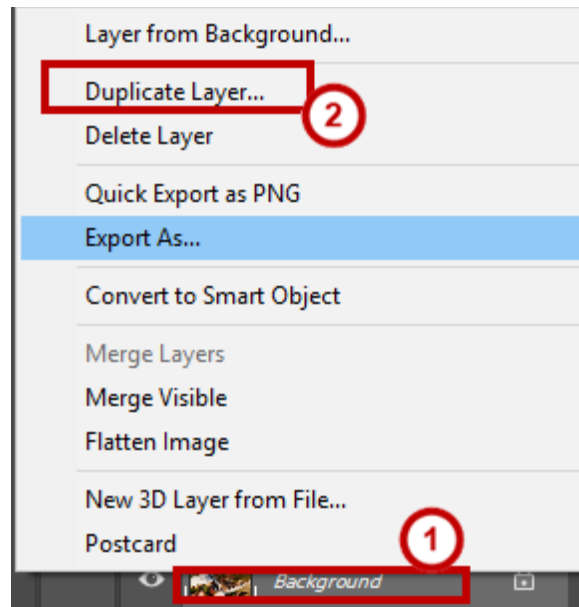


Figure 12 - Duplicate Layer

3. Click **OK** at the *Duplicate Layer* prompt. A new layer is created called *Background copy*. This layer is unlocked and can be edited. Your original Background layer is maintained behind the Background copy layer.

Creating a New Layer

Create a new layer to add to your image file without permanently affecting your existing layers.

1. In the Layers panel, select the **New Layer** icon.

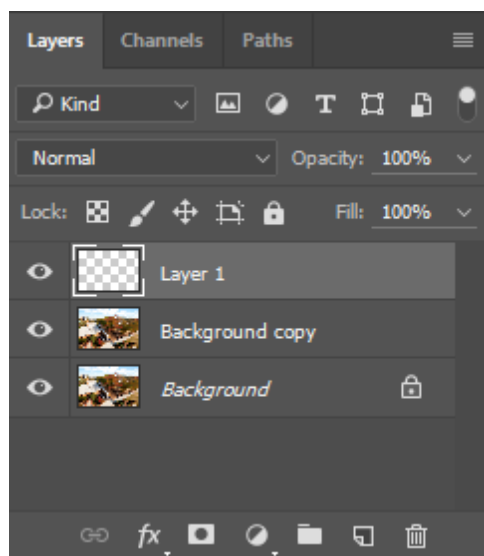


Figure 13 - Create a New Layer

2. A new transparent layer is created.

Layer Opacity

Each layer has a variety of properties and possible effects. *Opacity* is one of those options, making the layer transparent. The following section describes how to adjust layer opacity.

1. Click the **layer** in the *Layers* panel.
2. Click the **arrow** next to *Opacity*, it is set to 100% by default (See Figure 14).
3. Drag the **slider** to the desired opacity (See Figure 14).

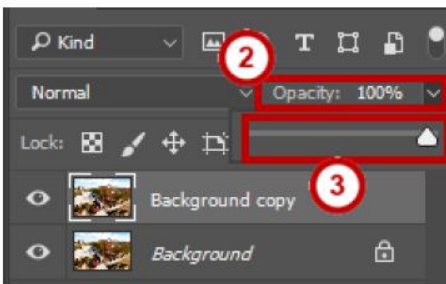
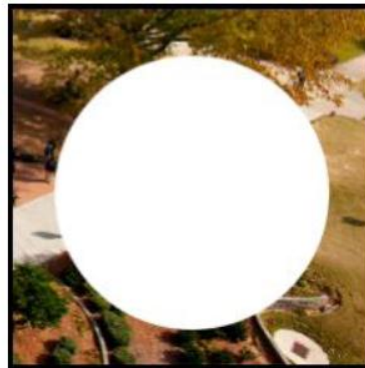


Figure 14 - Setting Layer Opacity



Before opacity change (100%)




After opacity change (45%)

Note: 100% is fully opaque and 0% is fully transparent.

Adding Text to your Graphics

The following section describes how to use the *Type Tool* to add text to your graphics.

1. In the toolbar, select the **Type Tool**. 
2. Above your image, the Type toolbar will appear.

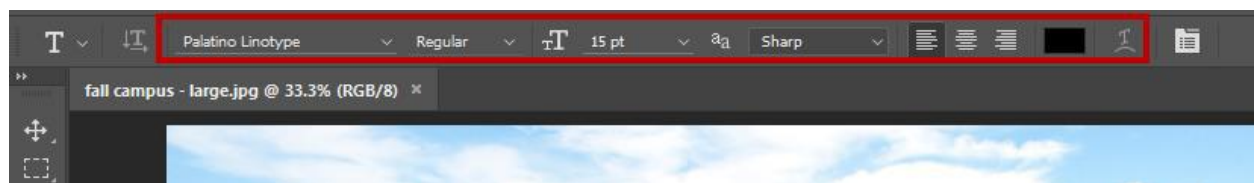


Figure 15 - Selections for Text

3. Click the desired formatting for your text, including the **font**, **style** (e.g., bold or italic), **font size**, **alignment** (e.g., left or center), and **color**.
4. **Click** once within your image where you would like to enter your text.

5. Type the desired text.

6. Click the **check mark** next to the type toolbar to commit your changes, or use the keyboard shortcut **Ctrl+Enter**.

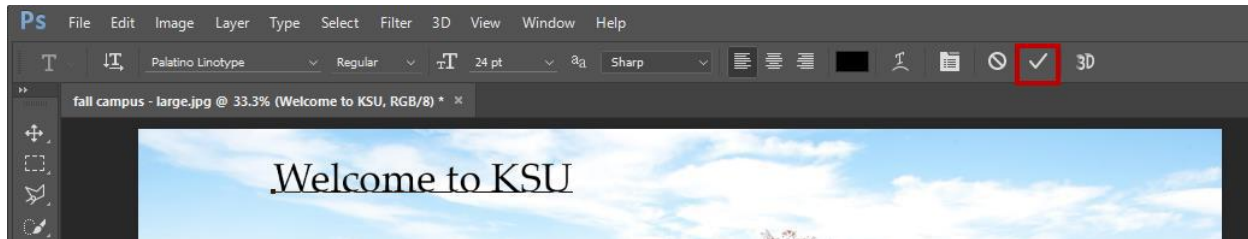


Figure 16 - Click the Check Mark

Note: When you create text with the *Type Tool*, a separate layer is automatically created for the text.

Editing Text

The following section explains how to use the *Type Tool* to edit text that you have already entered in Photoshop.

1. In the toolbar, select the **Type Tool**.



2. Click once within your existing text.

3. To make a formatting change, highlight all the text, then make your changes within the Type toolbar above your image.

4. To make a change to the typed text: type or delete text as normal.

5. Click the **check mark** next to the Type toolbar to commit your changes (See Figure 16), or use the keyboard shortcut **Ctrl+Enter**.

Moving text

Use the *Move Tool* to move text that you have already entered in Photoshop.

1. In the toolbar, select the **Move Tool**.



2. In the Layers panel, click once to select your type layer.

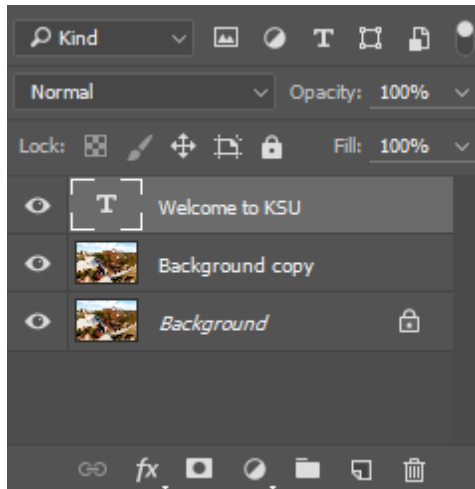




Figure 17 - Select a Type Layer

3. Click and drag the **text** placed in your graphic to move it.
4. Use the keyboard arrows to make more precise adjustments.

Adding a Shape

Photoshop includes 6 separate shape tools: rectangle, rounded rectangle, ellipse, polygon, line, and custom shape.

1. In the toolbar, click and hold the shape tool to choose the desired shape, e.g. the Ellipse Tool. 


2. Use the foreground swatch at the bottom of the toolbar to choose the color for your shape. 

3. Click and drag over your image to create the shape. Hold down the Shift key on your keyboard to create a perfect circle or perfect square, if desired.

Note: Your shape appears over your image, automatically receiving its own layer.

Moving a Shape

After creating a shape, you can move it onto the canvas.

1. Click the **Move Tool** from the toolbar. 
2. Select your **shape layer** in the Layers panel.
3. Click and drag to move the position of your shape.

Resizing a Shape

After creating a shape, you can still resize or transform it.

1. Click your preferred **shape layer** in the *Layers* panel.
2. Click **Edit** in the top menu.



Figure 18 - Click Edit

3. Click **Free Transform**.

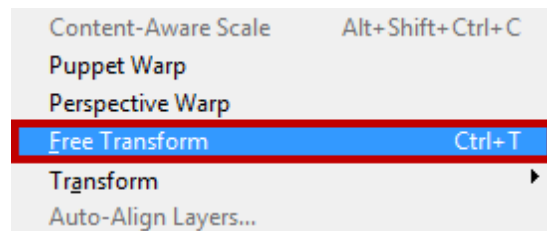


Figure 19 - Click Free Transform

4. Resize/transform your shape, using the squares at the corners and sides of your shape.
5. Click the **check mark** in the top toolbar to commit your change.

Image Repair

Photoshop includes a variety of tools for repairing and modifying images, from repairing blemishes and red eye to removing elements from your images.

Removing Red Eye

Red eye occurs in some photos due to flash photography, but it is easily repaired in Photoshop.

1. In the toolbar, click and hold the **Spot Healing Brush Tool** (See Figure 20).
2. From the menu that appears, choose the **Red Eye Tool** (See Figure 20).

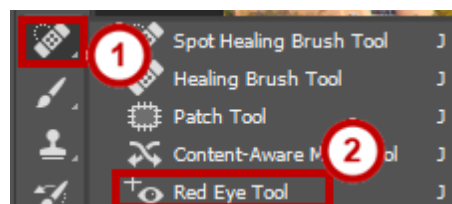


Figure 20 - Selecting the Red Eye Tool

Note: The **Red Eye Tool** is usually hidden behind the **Spot Healing Brush Tool**.

3. Click in the **center of the red eye** to be repaired.

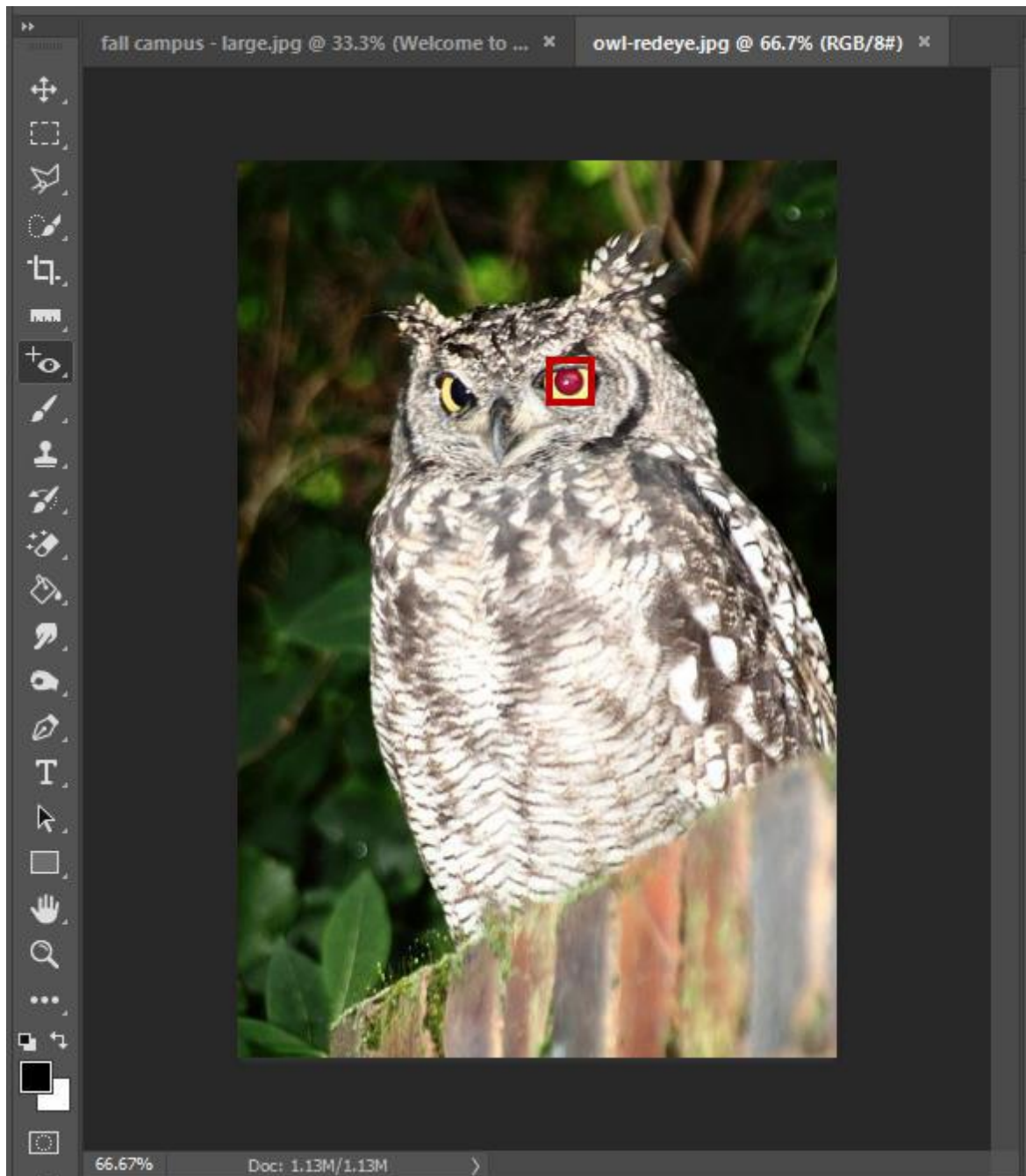


Figure 21 - Red Eye Repairs

Removing Blemishes or Small Imperfections with the Spot Healing Brush


1. In the toolbar, choose the **Spot Healing Brush Tool**. 
2. Click and drag the brush over the **imperfection**; the area becomes shaded.




Figure 22 - Covering an Imperfection

3. Release the mouse button to reveal the repaired area.

Removing Unwanted Elements with Content-Aware Fill

Before you can use *Content-Aware Fill*, you must first select the area of your image to remove. There are a variety of tools in Photoshop to make selections, including the Marquee tools, the Lasso tools, the Magic Wand tool, and the Quick Selection tool. This example uses the Rectangular Marquee tool.

1. Click the **Rectangular Marquee Tool** from the toolbar. 
2. Click and drag to draw a circle around the **element** you wish to remove.
3. Click the **Edit** menu item.
4. Choose **Fill**

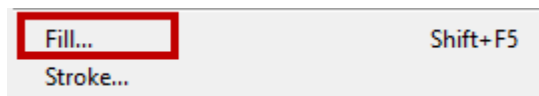


Figure 23 - Content Aware Fill

5. The Fill menu appears. **Content-Aware** should be selected (See Figure 24).
6. Click OK (See Figure 24).

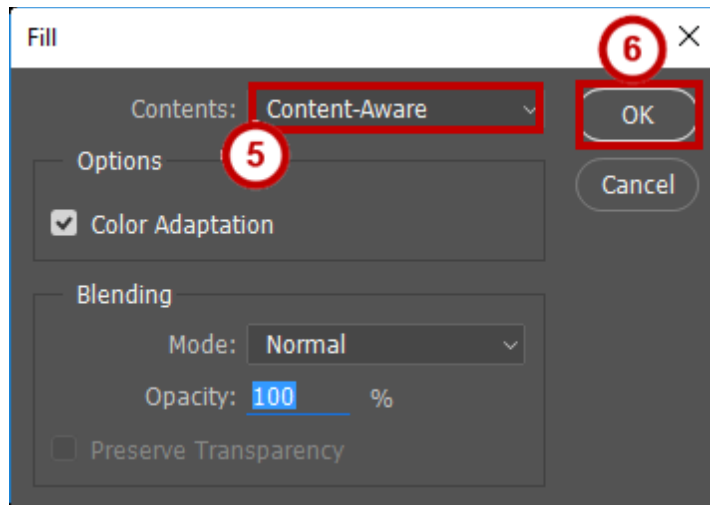


Figure 24 - Click OK

7. To de-select the area you outlined with the elliptical marquee, choose **Select** in the top menu, and then **Deselect**.

Using History to Reverse Steps

Photoshop's History panel keeps a record of the last 20 changes you have made in Photoshop. You can revert to any of these 20 steps.

1. Click the **History** icon in the *Panels* area.

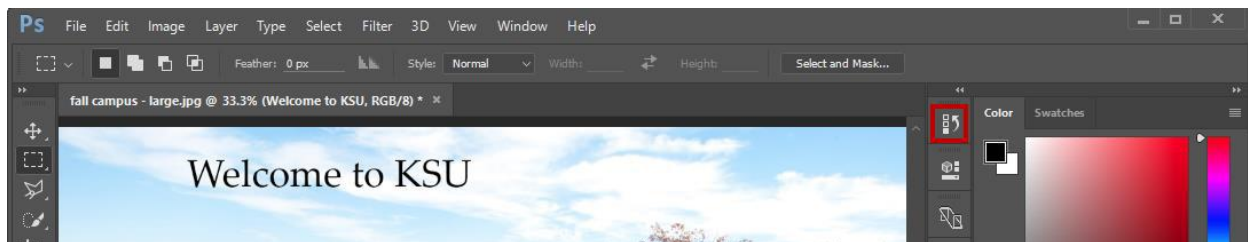


Figure 25 - Locating History in Photoshop panels.

2. Your image *History* expands.
3. Click any **step** in the list to revert your image to that state.

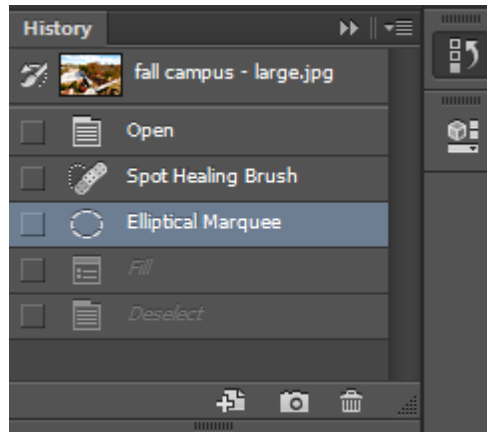


Figure 26 - Reverting to a Previous Step in History

Note: The history is reset when you close the file.

Saving Files

The following sections explain how to save your Photoshop file and image files for print or web:

Saving Your Photoshop File (PSD)

When working with an image in Photoshop, always save your work in Photoshop's native format, the PSD file format. The PSD file keeps all layers intact so you can edit your work later.

1. Click **File** in the menu bar.
2. Click **Save As**.
3. The *Save As* dialog box appears. Choose the location where you would like to save your file.
4. Name your file in the *File name* field.
5. In the *Save as type* drop-down, make sure **Photoshop (*.PSD;*.PDD)** is selected.

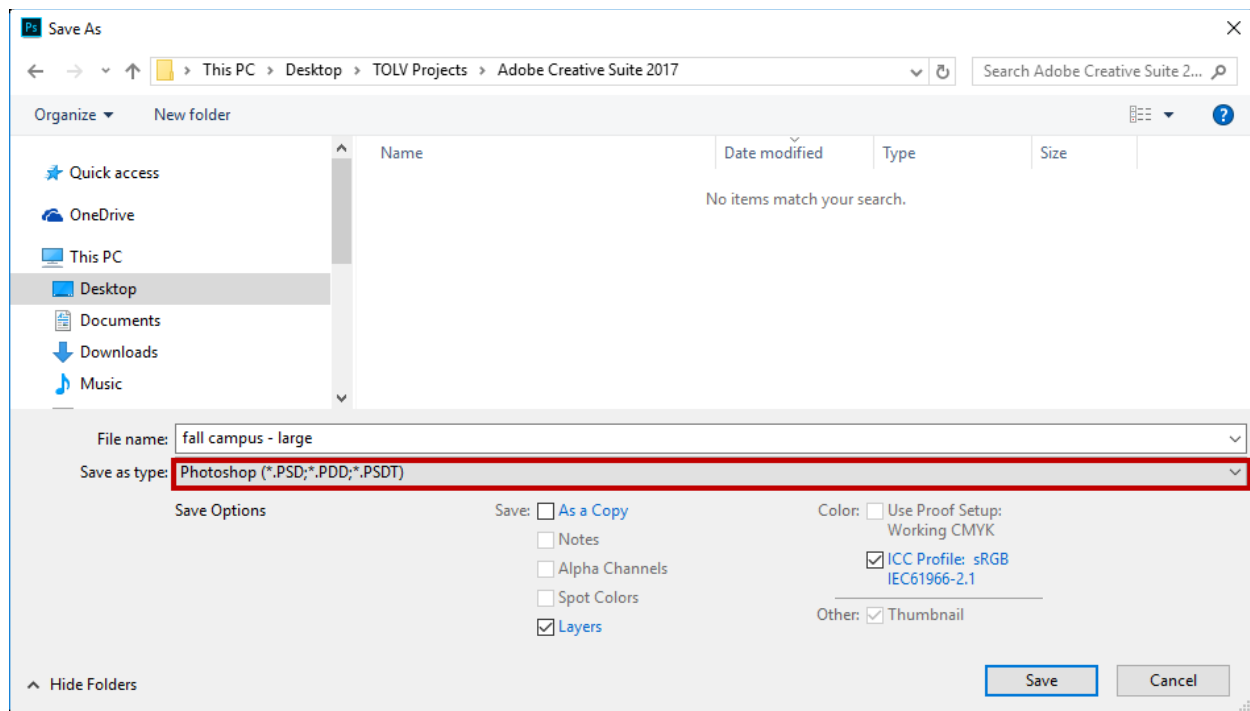


Figure 27 - Save as Photoshop File

6. Under *Save Options*, make sure **Layers** is checked.
7. Click the **Save** button.

Saving Your File for Print

Print files should be saved at a high resolution. The recommended resolution is 300 ppi (pixels per inch). While a lower-resolution photo may look crisp on-screen, it will appear pixelated when printed.

First, verify that your image file is at least 220 to 300 ppi:

1. Click the **Image** menu in the menu bar.
2. Click **Image Size**.
3. Verify that the resolution is between **220 – 300 pixels/inch**.

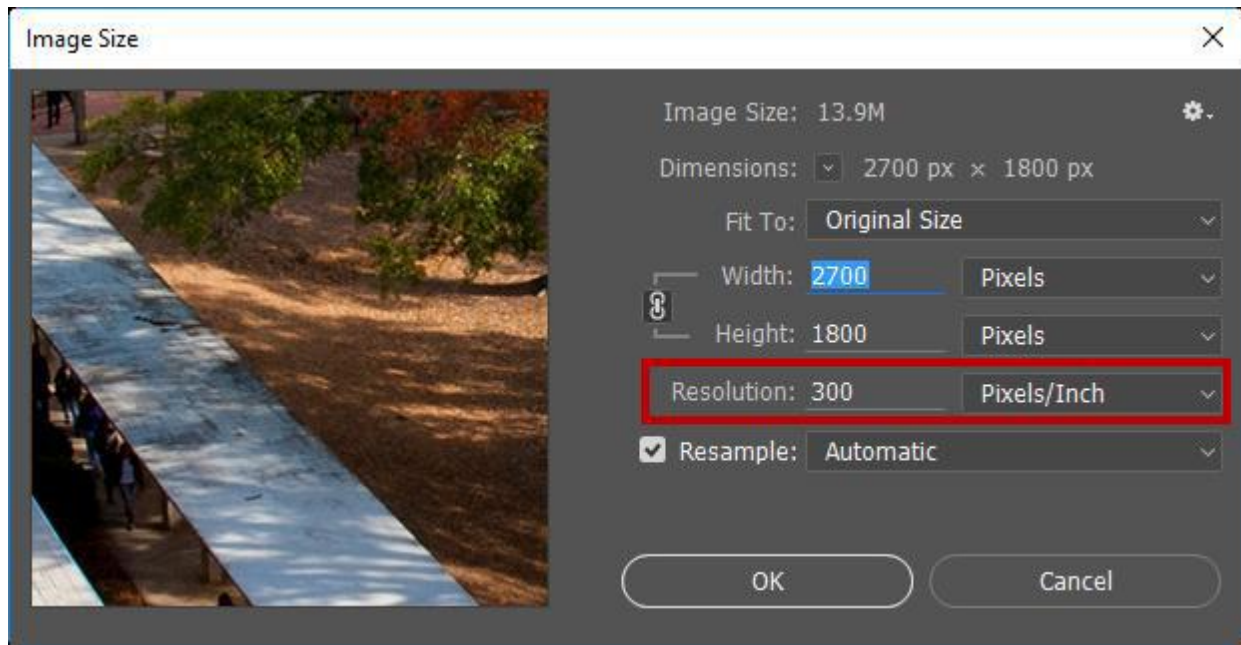


Figure 28 - Image Resolution

4. Click the **OK** button.

Note: For resolution less than 220 ppi, your file may not be suitable for print. See Adobe's web page [Photoshop / Image size and resolution](#) for information. You may be able to increase resolution while decreasing size, as long as you maintain pixel dimensions equal to or smaller than the original.

After verifying your resolution, save a copy of the image:

1. Click the **File** menu.
2. Click **Save As**.
3. Choose the desired image file format in the **Save as type drop-down**, such as JPG, PNG, or BMP.
4. Choose the **location** where you would like to save your file.
5. Name your file.
6. Click the **Save** button.