



GRAPHICS DESIGNING

03

Adobe Photoshop



After completing this section, students will be able to:-

- define adobe photoshop
- describe applications of photoshop
- explain basic tools of adobe photoshop (selection tools, burn tool, history, pen tools, smudge tool, crop tool, blur, dodge and sponge etc.).
- describe popular file formats in photoshop (jpeg, gif & png etc.)

Adobe Photoshop

Adobe Photoshop is the software that is extensively used for raster image editing, graphic design and digital art.

Adobe Photoshop, computer application software **Skilry.com**

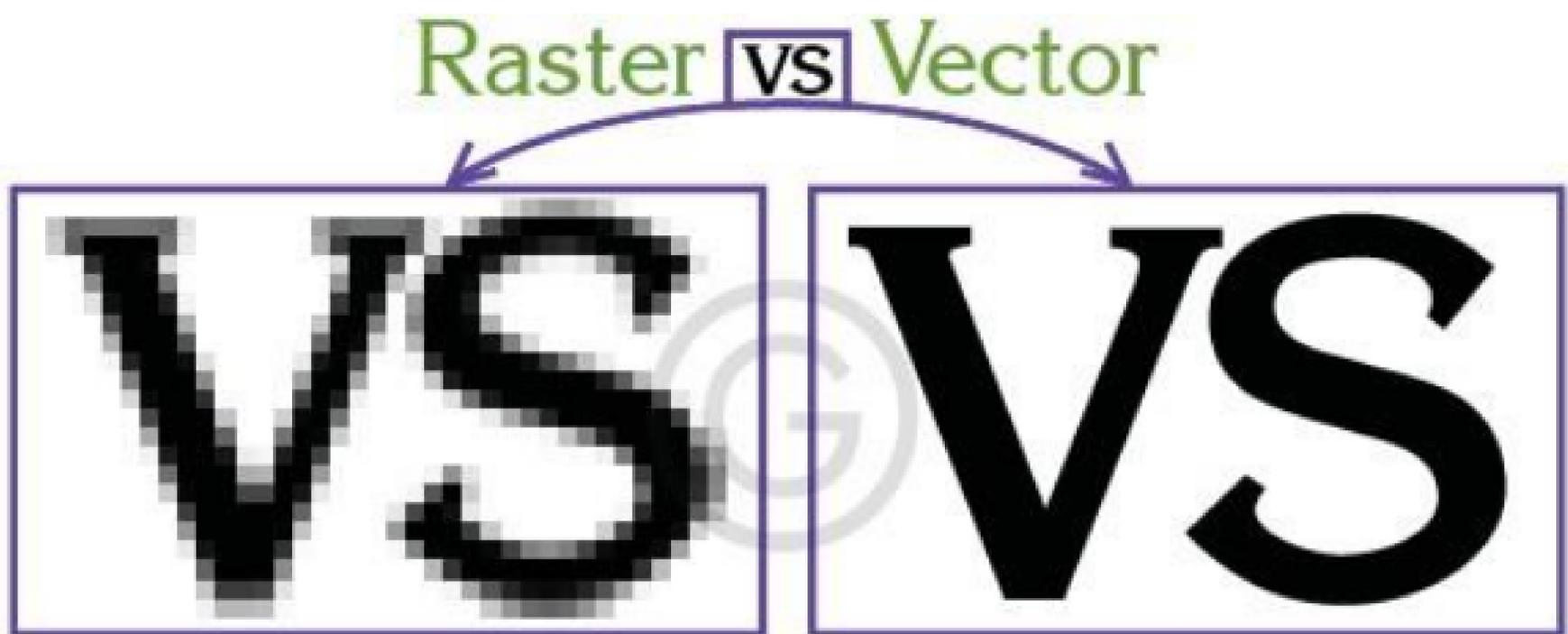
used to edit and manipulate digital images. Photoshop was developed in 1987 by the American brothers Thomas and John Knoll, who sold the distribution license to Adobe Systems Incorporated in 1988.

Raster Image:

In computer graphics and digital photography, a raster graphic is a dot matrix data structure that represents a generally rectangular grid of pixels.

Vector:

Vector graphics are computer graphics images that are defined in terms of points on a cartesian plane, which are connected by lines and curves to form polygons and other shapes. Example given in below image:



Applications of Photoshop

We can use Adobe Photoshop to retouch our scanned or digital photographs. We can improve the color tone and brightness of the pictures into a fresh style.

We can also remove the unwanted dots using blur tool, photo filter, and color lookup. In Adobe Photoshop, we can remove or change the backgrounds of our photographs. Changing the color of clothes, hair, and eyes is very simple when you use this software. We can add a person to the photograph and make it look like an original one. Adobe Photoshop helps us to retouch, sharpen and enhance the photos in high quality

Basic tools in Photoshop

Selection Tools:

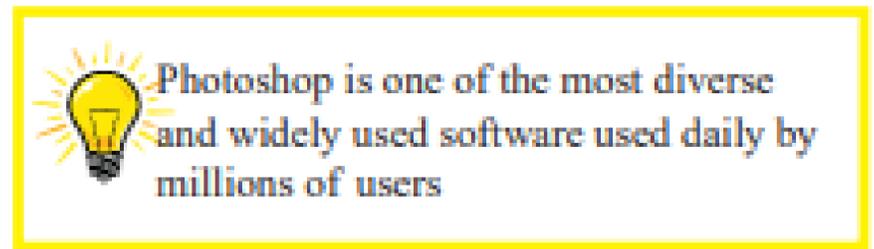
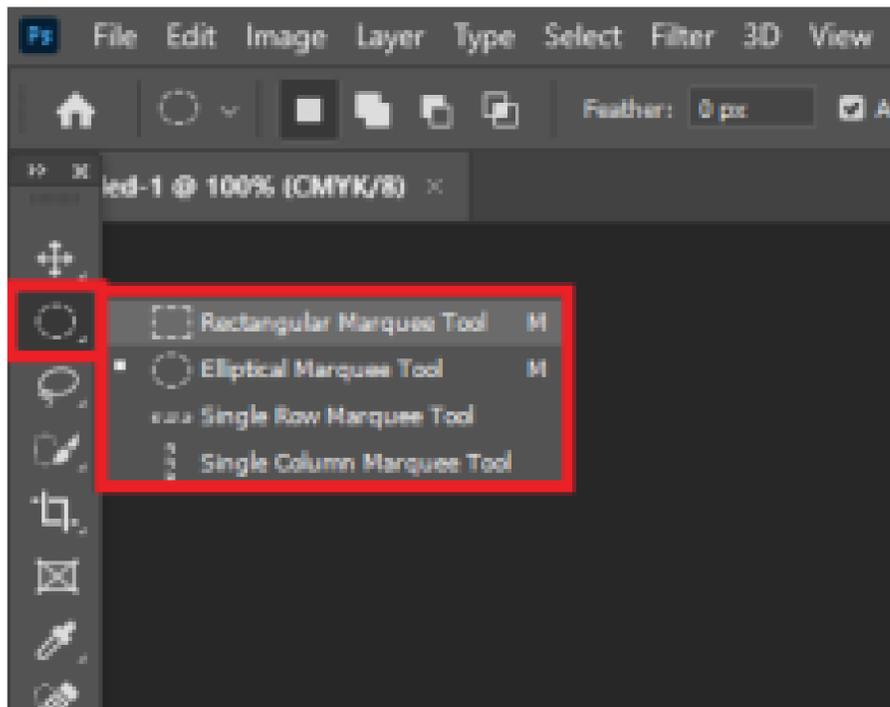
Adobe Photoshop also offers a number of selection tools: Quick Mask, Rectangular marquee, Elliptical marquee, Lasso, Polygonal Lasso, Magnetic Lasso, Magic Wand.

Quick Mask mode:

To switch from Standard mode to Quick Mask mode, press the Q button. Paint over the areas to be selected with a hard-edge Brush (in Quick Mask mode the selected area is highlighted in semitransparent red), then switch back to Standard mode by pressing the Q button again.

Rectangular Marquee:

The Rectangular marquee and Elliptical marquee tools are hidden in the Toolbox under one and the same icon as can be seen in Figure 3.2. The icon on the Toolbox displays the last tool used. To open the floating menu, right click on the arrow in the lower right corner of the displayed icon.



This tool selects rectangular and square areas. To select a rectangular area, you should:

Step 1. Activate the Rectangular marquee tool by clicking on the icon The Rectangular marquee tool, or (if the rectangular marquee was not the last tool applied) select it from the floating window.

Step 2. Bring the mouse cursor to the point of the image where the corner of an imaginary rectangle should be, and press the left mouse button.

Step 3. Keeping the left button pressed, move the cursor diagonally to the opposite corner and release the button.

To select a square area of the image, make a selection keeping the Shift key pressed. Take into account that if you already have a selected area the new selection will be added to the previous one. To avoid it you should press the Shift key only when you start selecting a new area.

Elliptical marquee:

This tool selects ellipses and circles. To select an elliptical area, you should:

Step 1. Select the Elliptical marquee tool from the Toolbox by clicking on the icon The Elliptical marquee tool, or (if the Elliptical marquee was not the last tool applied) select it from the floating window.

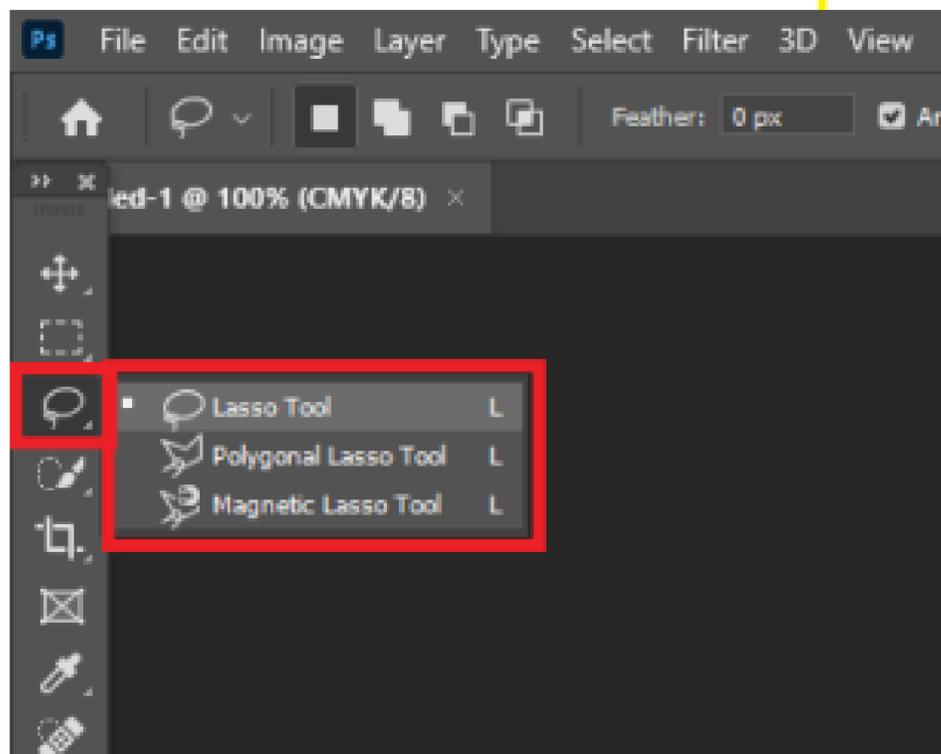
Step 2. Bring the mouse cursor to the point of the image where the corner of an imaginary rectangle with an inscribed ellipse should be, and press the left button.

Step 3. Keeping the left button pressed, move the cursor diagonally to the opposite corner and release the button.

To select a circular area of the image, make a selection keeping the Shift key pressed. Take into account that if you already have a selected area the new selection will be added to the previous one. To avoid it you should press the Shift key only when you start selecting a new area. If you keep the Alt (Option in Mac) key pressed when selecting an elliptical or a rectangular area the selection is generated from the center to borders, not from one corner to another.

The Lasso, Polygonal Lasso, Magnetic Lasso tools are hidden in the Toolbox under one and the same icon as can be seen in Figure 3.3. The icon on the Toolbox displays the last tool selected. To open the floating menu right-click on the arrow in the lower right corner of the displayed icon.

 You may use quick selection tool instead of lasso tool as it saves time



Lasso

The tool allows creating freehand selections. To make a freehand selection you should:

Step 1. Select the Lasso tool from the Toolbox by left-clicking on the icon Lasso tool, or (if Lasso was not the last tool applied) select it from the floating window.

Step 2. Bring the mouse cursor to the object that must be selected and outline it keeping the left button pressed.

Polygonal Lasso

The tool makes freehand selections, but its contour is made up of straight segments.

To make a selection you should:

Step 1. Select the Polygonal Lasso tool from the Toolbox by clicking on the icon The Polygonal Lasso tool, or (if Polygonal Lasso was not the last tool applied) select it from the floating window

Step 2. Bring the cursor to any point near the object to be outlined and press the left mouse button - it'll be the first point of the contour.

Step 3. Move the cursor to the next point of the contour not far from the first one and left-click it again. The program will automatically draw a straight line between the two points.

Step 4. Keep putting points in this way until the whole object is outlined and close the contour

Magnetic Lasso

This tool makes a freehand selection.

When you use *Magnetic Lasso*, you do not need to follow the contour of the object precisely. If the object stands out against the background the border of the selected area will be traced automatically as you move the cursor along the object. To select an area using *Magnetic lasso* you should:

Step 1. Select the *Magnetic Lasso* tool from the Toolbox by clicking on the icon The *Magnetic Lasso* tool, or (if *Magnetic Lasso* was not the last tool applied) select it from the floating window.

Step 2. Bring the mouse cursor to the border of the object that you need to be selected.

Step 3. Press the left button and start dragging the cursor along the object. Pay attention to fastening points that appear as you outline the object and when you make a click.

If a fastening point is irrelevant, you can remove it by pressing the Delete key and return to the previous fastening point to continue outlining the object.

Step 4. Close the contour, that is join the first fastening point with the last one by bringing the cursor to the first point or by making a double-click.

Magic Wand

This tool selects a consistently colored area. You can set Tolerance in the Options palette of the Magic Wand tool. The higher is the value, the more colors will fall into the selected area. The Tolerance value ranges from 0 to 255. At Tolerance equal to 0 the selected area will be represented only by one color, at Tolerance equal to 255 - all colors of the image will be selected, that is the whole image.

To select a consistently colored area, you should:

Step 1. Select the Magic Wand tool in the Toolbox by clicking the icon The Magic Wand tool.

Step 2. Bring the cursor to the pixel of the image that must be included into the selection and leftclick it. As a result, an outline appears around the pixel. It includes colors of the image similar to the color of the selected pixel according to the specified Tolerance value.

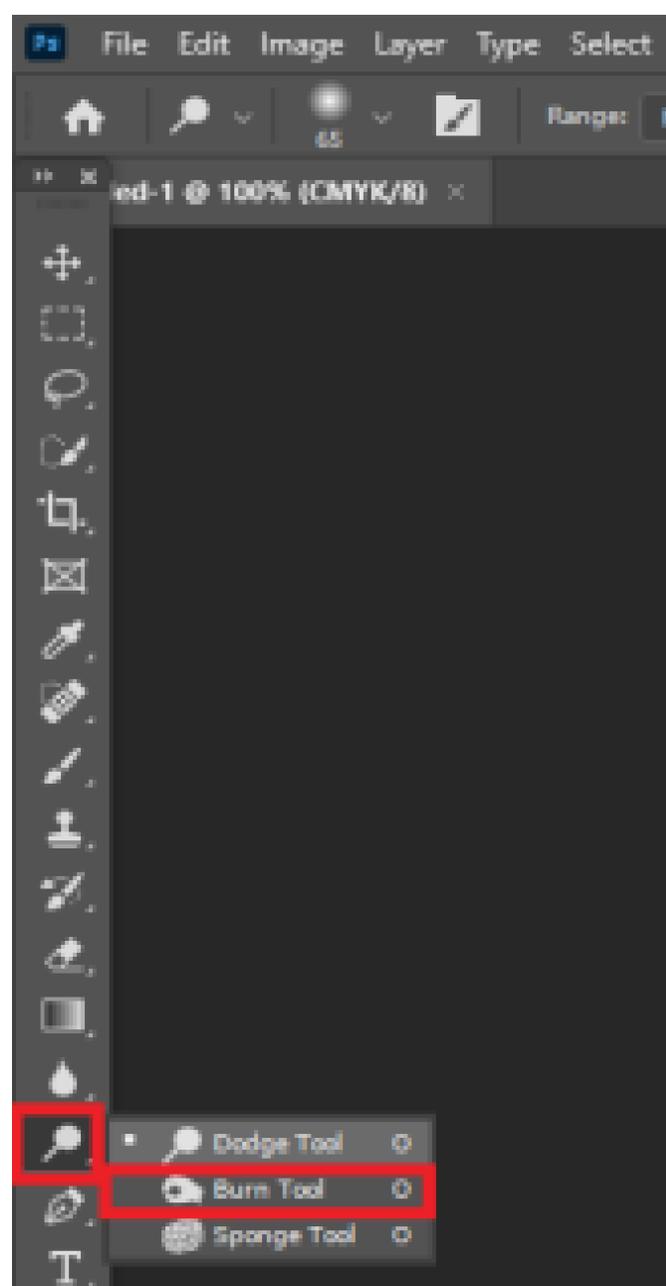
- These selection tools are efficient due to the flexibility of their usage: you can add to, subtract from or intersect a selection.

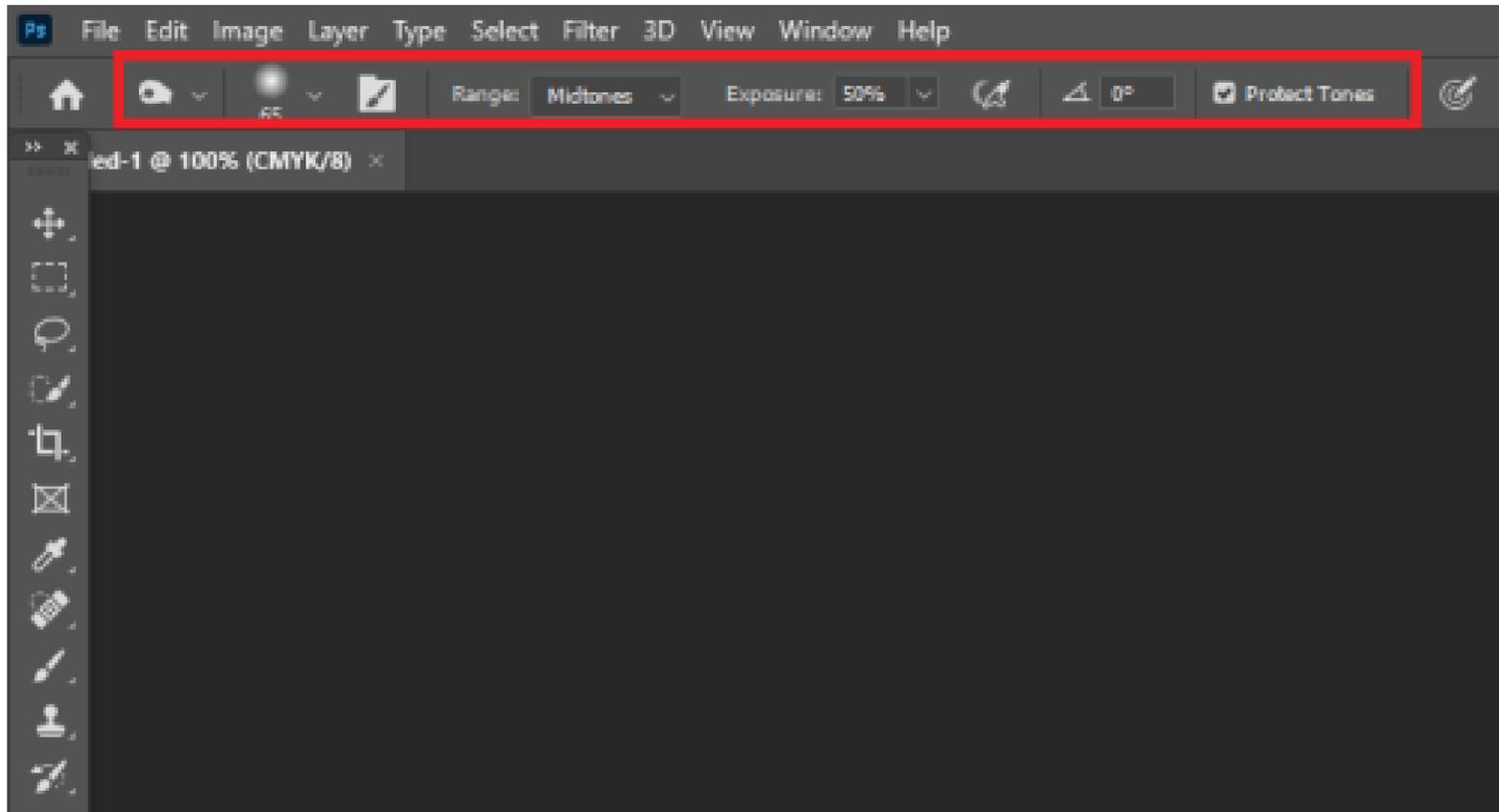
- To add an area to the previous selection you should press the Shift key before you use a selection tool and, keeping it pressed, make a new selection
- To subtract an area from the previous selection you should press the Alt (Option in Mac) key before you use a selection tool and, keeping it pressed, make a new selection
- If you press Shift and Alt (Shift and Option in Mac) keys simultaneously you obtain an intersection of the old and new selections

Burn Tool



Burn tool is present in the toolbox as shown below; the shortcut is “o” to use the tool.





Using Burn Tool:

With the Burn tool, you can darken the pixels in the location of the brush stroke. This makes the background color darker on the area of the brush stroke.

In Photoshop Components, you could lighten or darken area of a picture utilizing the Dodge as well as Burn tools, respectively. You can specify the size as well as softness of your tool by just choosing from among the several brush pointers. You can also restrict the adjustment to various tonal ranges in your photo-- shadows, midtones, or highlights. You likewise could adjust the amount of modification that's applied by defining a direct exposure percentage.



Choose either the Dodge (to lighten) or Burn (to darken) tool from the Tools panel in Edit Full mode. Press Shift+O to cycle via the Dodge, Burn, and also Sponge tools.

1- Select a brush from the Brush Preset Picker drop-down panel and also change the brush size, if necessary. Larger, softer brushes spread the dodging or burning effect over a bigger area, making mixing with the bordering area less complicated.

2- From the Range pop-up checklist, select Shadows, Midtones, or Highlights. Select Shadows to darken or lighten the darker areas of your image. Select Midtones to adjust the tones of average darkness. Select highlights to make the light area lighter or darker.

3- Choose the quantity of improvement you wish to apply with each stroke by readjusting the Exposure setup.

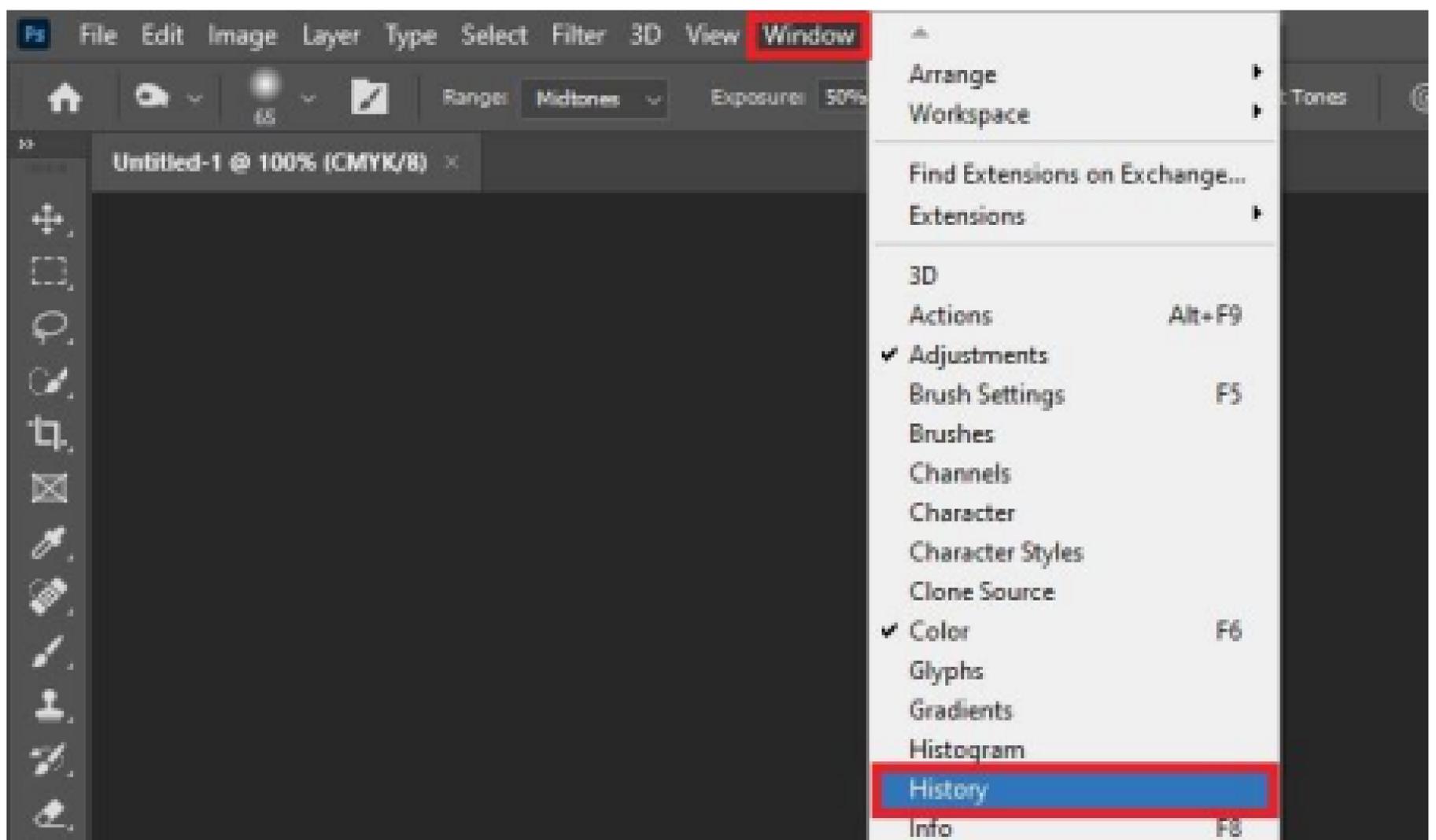
Beginning with a reduced percentage to far better control the quantity of darkening or lightening. Direct exposure is similar to the opacity setting that you utilize with the Brush tool.

4- Paint over the locations you want to lighten or dim. If you don't like the results, press Ctrl+Z (cmd+Z on the Mac) to reverse.

History

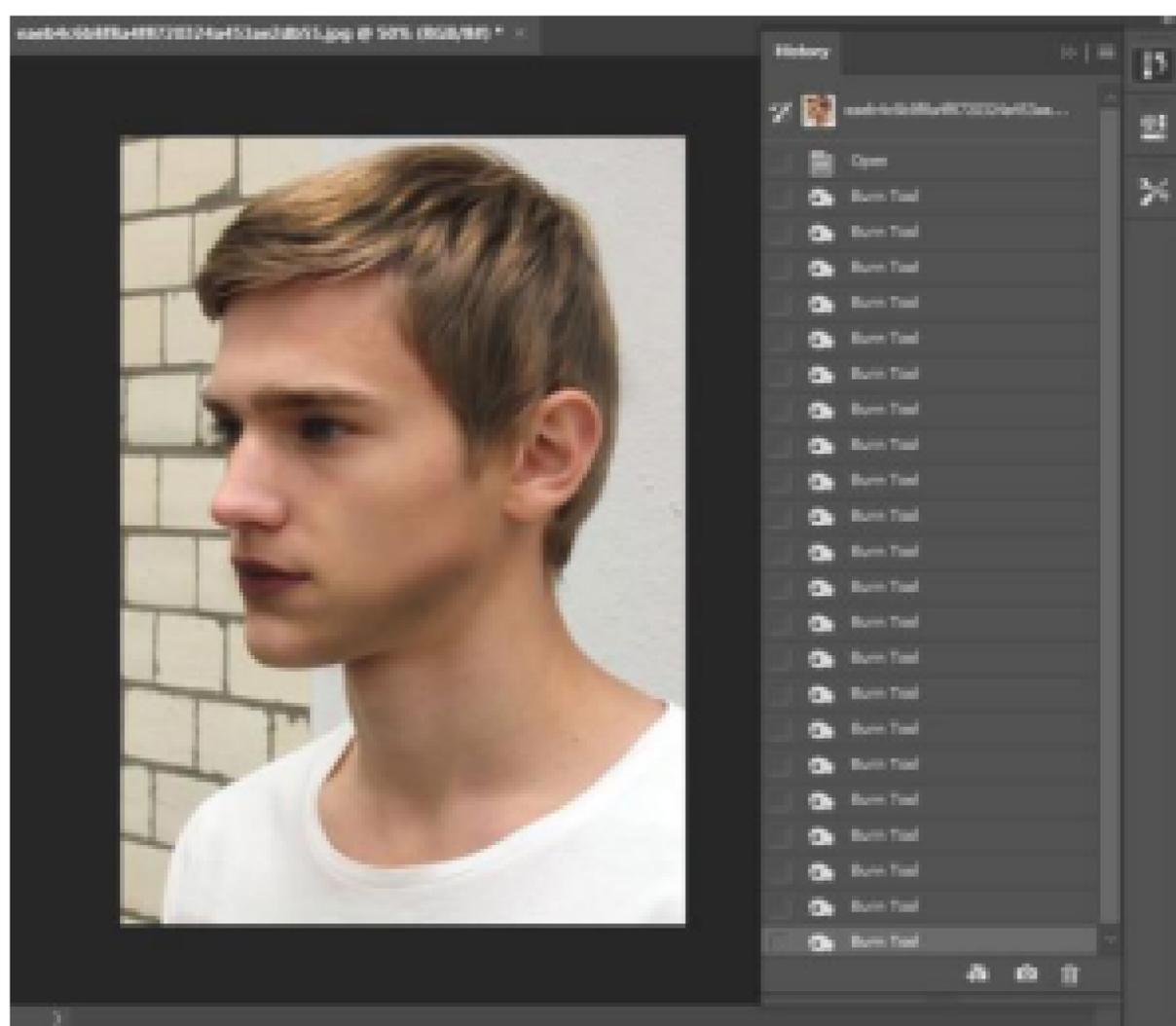


The History Panel is a tool which creates a chronological top-down view of everything you do in your working session in Photoshop. To access the History Panel, choose Window > History, or click the History Panel tab if it's already activated in your workspace (highlighted in the Featured image).



Every move you make, from brush strokes to selections, is recorded and referred to as a History State or State for short, and each State appears in the panel. We can use this list of History States to, as I like to say, 'time travel' without the need for a flux capacitor.

As we angrily spam our Ctrl + Z (Windows) or + Z (Mac) after we've made a dreadful mistake, we're actually going back state by state to a time when we were happy with our work, and from that previous State we can start anew. A more thoughtful, timid and alternate approach would be by clicking on a specific State within the History Panel list itself and continuing on from there. Let's face it, though, we all like to spam our "ctrl + Z" shortcuts, and it's not a bad thing, an example of History, Where Brush tool is used multiple times on an image.

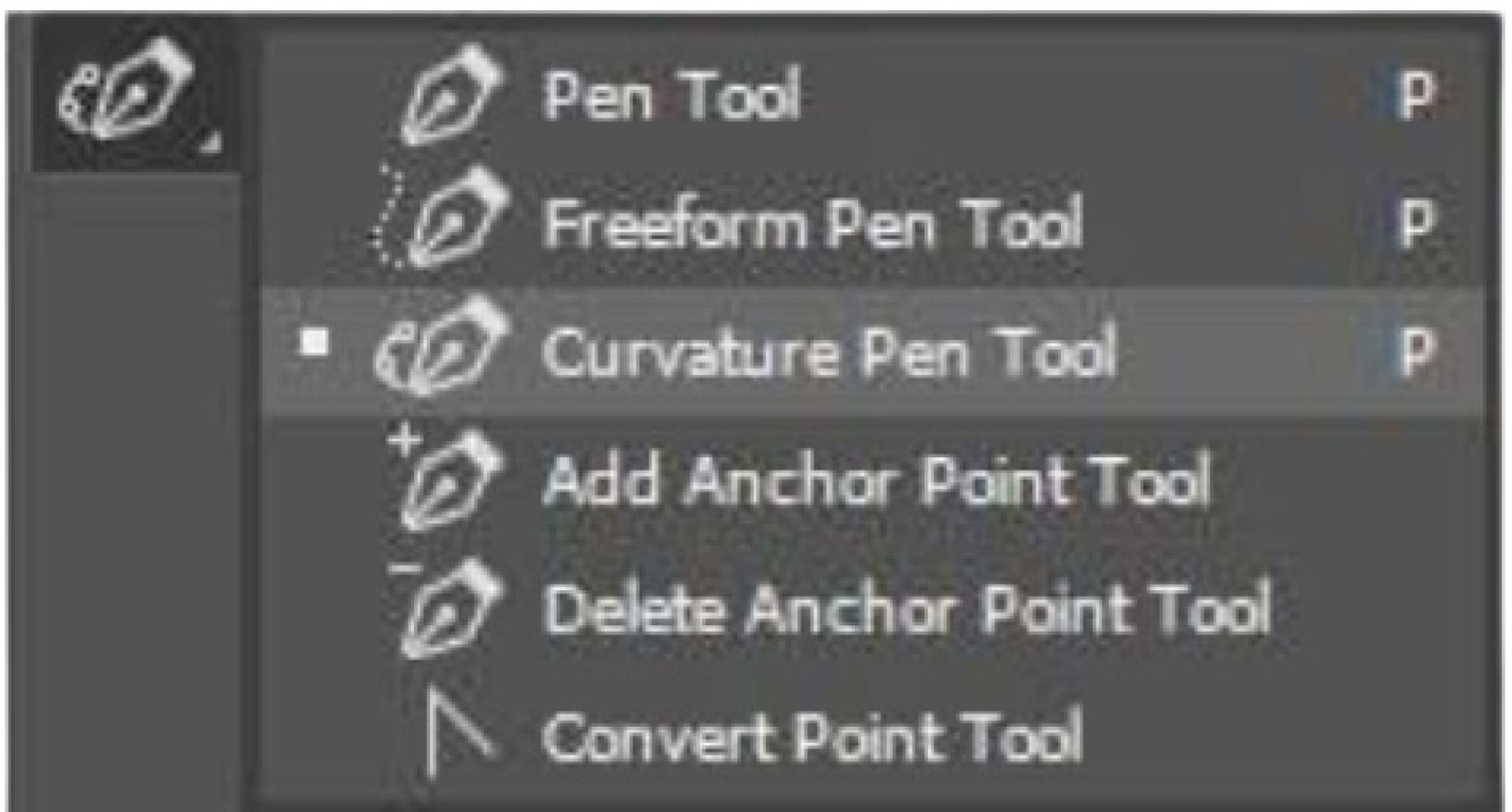


Pen Tool

Photoshop provides multiple Pen tools to suit your use cases and creative style:

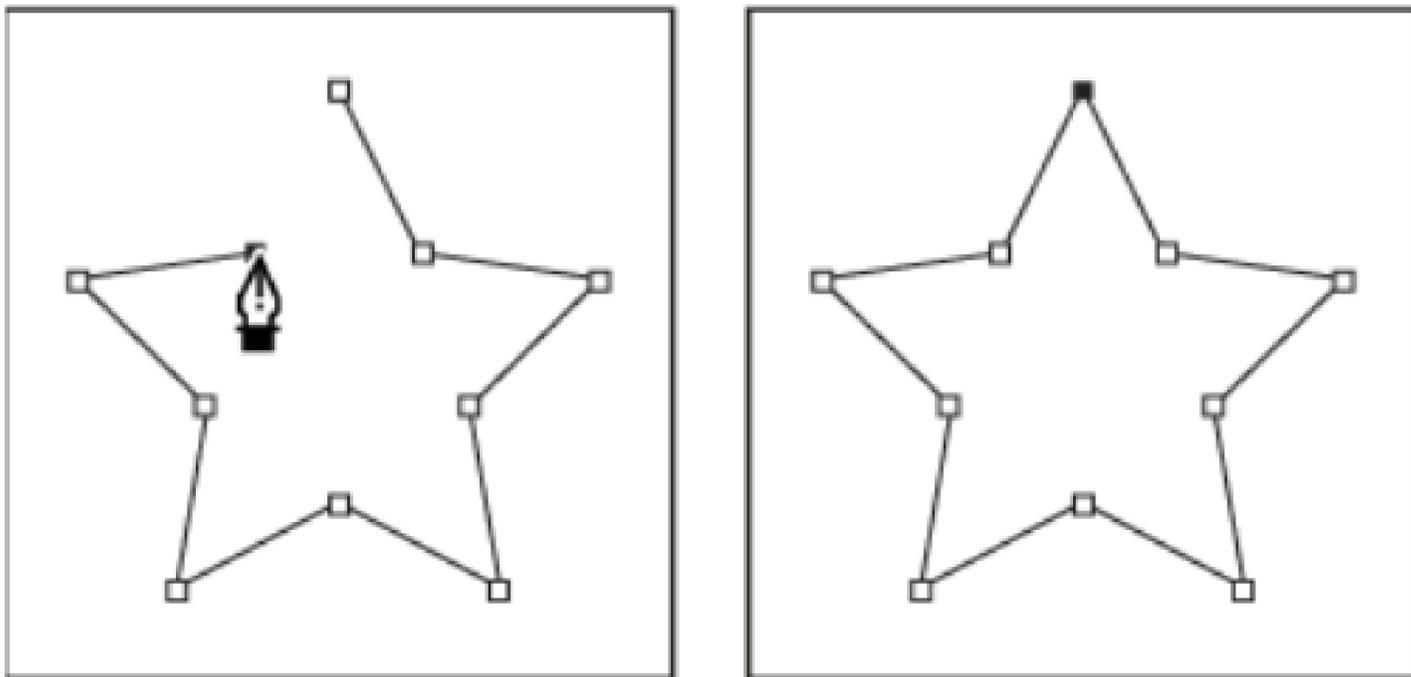
- The Curvature Pen tool lets you intuitively draw curves and straight segments.
- The Standard Pen tool lets you draw straight segments and curves with great precision.
- The Freeform Pen tool lets you draw paths as if you were drawing with pencil on a piece of paper
- The Magnetic Pen options let you draw a path that snaps to the edges of the defined areas in your image. The Content-Aware Tracing tool lets you automate the process for tracing images

Use the Shift+P key combination to cycle through the tools in the Pen group



Draw straight line segments

The simplest path you can draw with the standard Pen tool is a straight line, made by clicking the Pen tool to create two anchor points. By continuing to click, you create a path made of straight-line segments connected by corner points



Select the Pen tool.

- Position the Pen tool where you want the straight segment to begin, and click to define the first anchor point (do not drag).
- Click again where you want the segment to end (Shift-click to constrain the angle of the segment to a multiple of 45°).
- Continue clicking to set anchor points for additional straight segments.
- The last anchor point you add always appears as a solid square, indicating that it is selected.
- Previously defined anchor points become hollow, and deselected, as you add more anchor points.

- Complete the path by doing one of the following:

1- To close the path, position the Pen tool over the first (hollow) anchor point. A small circle appears next to the Pen tool pointer when it is positioned correctly. Click or drag to close the path.

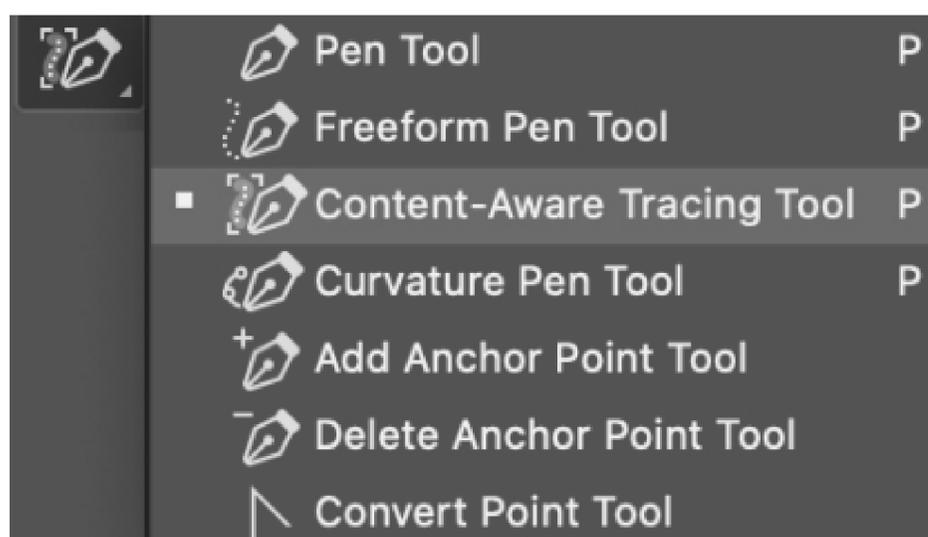
2- To leave the path open, Ctrl-click (Windows) or Command-click (Mac OS) anywhere away from all objects.

3- To leave the path open, you can also select a different tool.

Content-Aware Tracing Tool

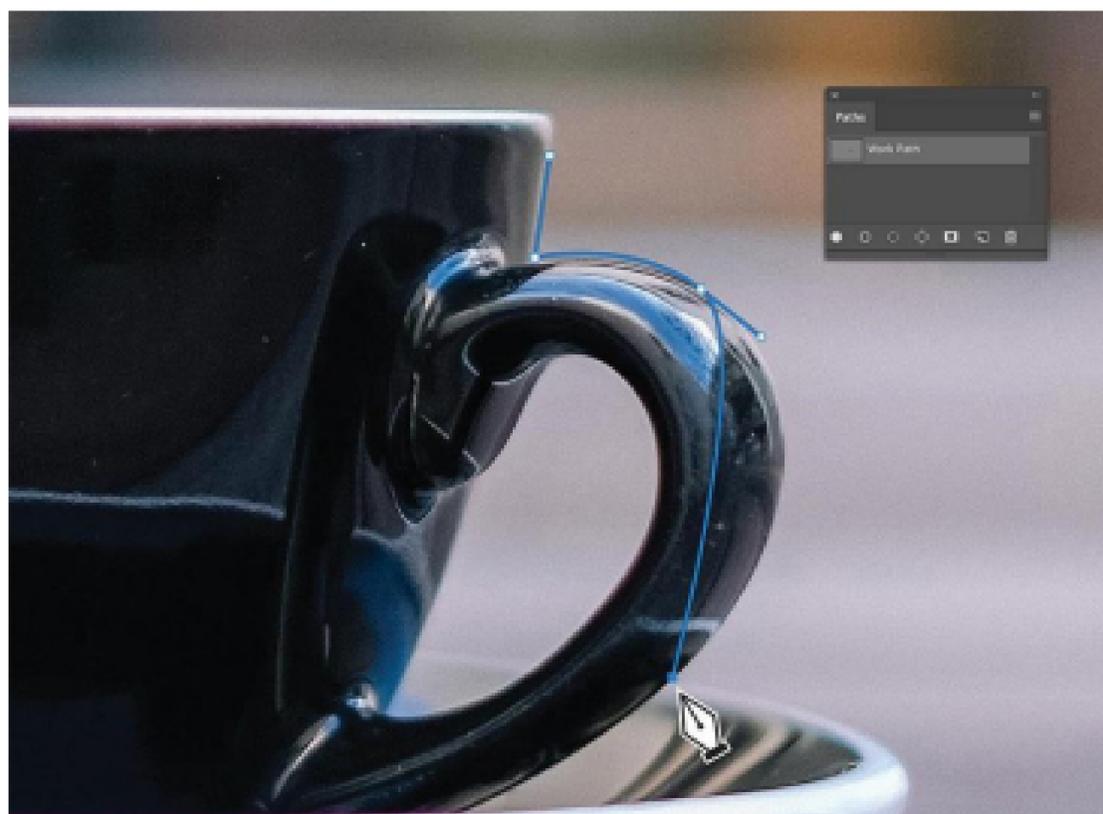
The Content-Aware Tracing Tool is being introduced as a Technology Preview in the October 2020 release of Photoshop and lets you create vector paths and selections by simply hovering over the edges of your image and clicking. You can enable the Content-Aware Tracing Tool in Preferences > Technology Previews and then restart Photoshop.

Try out the Content-Aware Tracing Tool by following the below five simple steps: 1- From the Pen tools group, select the Content-Aware Tracing Tool.

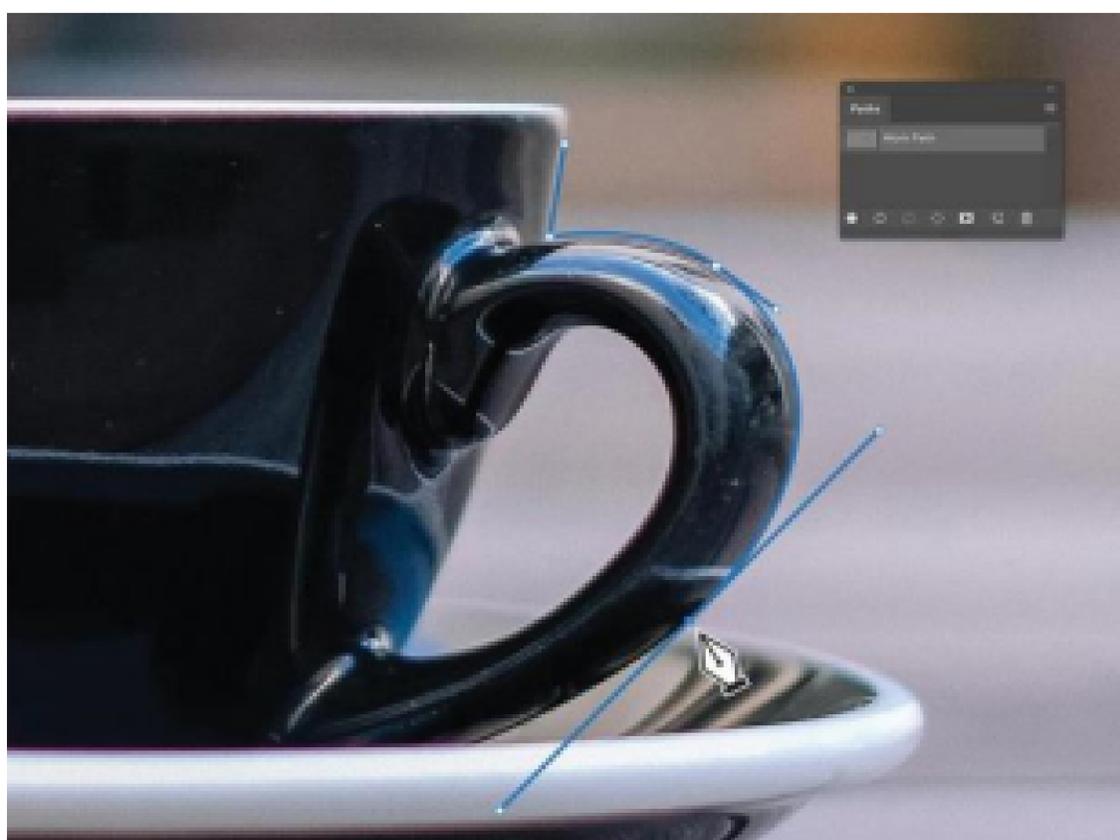


2- Hover the cursor over the edge of an object to highlight it

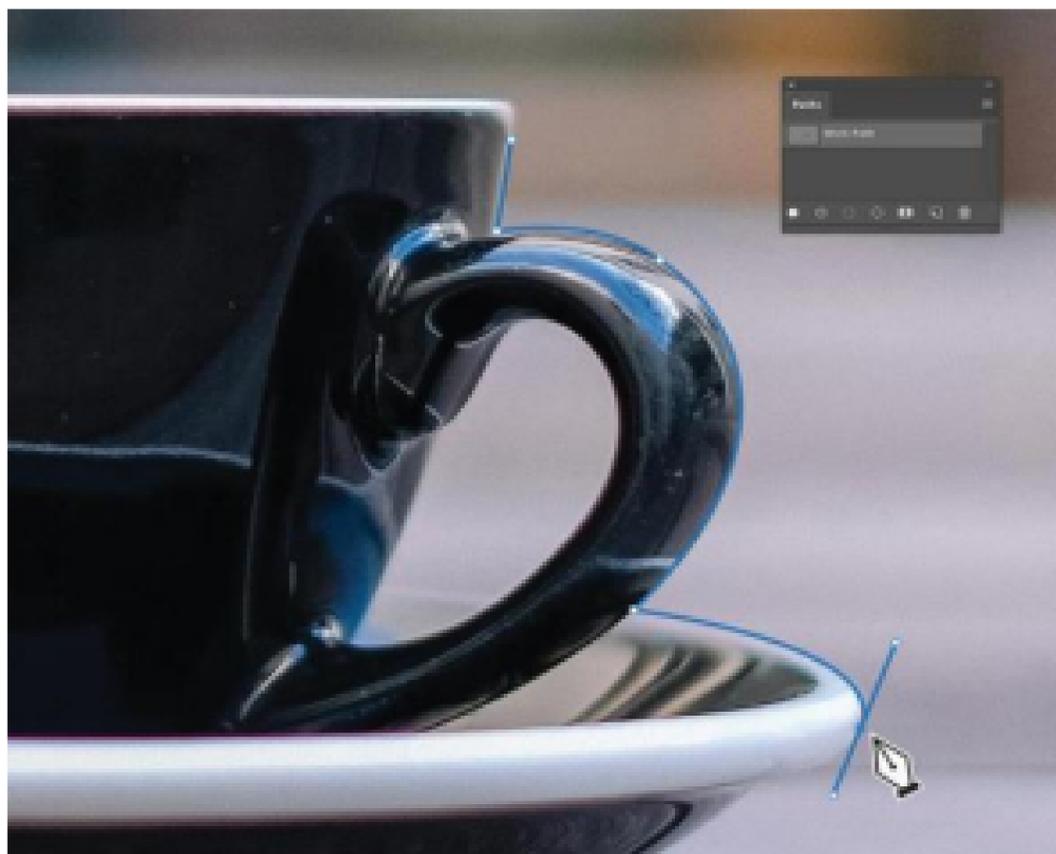
3- Click on the highlighted section to create a path



4- To add to the path, hover over an adjacent edge to highlight a new section and hold the Shift key while clicking to extended the path. The pink line that appears indicates that you're adding a new section to the existing path.



5- To delete an area from the path, hold down the Alt key (Windows) or Option key (Mac) while you click. You can also click and drag in a direction to remove larger sections.



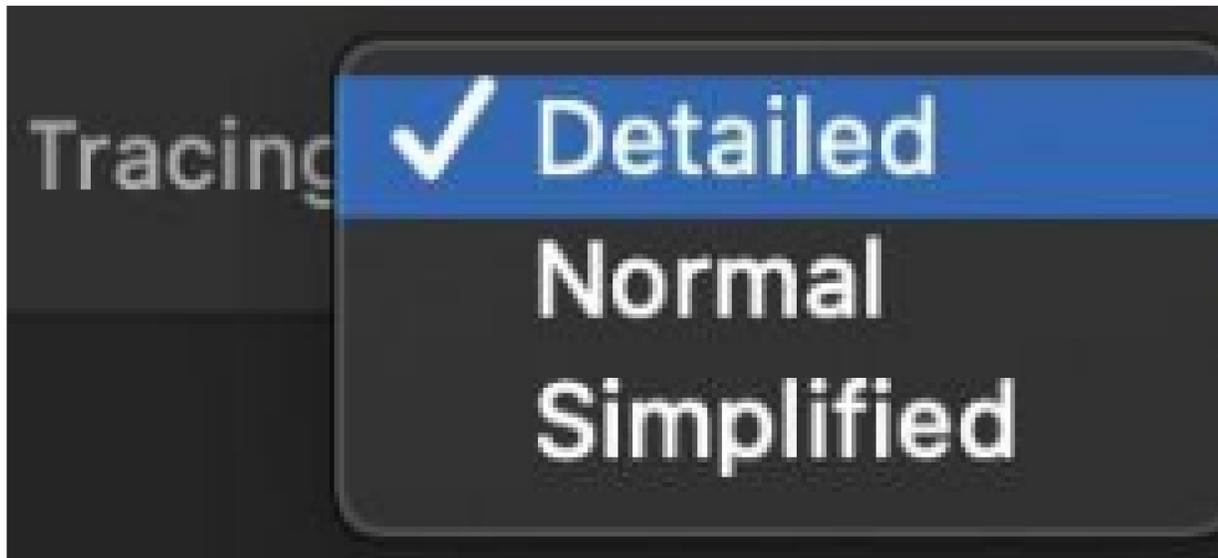
Details

While adjusting the Detail slider, Photoshop displays a preview of the edges that Photoshop sees. Moving the slider to the right increases the amount of edges Photoshop detects and moving to the left decreases the number of detected edges.



Tracing

Tracing modes (Detailed, Normal, and Simplified) adjust how detailed or textured the image is prior to processing the tracing



Smudge



The Smudge tool simulates the effect you see when you drag a finger through wet paint. The tool picks up color where the stroke begins and pushes it in the direction you drag.

- 1- Select the Smudge tool.
- 2- Choose a brush tip and options for the blending mode in the options bar.
- 3- Select Sample All Layers in the options bar to smudge using color data from all visible layers. If this is deselected, the Smudge tool uses colors from only the active layer.
- 4- Select Finger Painting in the options bar to smudge using the foreground color at the beginning of each stroke. If this is deselected, the Smudge tool uses the color under the pointer at the beginning of each stroke.
- 5- Drag in the image to smudge the pixels.

Crop Tool

Cropping is the process of removing portions of a photo to create focus or strengthen the composition. Use the Crop tool to crop and straighten photos in Photoshop. The Crop tool is nondestructive, and you can choose to retain the cropped pixels to optimize the crop boundaries later. The Crop tool also provides intuitive methods to straighten a photo while cropping.

For all operations, visual guides provide an interactive preview. When you crop or straighten photos, real-time feedback helps you visualize the final result.

Crop a Photo

- 1- From the toolbar, select the Crop Tool. Crop borders display on the edges of the photo.
- 2- Draw a new cropping area or drag the corner and edge handles to specify the crop boundaries in your photo.
- 3- (Optional) Specify the Crop options using the Control bar.



A. Aspect Ratio Menu B. Swap Width and Height values C. Overlay Options

Choose a ratio or size for the crop box. You can also choose a preset, enter your own, or even define your own preset values for later use.

Overlay Options

Choose a view to display overlay guides while cropping. Guides such as Rule of Thirds, Grid, and Golden Ratio are available. To cycle through all the options, press O.

Crop Options

Click the Settings (gear) menu to specify additional crop options

Use Classic mode

Enable this option if you want to use the Crop tool in Photoshop CS5.

Auto Center Preview

Enable this option to place the preview in the center of the canvas.

Show Cropped Area

Enable this option to display the area that is cropped. If this option is disabled, only the final area is previewed.

Enable Crop Shield

Use the crop shield to overlay the cropped areas with a tint. You can specify a color and opacity. If you Enable Auto Adjust Opacity, the opacity is reduced when you edit the crop boundaries.

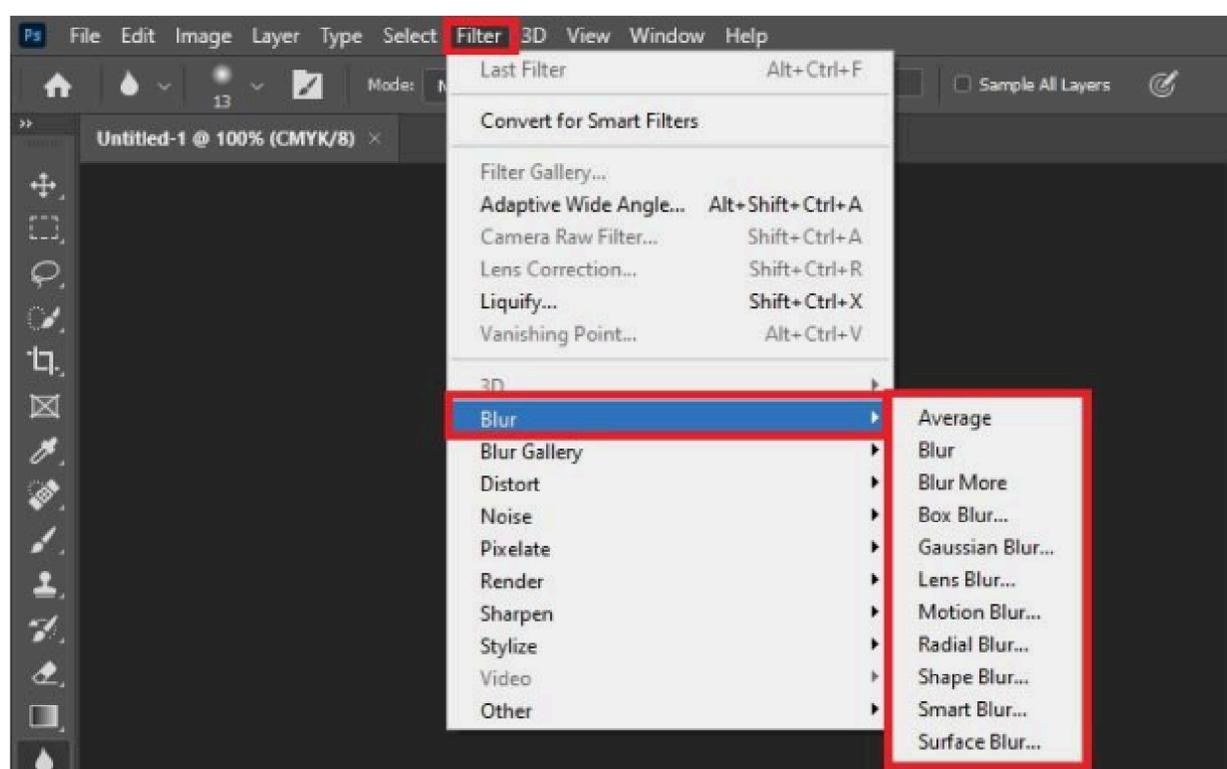
Delete cropped pixels

Disable this option to apply a non-destructive crop and retain pixels outside the crop boundaries. Nondestructive cropping does not remove any pixels.

You can later click the image to see areas outside current crop borders. Enable this option to delete any pixels that are outside the crop area. These pixels are lost and are not available for future adjustments.

Blur Tool

- 1- In Photoshop, go to Filter > Blur Gallery as can be seen in figure 3.15 and select Iris Blur.
- 2- Click the pin at the center of the ring and place it on your focal point.
- 3- Click and drag single points to elongate the ellipsis or drag the outer line to resize the blur area.
- 4- Click and drag the dots inside the blur preview ring to adjust the size of the blur transition area.
- 5- Adjust the round blur dial to control the amount of blur applied.
- 6- When you're finished, press Enter or click OK at the top of the Blur Gallery window.



Dodge and Sponge tool

Dodge Tool

There are three Ranges: Shadows, Midtones, and Highlights. Each choice will only affect the area falling into your category choice. The Exposure slider, with values ranging from 1% to 100%, sets the intensity of the effect. The default is 50%. What this means is that, if Midtones are set to 50%, then only the midtones will be darkened or lightened to a maximum of 50%.

Sponge Tool

There are two mode choices: Desaturate and Saturate.

Desaturate reduces the color intensity and Saturate increases the color intensity of the area being painted. Flow is a bit different. The value ranges from 1% to 100% and refers to how quickly the effect is applied.

Popular File Formats in Photoshop

Many file formats use compression to reduce the file size of bitmap images. Lossless techniques compress the file without removing image detail or color information; lossy techniques remove detail. The following are commonly used compression techniques:

RLE (Run Length Encoding) Lossless compression; supported by some common Windows file formats.

LZW (Lemple-Zif-Welch)

Lossless compression; supported by TIFF, PDF, GIF, and PostScript language file formats.

JPEG (Joint Photographic Experts Group)

Lossy compression; supported by JPEG, TIFF, PDF, and PostScript language file formats. Recommended for continuous-tone images, such as photographs. JPEG uses lossy compression. To specify image quality, choose Quality text box. For the best printed results, choose maximum-quality compression. JPEG files can be printed only on Level 2 (or later) PostScript printers and may not separate into individual plates.

CCITT

A family of lossless compression techniques for black-and-white images, supported by the PDF and PostScript language file formats. (CCITT is an abbreviation for the French spelling of International Telegraph and Telekeyed Consultive Committee.)

ZIP

Lossless compression; supported by PDF and TIFF file formats. Like LZW, ZIP compression is most effective for images that contain large areas of single color.

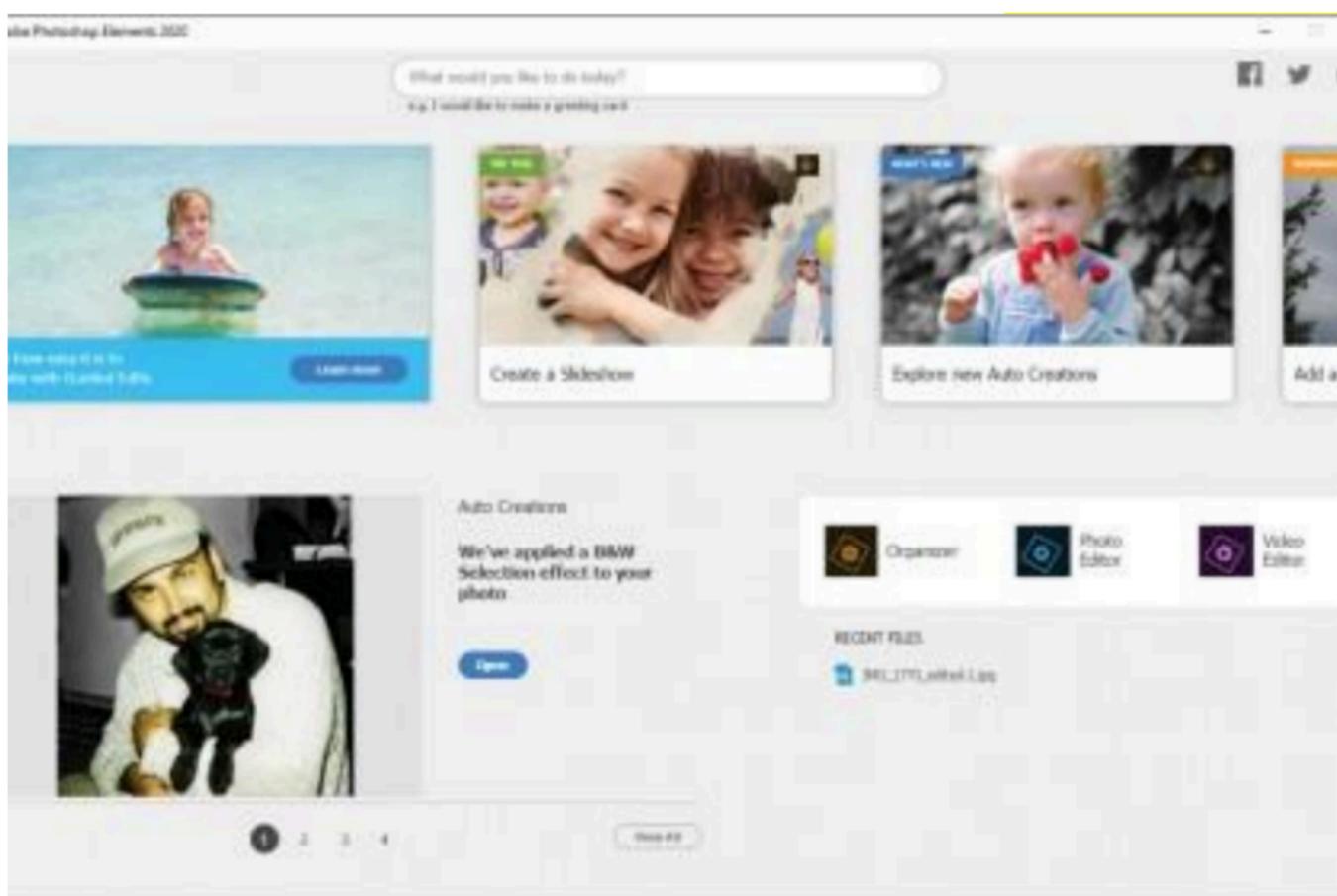
After completing this section, students will be able to: -

- define home screen
- understand workspace
- understand about user interface of photoshop
- describe properties of different tool
- describe about panels and panel location
- define how to import and export files
- understand concept of save files for web and print

Home Screen

The Home Screen in Photoshop Elements appears after opening Photoshop Elements 2019 or later. This screen replaces the Welcome Screen in Photoshop Elements from older software versions. The Home Screen in Photoshop Elements contains auto-generated photo and video collages and slideshows from imported media. It also lets you find new editing projects, get inspiring ideas, open different workspaces, open recent files, and get help.

The Search bar at the top of the Home Screen in Photoshop Elements lets you search and find help files and tutorials. To search, enter the desired text in the Search bar and then press your keyboard's "Enter" key. Matching results appear via thumbnails and hyperlinks in the Home Screen. To access the help documentation, click a thumbnail or hyperlink to open the page in your web browser. To return "Home" in the Home Screen, click the "Home" link in the breadcrumbs area in the upperleft corner of the screen.



Workspace

A workspace is a preset layout for the various elements that make up Photoshop's interface. Workspaces determine which of Photoshop's panels are displayed on your screen and how those panels are arranged. A workspace can also change which tools are available in the Toolbar and how the Toolbar is organized. Workspaces may include custom menu items in the Menu Bar, and even custom keyboard shortcuts. Any or all of these elements can be included and saved as part of a workspace.

Workspaces give us a way to customize Photoshop's interface for specific tasks, and to better match the way we work. Photoshop includes far too many panels to fit them all on your screen at once, so it's important that we limit the panels to just the ones we actually need. A photographer, for example, will use certain panels for image editing and retouching. A digital painter, on the other hand, will need different panels, ones for choosing brushes and colors. Other tasks, like web and graphic design, video editing, or working with type and typography, all use specific panels. A workspace streamlines the interface for the task at hand, keeping your screen free of clutter and helping you work more efficiently.

Photoshop's default workspace

By default, Photoshop uses a workspace known as Essentials as can be seen in Figure 3.16. If you've never chosen a different workspace, you're using the Essentials workspace. It's also the workspace we use in our tutorials.

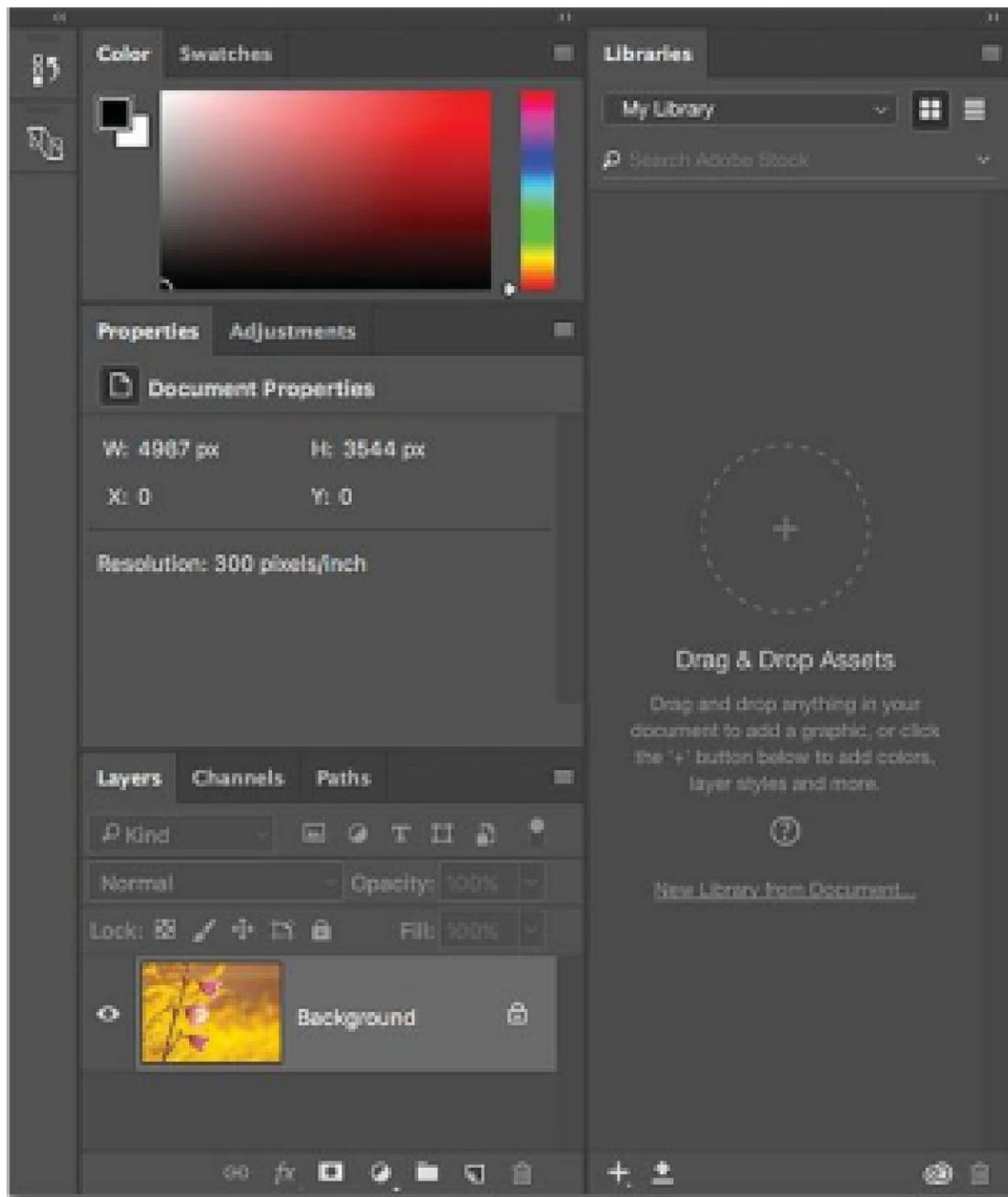
Essentials is a general-purpose workspace, suitable for many different tasks. It includes some of Photoshop's more commonly-used panels, like Layers, Adjustments and Properties, along with the Color and Swatches panels (flowers photo from Adobe Stock):



The default panels

Let's take a closer look at the default panels. As we learned in the Managing Panels tutorial, Photoshop's panels are located in columns along the right of the screen. The libraries panel, new in Photoshop CC, gets its own column on the far right. Panels we use the most (Layers, Properties, Color, etc.) are found in the main column in the middle. And on the left is a narrow column that holds the History and Device Preview panels. By default, panels in the left column are collapsed into icons (what Adobe calls iconic view). You can expand a panel that's in iconic view by clicking its icon.

Properties of Different tools



Tools in the View group of the Expert mode toolbox

Zoom tool (Z) Zooms in or zooms out

Zooms in or zooms out your image. The related tools shown in the Tool Options bar are Zoom In and Zoom Out. For more information about the Zoom tool, see Zoom in or out.

Hand tool (H)

Moves your photo in the Photoshop Elements workspace. You can drag your image using this tool.

Tools in the Select group of the Expert mode toolbox

Move tool (V)

Moves selections or layers.

Rectangular Marquee tool (M)

Selects an area in your image in a rectangular box. Hold the Shift key to make the selection a square.

Elliptical Marquee tool (M)

Selects an area in your image in an elliptical shape. Hold the Shift key to make the selection a circle.

Lasso tool (L)

Selects an area in your image in a free-form shape.

Magnetic Lasso tool (L)

Selects part of an image by selecting the high-contrast edges around a shape.

Polygonal Lasso tool (L)

Draws straight-edged segments of a selection border.

Quick Selection tool (A)

Makes a selection based on color and texture similarity when you click or click-drag the area you want to select.

Selection Brush tool (A)

Selects the area where you paint with the brush.

Magic Wand tool (A)

Selects the pixels with similar colors in a single click.

Refine Selection Brush tool (A)

Adds or removes areas to and from a selection by automatically detecting the edges. For more information on this tool, see [Edit and refine selections](#).

Auto Selection tool (A)

Automatically makes a selection when you draw a shape around the object you want to select.

Tools in the Draw group of the Expert mode toolbox

Brush tool (B)

Creates soft or hard strokes of color. You can use it to simulate airbrush techniques.

Impressionist Brush tool (B)

Changes the existing colors and details in your image so your photo looks like it was painted using stylized brush strokes.

Color Replacement tool (B)

Simplifies replacing specific colors in your image.

Eraser tool (E)

Erases the pixels in the image as you drag through them

Background Eraser tool (E)

Turns color pixels to transparent pixels so that you can easily remove an object from its background.

Magic Eraser tool (E)

Changes all similar pixels when you drag within a photo. For more information, see [Use the Magic Eraser tool](#).

Paint Bucket tool (K)

Fills an area that is similar in color value to the pixels you click.

Pattern tool (K)

Applies a fill or a pattern to your image, instead of using one of the brush tools.

Gradient tool (G)

Fills in an area of image by a gradient. For more information, see [Apply a gradient](#).

Color Picker tool (I)

Copies or samples the color of an area in your photo to set a new foreground or background color.

Custom Shape tool (U)

Provides different shape options for you to draw. When you select the Custom Shape tool, you can access these shapes in the Tool Options bar.

The other shape-related tools available in the Tool Options bar are:

Rectangle

Rounded Rectangle Ellipse

Polygon Star Line

Selection

Type tool (T)

Creates and edits text on your image.

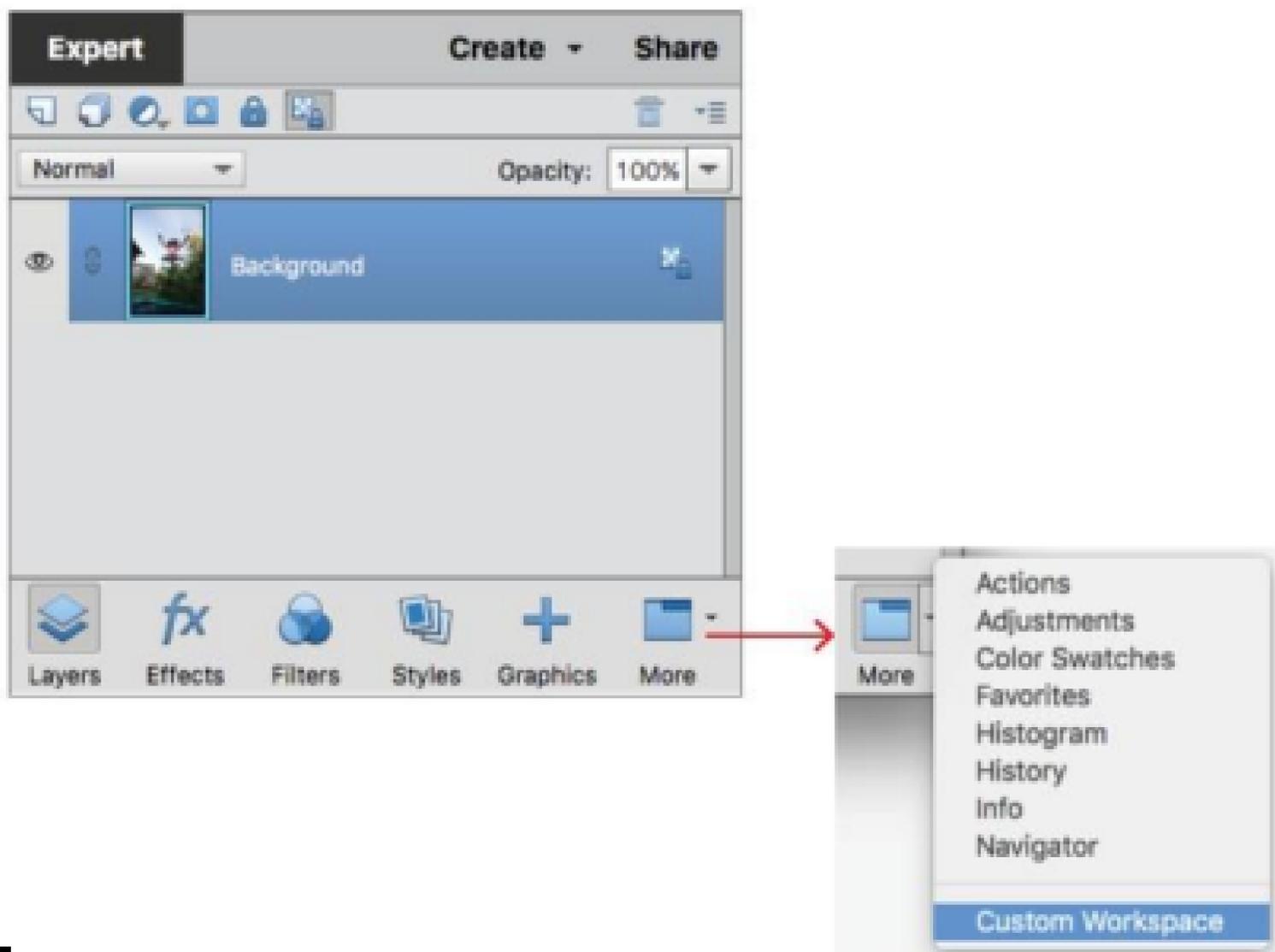
Vertical Type Horizontal Type Mask Vertical Type Mask Text on Selection Text on Shape Text on Custom Path

Pencil tool (N)

Creates hard-edged freehand lines.

Panels and Panel Location

Panels are available in both Photoshop Elements and Elements Organizer; however, they behave a little differently in each. Panels help you manage, monitor, and modify images. Some panels have menus that provide additional commands and options. You can organize panels in the basic and custom workspaces in Expert mode. You can store panels in the Panel Bin to keep them out of your way



Panel menus

Some commands appear in both the panel menu and the menu bar. Other commands are exclusive to panel menus. Click panel menu to view the different commands in each panel.

Work with panels

Panels contain features, information, or functionality, in logical groups, for fast and easy access. The Panel Bin is on the right side of Photoshop Elements. It displays tabs and panels, depending on the mode you are in, or the kind of elements you want to work with. The Panel Bin displays:

Quick mode: lists the quick-mode effects that can be applied to a photo
 Guided mode: lists all the guided-mode edits that you can apply to a photo.

Expert mode: lists the options for a selected panel (Layers, Effects, Graphics, or Favorites)

Panels in the Expert mode

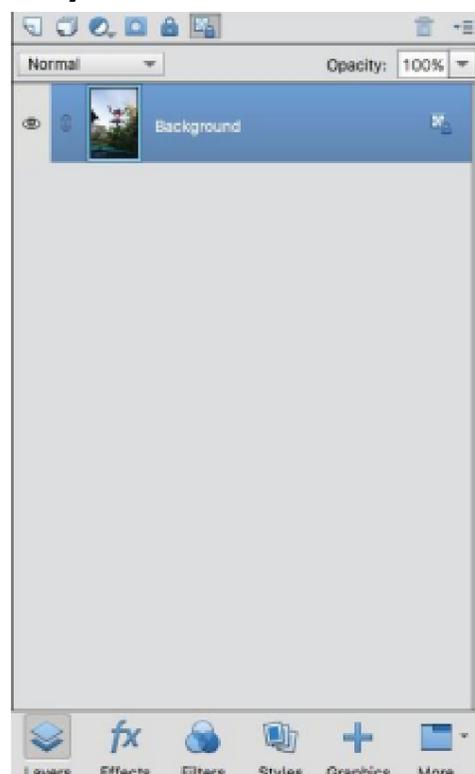
In the Expert mode, panels can be displayed in two ways - Basic Workspace, and Custom Workspace.

Basic Workspace

By default, the available workspace displayed is the Basic Workspace. In this view, buttons for the most frequently used panels are placed in the taskbar. The buttons in this workspace are Layers, Effects, Graphics, and Favorites. For example, clicking the Layers button displays all the layers-related options. To view all the other available tabs, or close open tabs, click More.

Custom Workspace

To view panels in a tabbed layout in the Panel Bin, click the arrow next to More, and select Custom Workspace. Click More to view a list of all the available tabs, and select one from the pop-up list. The selected tab is displayed. You can keep the frequently used panels open in the custom workspace. Group panels together or dock one panel at the bottom of another panel. You can drag title bar of the tab and drop it in the tabbed layout, or drag-and-drop the tabs dialog into the tabbed layout



Import content to Photoshop

In Photoshop, you can choose to open an image to work with or import content into a document that's open document, and you can then use tools to manipulate the imported content, as shown in the figure.

Export content from Photoshop

Because Photoshop can export paths in a document to Illustrator (in an AI file), your work in Photoshop is easy to manipulate after you open it with Illustrator.

You have another option, though: Export your Photoshop file by using the Zoomify feature. This useful feature can export a large file to a smaller, more compact SWF file. This file can be easily sent by e-mail and opened using the free Flash Player, which almost everyone already has installed.

To use Zoomify, follow these steps:

Click Folder in the Output Location section of the Zoomify dialog box and choose a folder location for your SWF file.

Choose the quality and size and then click OK.

The Zoomify Preview window appears. Use this window to zoom in to see detail.

You can then retrieve the files that were created in your destination folder and post them online or attach them to an e-mail message

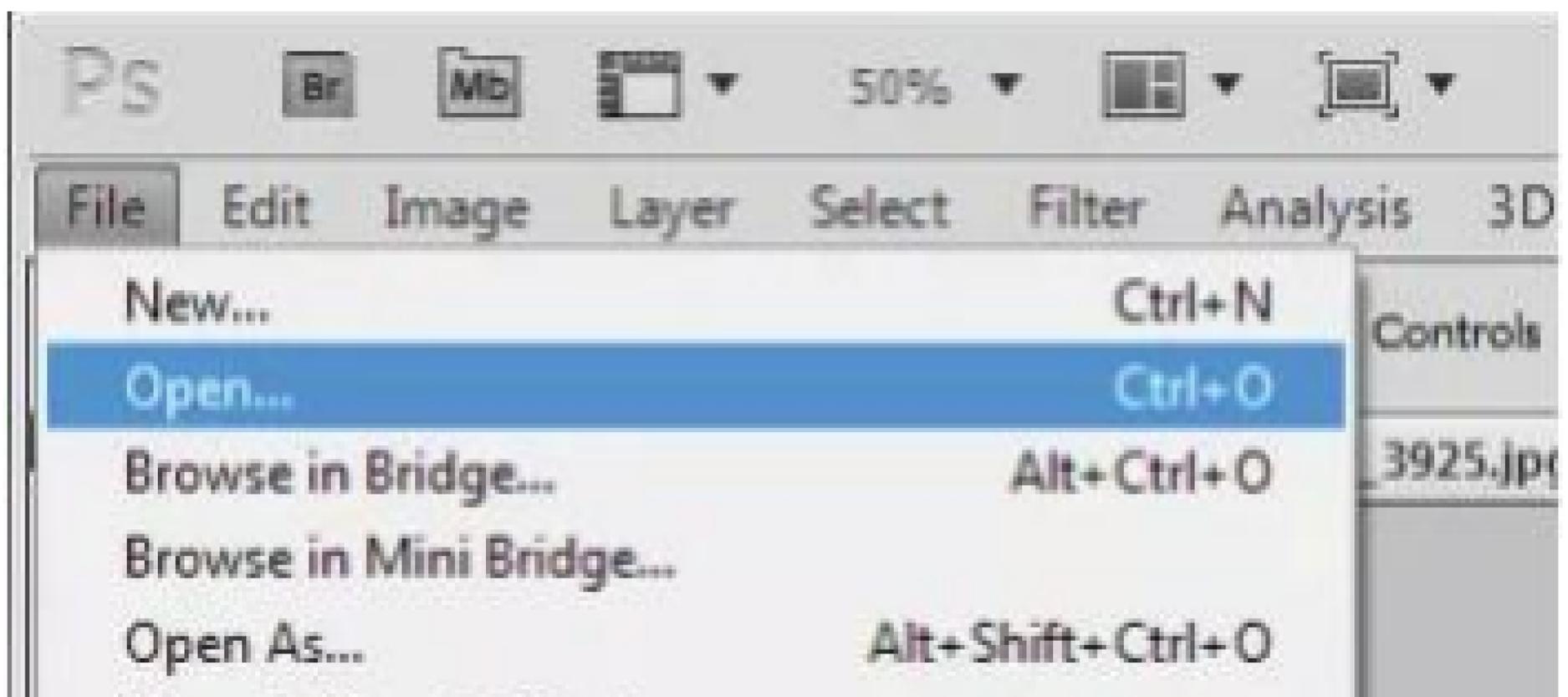
Save files for Web and Print

One of the more critical functions that Photoshop offers is the Save for Web/ Devices feature.

Why use it? While you could just save your file in a standard method, such File / Save As, the Save for Web/Devices feature does crucial three things.

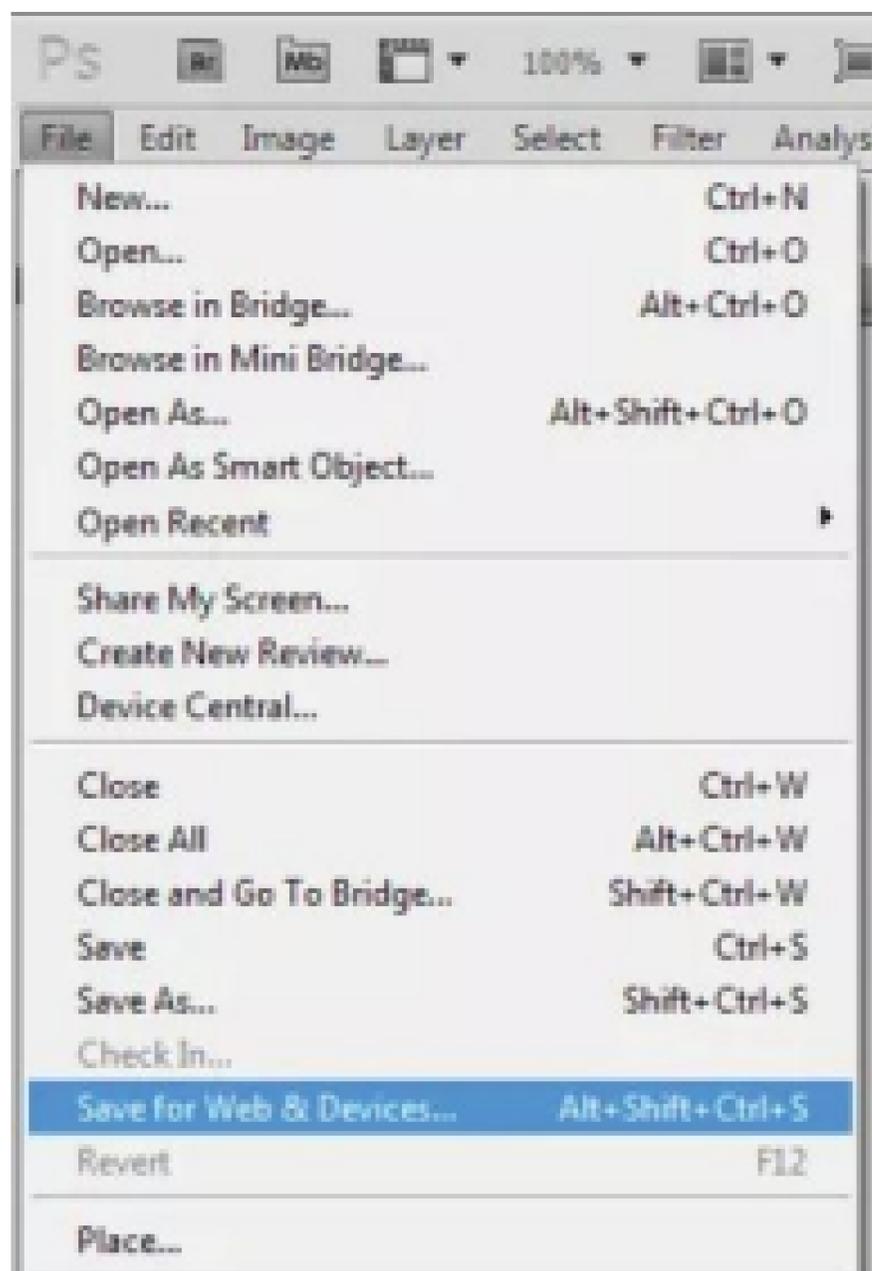
It optimizes the file dimensions (for example: 150 px X 150 px) allowing it to fit into web pages cleaner and look better and less distorted. It optimizes the file size (for example: 23 kb) allowing it to download faster. It saves in the RGB (or monitor) format as opposed to the CMYK (print) format. This tool works great for outputting Twitter icons, Facebook profile pics, product files, blog images and source files for favicons.

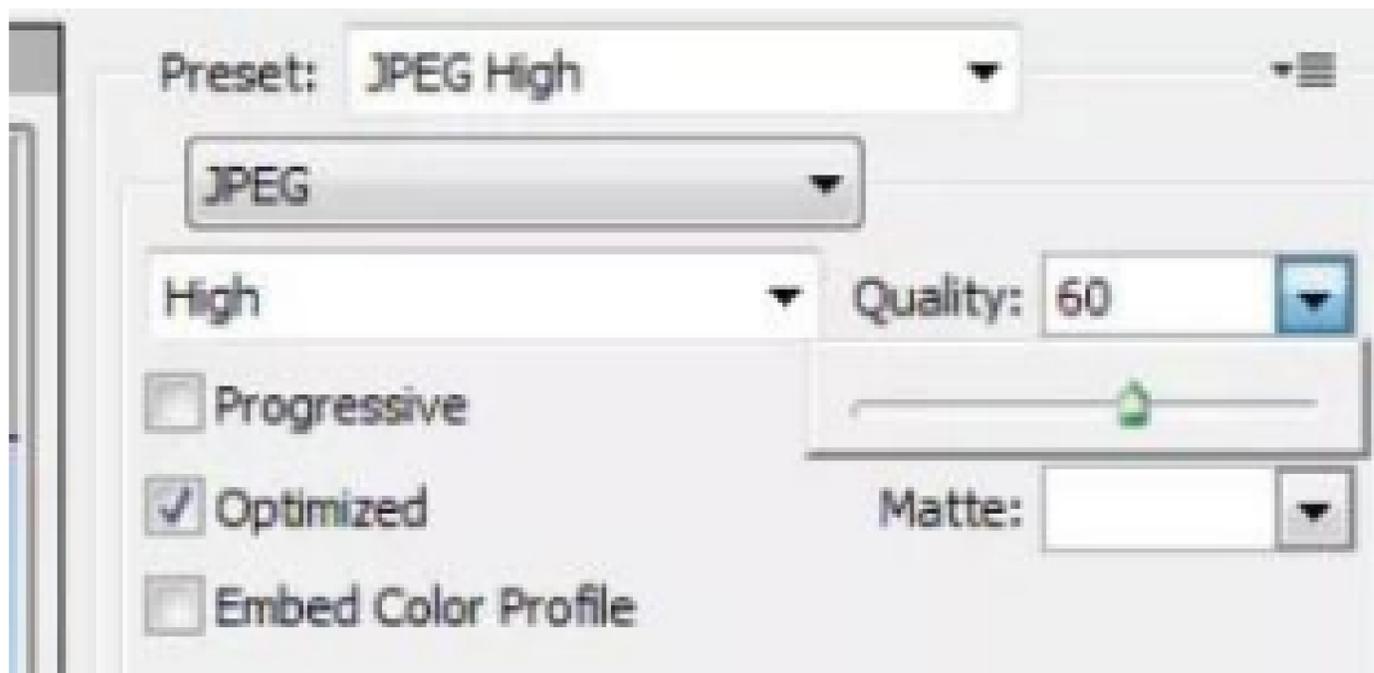
To get started, you'll need to go to File/Open to open your file. It can be in any format jpg, gif, psd, png or others. As long as Photoshop can open it, you can output it for the web as shown



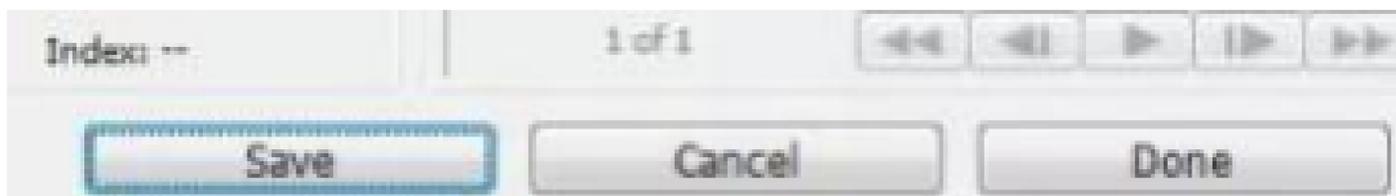
Go to File / Save for Web/Devices and click. It is about halfway down the drop-down menu. This process doesn't change your original file at all. You are creating a new file. Once you complete this tutorial and return to your original image in Photoshop, you'll need to save that file if you've made any changes to it. It's important to name your new image different than your original one. Often simply adding web to the file name will work well.

Each of the three jpg options (High, Medium, Low) , have preset quality settings – which can be manually adjusted. If you are viewing at 100% you can decide what quality you need. To adjust the level of zoom, see Step 5. The image will look the same online as it does in the preview window. If you chose anything other than jpg you can skip this step.





Once you have made the necessary adjustments you are ready to save the file. Click “Save” as can be seen, and choose the folder and file name you want for this new image.



After completing this section, students will be able to: -

- define presets
- describe brushes
- define type faces and font
- learn installation of new brushes and fonts
- learn about usage of presets, brushes, and fonts

Presets

Presets are a collection of edits that are recorded as a batch and can be applied to an image (or multiple images) with just one click.

The Preset Manager lets you save or load your presets for contours and tools. Each set of presets has its own file extension and default folder. Optional preset files are available inside the Presets folder in the Photoshop application folder.

To open the Preset Manager, choose Edit > Presets > Preset Manager. Choose a specific Preset Type from the Preset Type menu.

To delete a preset in the Preset Manager, select the preset and click Delete. Use the Reset command to restore the default presets.

You can adjust the way presets are displayed by clicking the Preset Manager's gear icon and choosing from the display modes listed:

Text Only

Displays the name of each preset item.

Small Thumbnail or Large Thumbnail

Displays a thumbnail of each preset item.

Small List or Large List

Displays the name and thumbnail of each preset item.

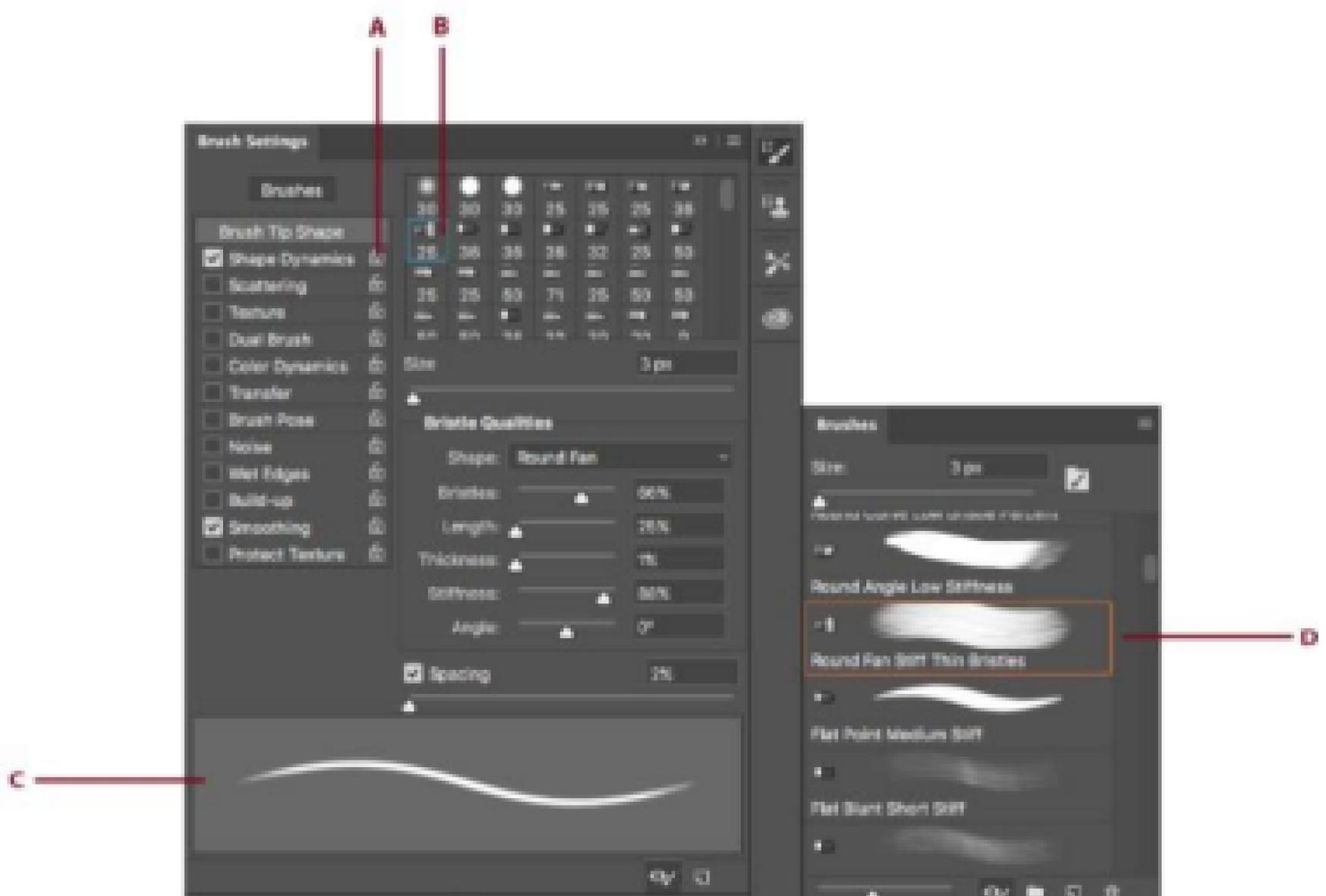


Brushes

To open the Preset Manager, choose Edit > Presets > Preset Manager. Choose a specific Preset Type from the Preset Type menu. To delete a preset in the Preset Manager, select the preset and click Delete. Use the Reset command to restore the default presets. You can adjust the way presets are displayed by clicking the Preset Manager's gear icon and choosing from the display modes listed:

Brush Settings panel overview

The Brush Settings panel lets you modify existing brushes and design new custom brushes. The Brush Settings panel contains the brush tip options that determine how paint is applied to an image. The brush stroke preview at the bottom of the panel shows how paint strokes look with the current brush options



A. Locked/Unlocked B. Selected brush tip C. Brush stroke preview D. Brushes panel Installing brushes and brush packs

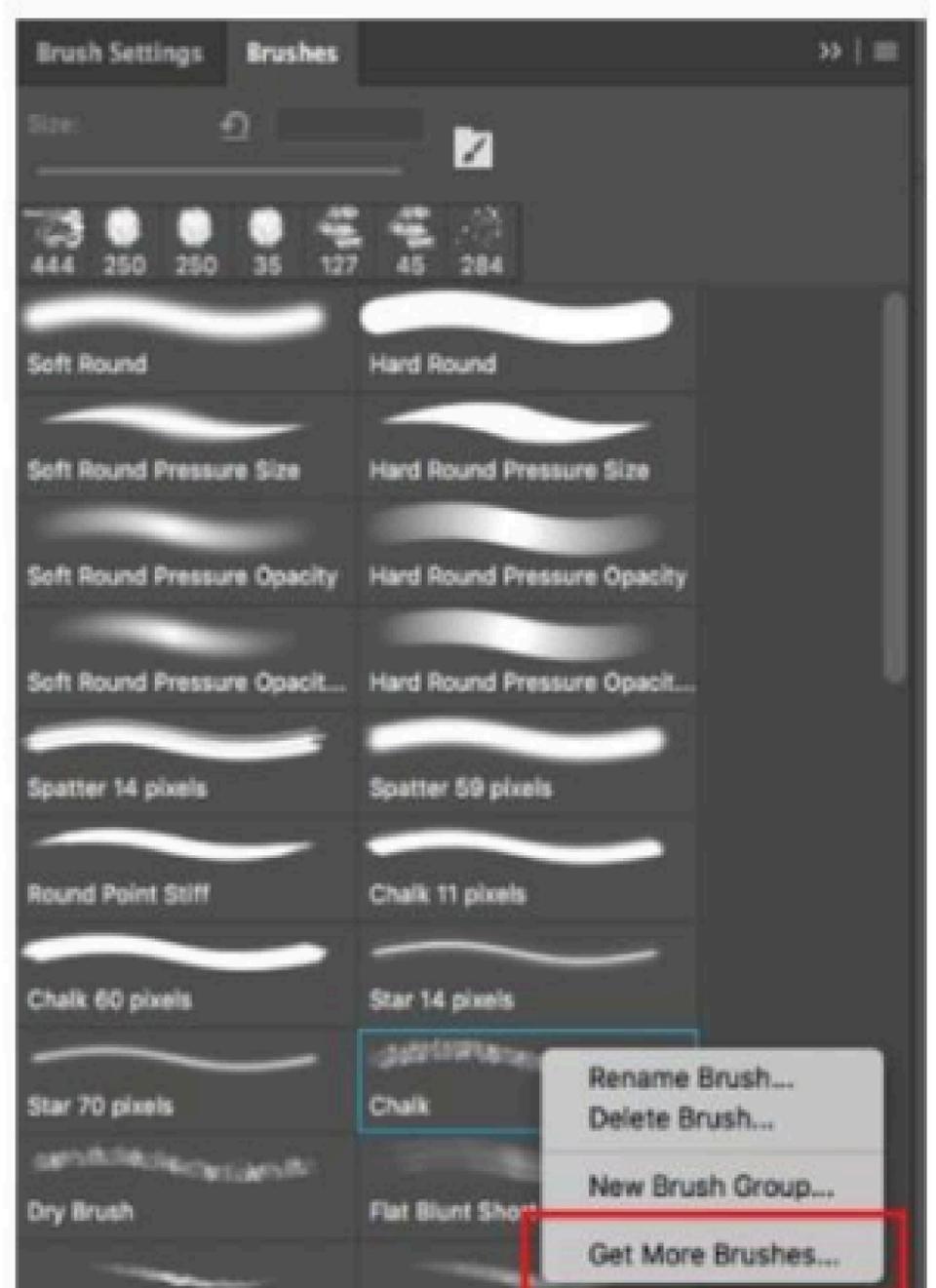
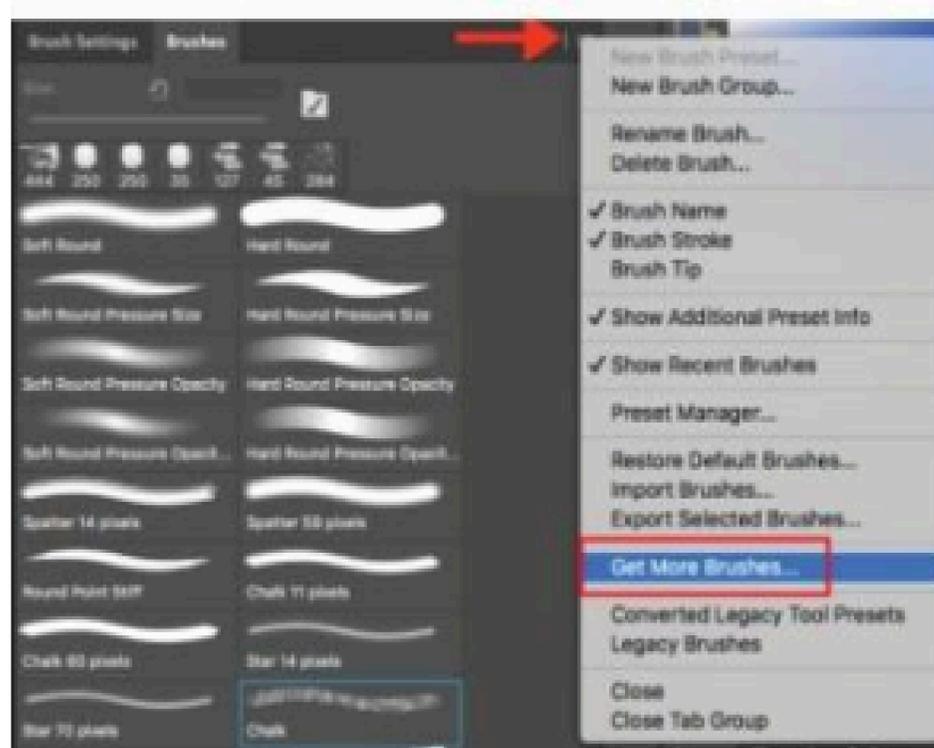
You can import a wide variety of free and purchased brushes—for example, Kyle's Photoshop brush packs into Photoshop.

Follow these steps:

1- In the Brushes panel, from the flyout menu, choose Get More Brushes. Alternatively, rightclick a brush listed in the Brushes panel and select Get More Brushes from the contextual menu.

2- Download a brush pack. For example, download Kyle's "Megapack".

3- With Photoshop running, double-click the downloaded ABRfile
The brushes you added are now displayed in the Brushes panel.



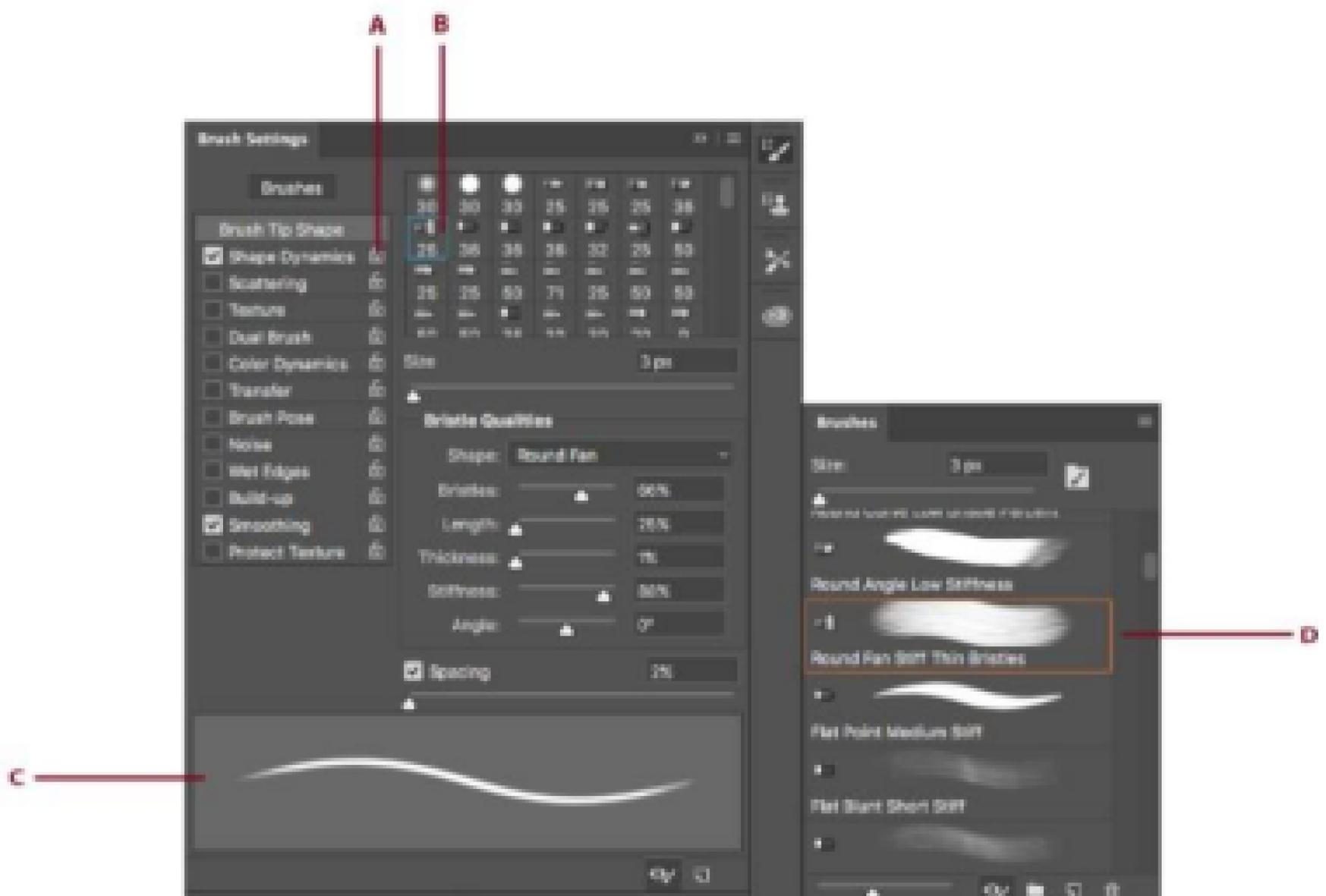
Fonts and Typefaces

Fonts

A font is a complete set of characters—letters, numbers, and symbols—that share a common weight, width,

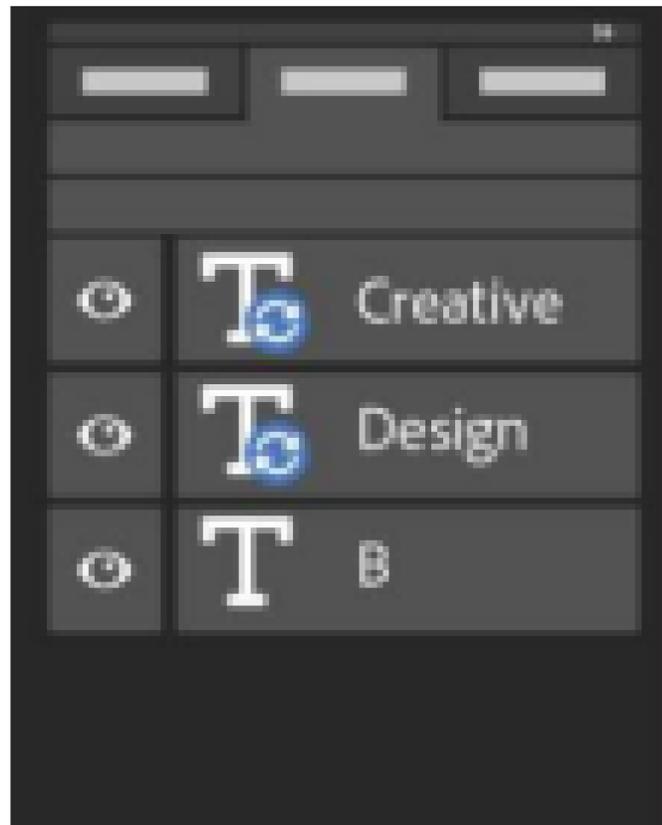
Typeface

Typefaces (often called type families or font families) are collections of fonts that share an overall appearance, and are designed to be used together, such as Adobe Garamond. Typefaces include many characters in addition to the ones you see on your keyboard. Depending on the font, these characters can include ligatures, fractions, and lining figures.



Installing New font

When you open a document that contains fonts that aren't installed on your computer, Photoshop automatically fetches and activates those missing fonts as can be seen in figure 3.28 from Adobe Fonts while you're connected to the internet.



When you open a document containing type layers, you may see a blue sync icon over some of the type layers in the Layers panel indicating an automatic activation of missing fonts from Adobe Fonts. As the download finishes, the sync icon is replaced by the standard type layer icon. You can now use the activated font in your document and also in other applications on your computer.

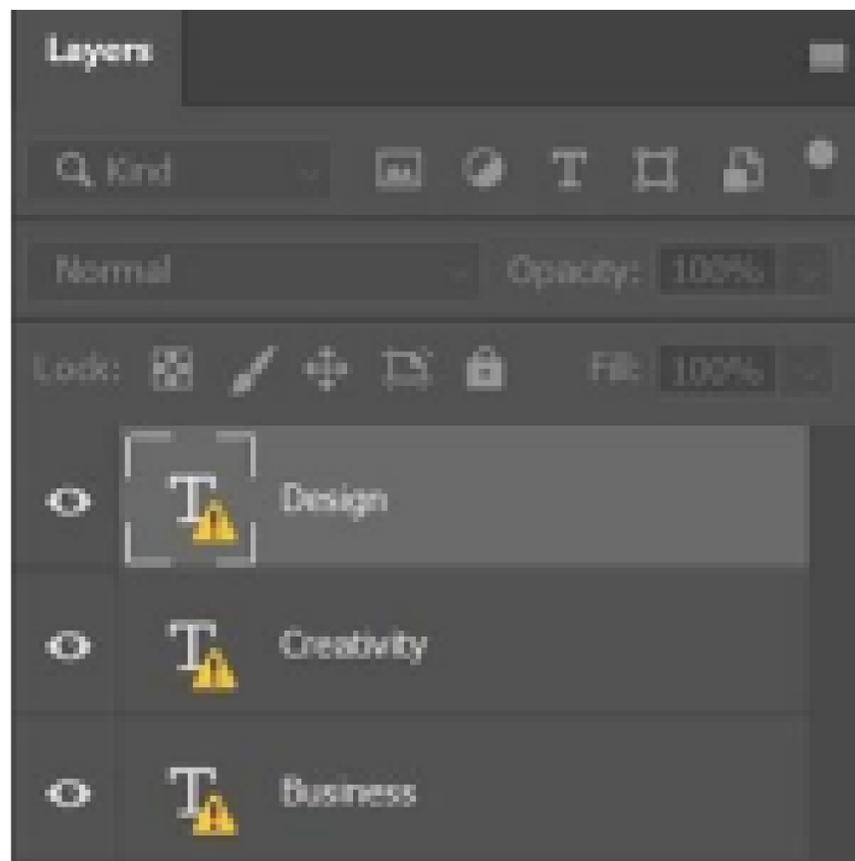
When you try to edit a type layer with a missing font while the font activation is in progress, Photoshop displays a dialog that asks you to replace the missing font with a default font and continue editing. In the dialog, you can choose any of the following:

Replace: Select to replace missing fonts with the default font. For Roman text, the default font is *Myriad Pro Regular*.

Cancel: Select to exit text-editing mode and resume activation of your missing Adobe Fonts.

Manage missing non-Adobe fonts

If you have a missing font as can be seen in figure 3.29 in your document that is not available via Adobe Fonts, Photoshop displays a yellow missing font icon over the type layer the Layers panel.



After completing this section, students will be able to: -

- understand mixer brush
- know about brush setting
- learn about mixing of colors
- describe color mixing with photograph
- explain painting and mixing colors with brush pr e se ts

Mixer Brush

The Mixer Brush simulates realistic painting techniques such as mixing colors on the canvas, combining colors on a brush, and varying paint wetness across a stroke. The Mixer Brush has two paint wells, a reservoir and a pickup. The reservoir stores the final color deposited onto the canvas and has more paint capacity.

The pickup well receives paint only from the canvas; its contents are continuously mixed with canvas colors.

1- Select the Mixer Brush tool. (If necessary, click and hold the standard Brushtool to reveal the Mixer Brush.)

2- To load paint into the reservoir, Alt-click (Windows) or Option-click (Mac OS) the canvas. Or, choose a foreground color.

3- Choose a brush from the Brush Presets panel.

4- In the options bar, set tool options.

Current Brush Load swatch

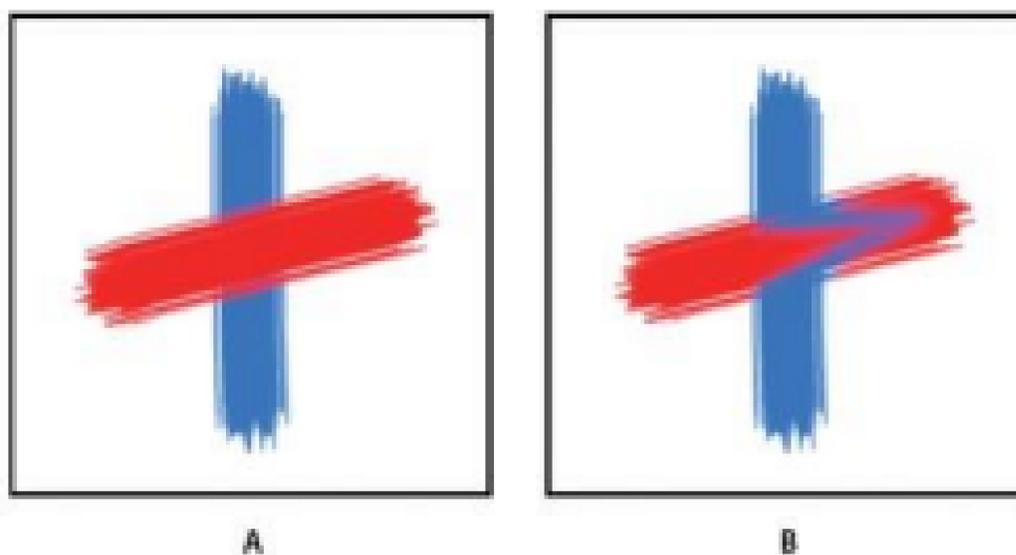
From the pop-up panel, click Load Brush to fill the brush with the reservoir color, or Clean Brush to remove paint from the brush. To perform these tasks after each stroke, select the automatic Load or Clean options.

Preset pop-up menu

Applies popular combinations of Wet, Load, and Mix settings.

Wet

Controls how much paint the brush picks up from the canvas. Higher settings produce longer paint streaks

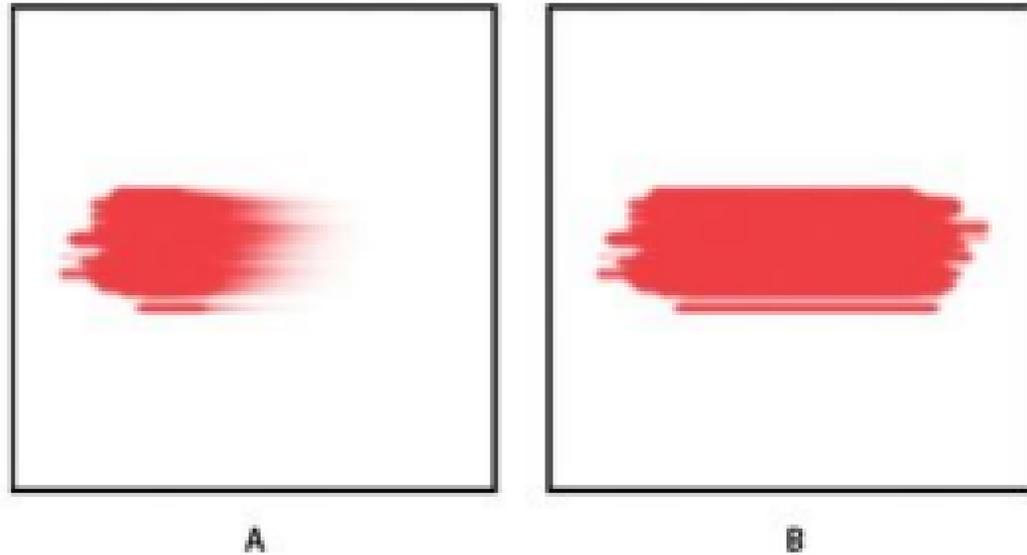


Photoshop Increasing paint wetness Increasing paint wetness

A. 0% B. 100%

Load

Specifies the amount of paint loaded in the reservoir. At low load rates, paint strokes dry out more quickly as can be seen



A. 1% B. 100%

Mix

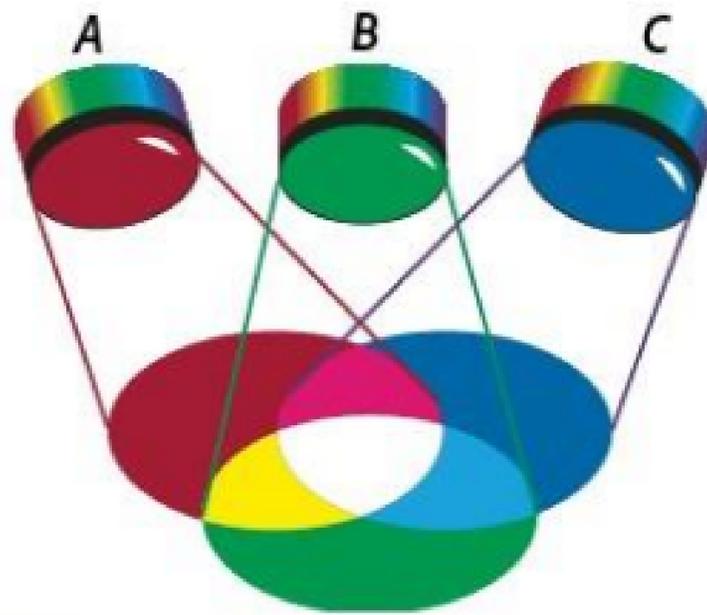
Controls the ratio of canvas paint to reservoir paint. At 100%, all paint is picked up from the canvas; at 0%, all paint comes from the reservoir. (The Wet setting, however, continues to determine how paints mix on the canvas.)

Sample All Layers

Picks up canvas color from all visible layers.

Colors Primary colors

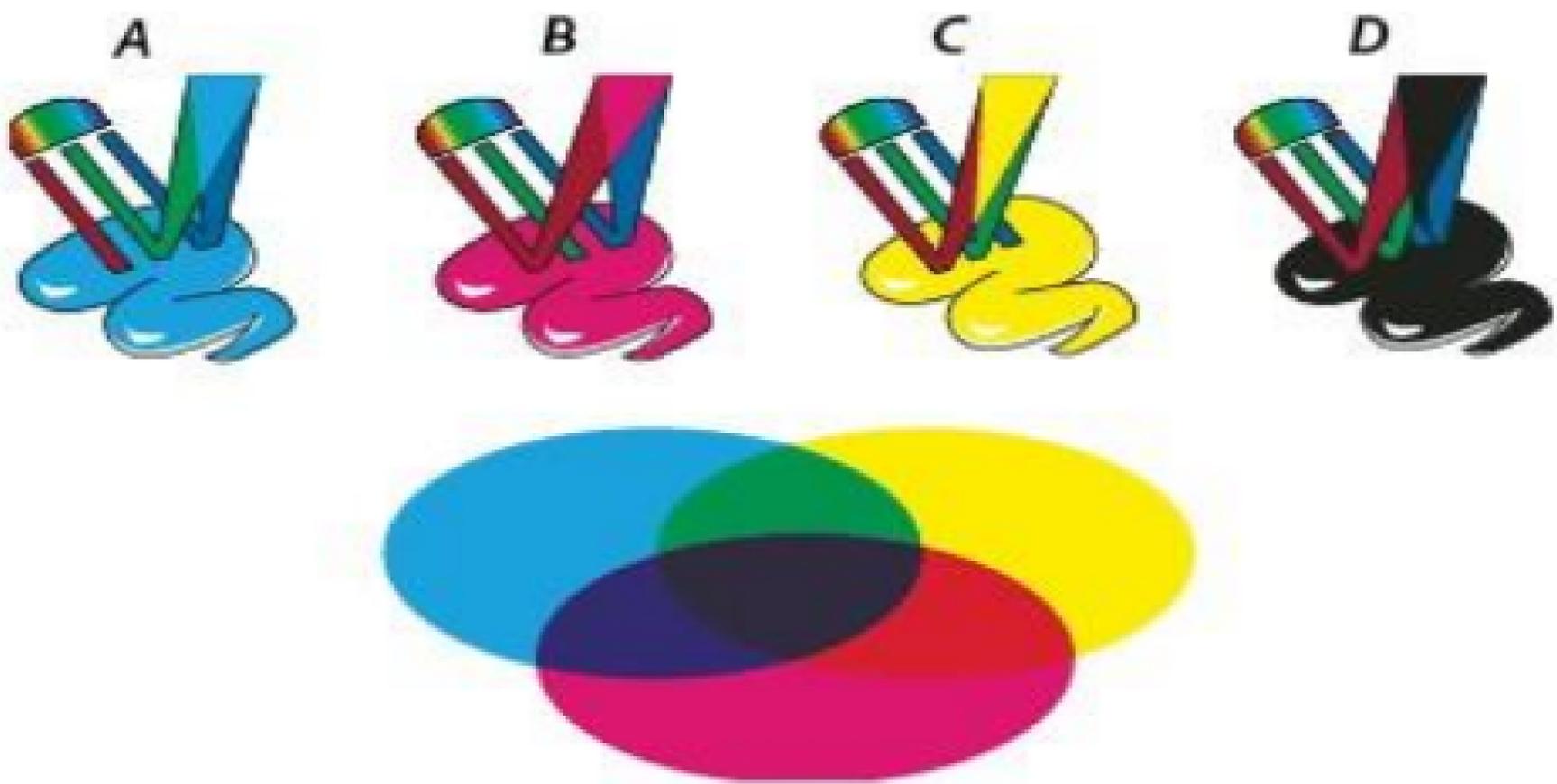
Additive primaries are the three colors of light (red, green, and blue) that produce all the colors in the visible spectrum when added together in different combinations. Adding equal parts of red, blue, and green light produces white. The complete absence of red, blue, and green light results in black. Computer monitors are devices that use the additive primaries to create color



Additive colors (RGB)

A. Red B. Green C. Blue

Subtractive primaries are pigments, which create a spectrum of colors in different combinations. Unlike monitors, printers use subtractive primaries (cyan, magenta, yellow, and black pigments) to produce colors through subtractive mixing. The term “subtractive” is used because the primary colors are pure until you begin mixing them together, resulting in colors that are less pure versions of the primaries. For example, orange is created through the subtractive mixing of magenta and yellow together. Refer to the image below.

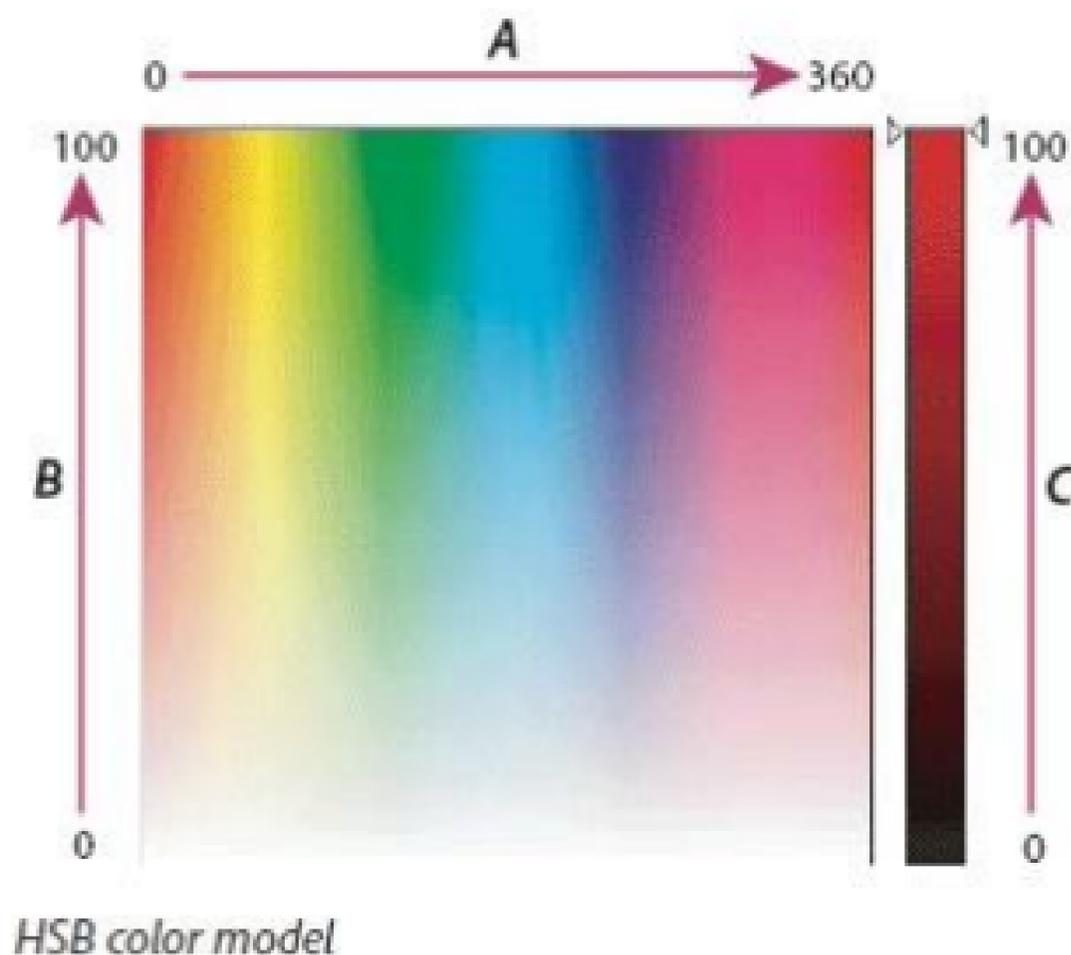


Subtractive colors (CMYK)

A. Cyan B. Magenta C. Yellow D. Black

Color Mixer

If you're new to adjusting color components, it helps to keep a standard color wheel diagram on hand when you work on color balance. You can use the color wheel to predict how a change in one color component affects other colors and also how changes translate between RGB and CMYK color models as can be seen



HSB color model
A. Hue B. Saturation C. Brightness

After completing this section, students will be able to: -

- Describe camera raw
- Understand advance color correction
- Learn techniques of using camera raw

Camera Raw

Adobe Camera Raw, which lets you import and enhance raw images, has been a must-have tool for professional photographers right since it was first released in 2003.

Applications that support Adobe Camera Raw include Photoshop, Photoshop Elements, After Effects, and Bridge. Additionally, Adobe Lightroom is built upon the same powerful raw image processing technology that powers Adobe CameraRaw.

Advance Color Correction

Histogram and RGB levels:

A histogram is a representation of the number of pixels at each luminance value in an image. A histogram that has non-zero values for each luminance value indicates an image that takes advantage of the full tonal scale. One that doesn't use the full tonal range corresponds to a dull image that lacks contrast. A histogram with a spike at the left side indicates shadow clipping; a histogram with a spike on the right side indicates highlight clipping. Refer to the figure below:



One common task for adjusting an image is to spread out the pixel values more evenly from left to right on the histogram, instead of having them bunched up at one end or the other. A histogram is made up of three ribbons of color that represent the red, green, and blue color channels. White appears when all three channels overlap. Yellow, magenta, and cyan appear when two of the RGB channels overlap (yellow equals the red + green channels, magenta equals the red + blue channels, and cyan equals the green + blue channels).

The histogram changes automatically as you adjust the settings in the Camera Raw dialog box. The RGB values of the pixel under the pointer (in the preview image) appear below the histogram.

Preview highlight and shadow clipping

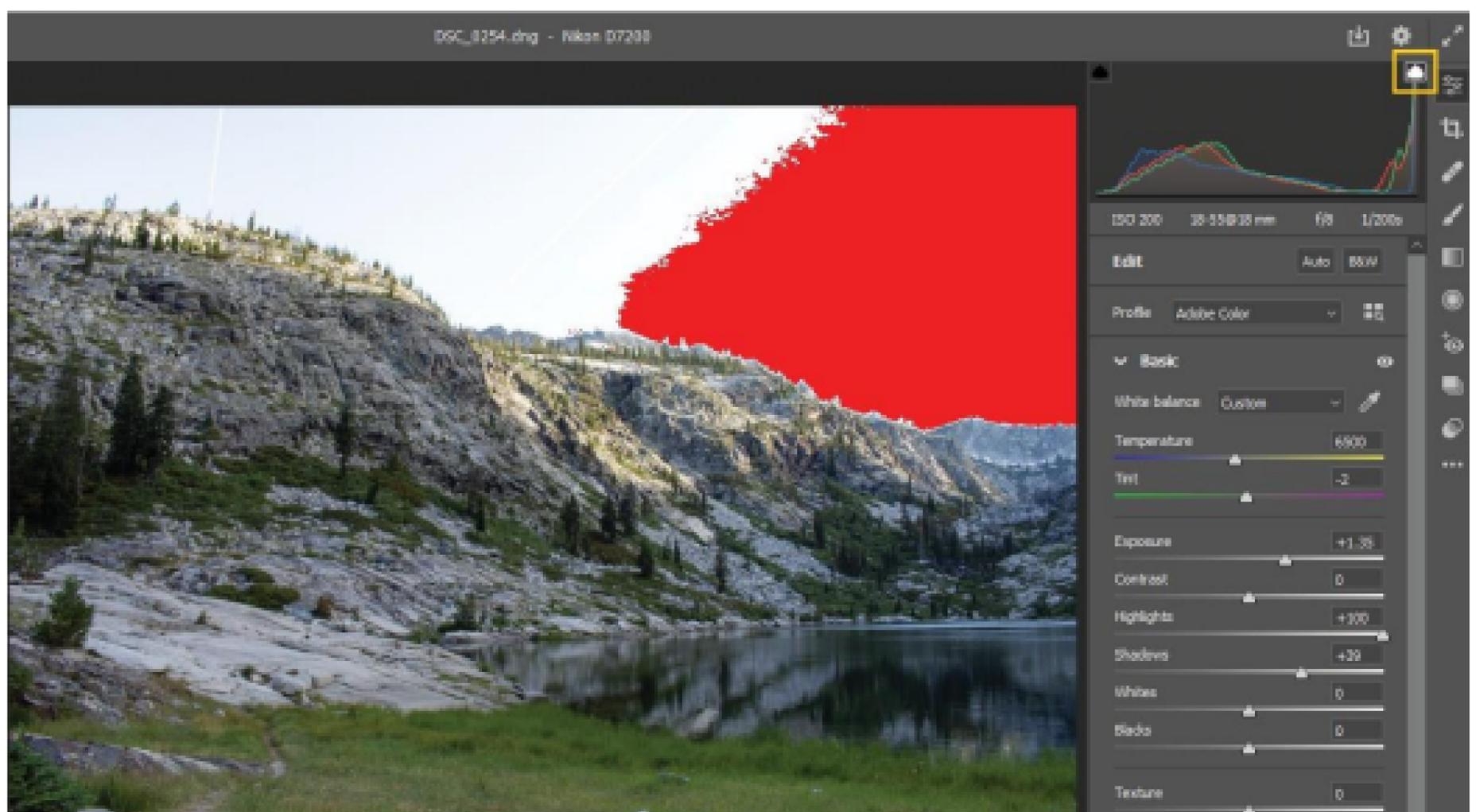
Clipping occurs when the color values of a pixel are higher than the highest value or lower than the lowest value that can be represented in the image. Overly bright values are clipped to output white, and overly dark values are clipped to output black. The result is a loss of image detail.

You can view Highlight and Shadow clipping indicators in the upper corners of the histogram. This is to check areas in your photo that are either too light or dark, as you make edits.

1- If the upper-left clipping indicator is illuminated (the clipping indicator is white), it implies that shadows are clipped in your photo. Click the illuminated indicator to view the shadows in your photo. The shadows are displayed as a blue overlay mask

2- If the upper-right clipping indicator is illuminated (the clipping indicator is white), it implies that highlights are clipped in your photo. Click the illuminated indicator to view the highlights in your photo. The highlights are displayed as a red overlay mask.

Refer to the figure below:



Tone a grayscale or B&W image

Use the controls in the Color Grading panel to color a grayscale image.

You can add one color throughout the tonal range or create a split tone result, in which a different color is applied to the shadows, midtones, and highlights. The extreme shadows and highlights remain black and white reference

You can also apply special treatments, such as a cross-processed look, to a color image. 1- Select a grayscale or B&W image.

2- Click Edit in the right panel and open the Color Grading drop-down. Use the color wheels for Shadows, Midtones, and Highlights to adjust the colors in your image.

Adjust color or tone using the Targeted Adjustment tool

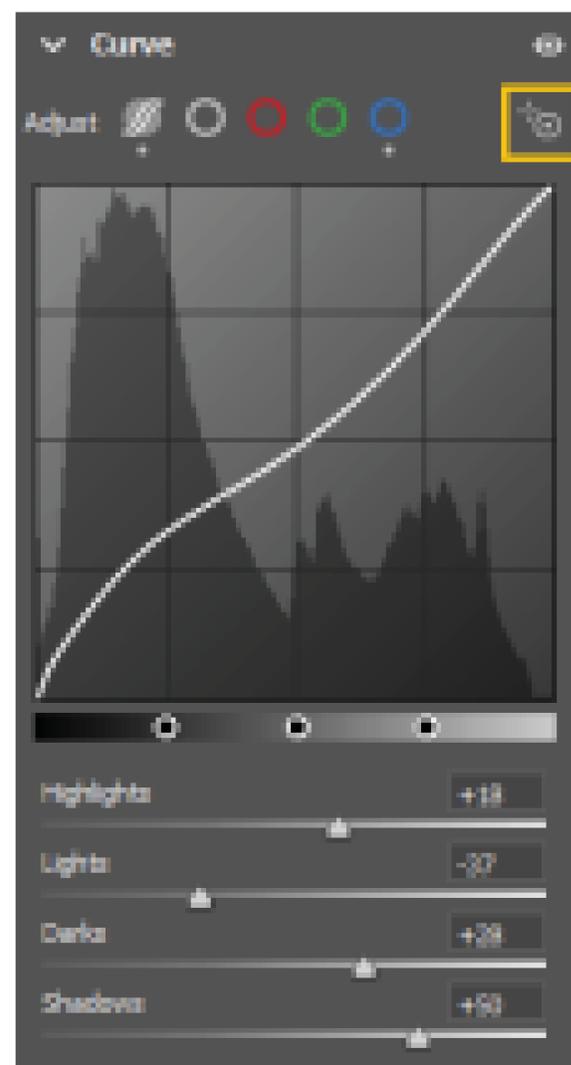
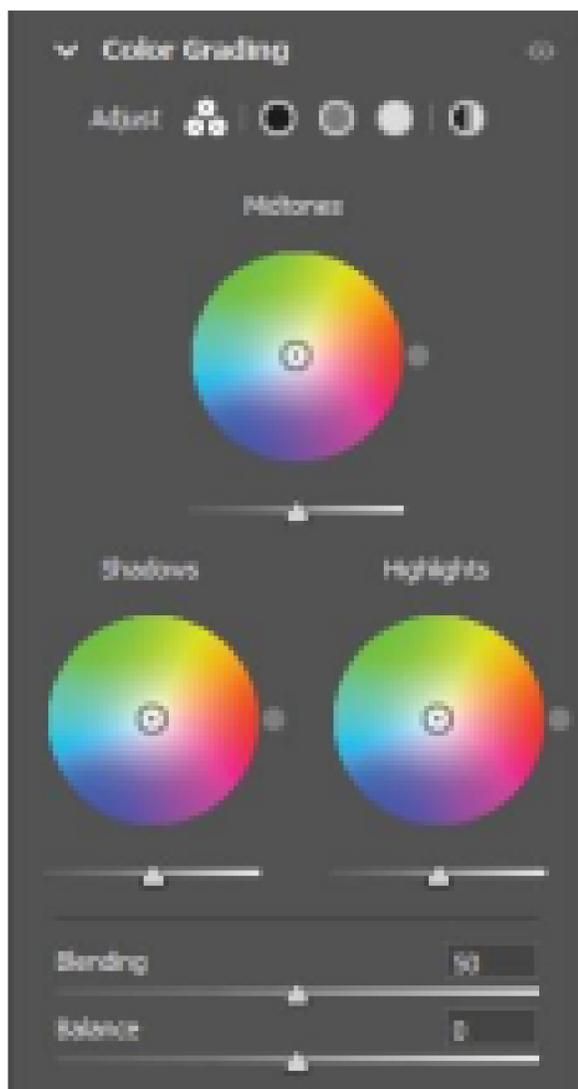
The Targeted Adjustment tool allows you to make tonal and color corrections by dragging directly on a photo. Using the Targeted Adjustment tool, you can drag down on a blue sky to desaturate it, for example, or drag up on a red jacket to intensify its hue as can be seen

1- Open the Curve panel under Edit and select the Targeted Adjustment tool.

In the preview image, dragging the tool up or right increases values; dragging down or left decreases values. Sliders for more than one color may be affected when you drag with the Targeted Adjustment tool.

2- To make tone curve adjustments using the Targeted Adjustment tool, choose Parametric Curve. Then, drag the tool in the preview image.

The Parametric Curve Targeted Adjustment tool adjusts the Highlights, Lights, Darks, or Shadows curve region based on the values in the image where you click.



Work with Camera Raw

Camera Raw and Lightroom share the same image-processing technology to ensure consistent and compatible results across applications. For Camera Raw to view image adjustments made in the Develop module of Lightroom, metadata changes must be saved to XMP in Lightroom.

Adjustments made in Camera Raw are also displayed in the Adobe Bridge Content and Preview panels.

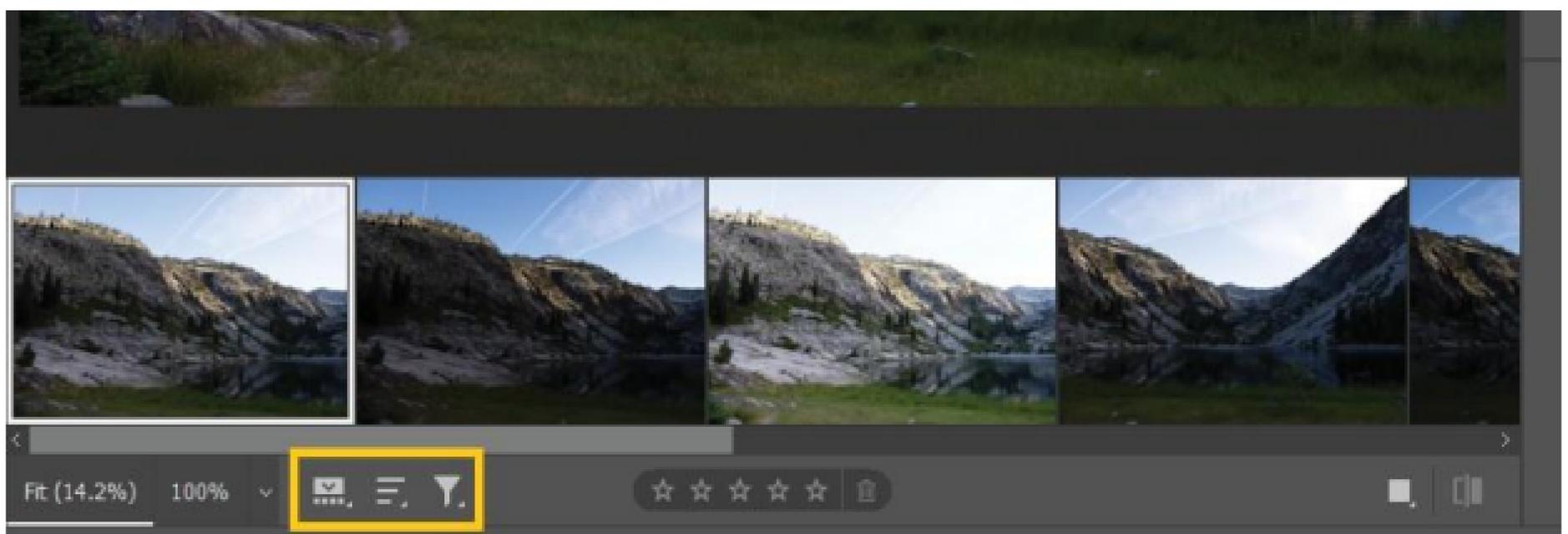
1- In Adobe Bridge, choose Edit > Camera Raw Preferences (Windows) or Bridge > Camera Raw Preferences (Mac OS). Or, with the Camera Raw dialog box open, click the Open Preferences Dialog button.

2- Choose Save Image Settings In > Sidecar “.XMP” Files, and deselect Ignore Sidecar “.XMP” Files. 3- After applying adjustments to a photo in Camera Raw, save them by clicking Done or Open Image.

Filmstrip

The images that you open in Camera Raw are displayed in the filmstrip, positioned below the preview. You can choose to hide the filmstrip, sort images based on Capture Date, File Name, Star Rating, and Color Label, and also filter photos using the Filter icon

You can also move the filmstrip to the left panel, which is especially useful when working with portraits. To do this, Control-click (macOS)/Right-click (Windows) the filmstrip and select Filmstrip Orientation > Vertical. Refer to the figure below:

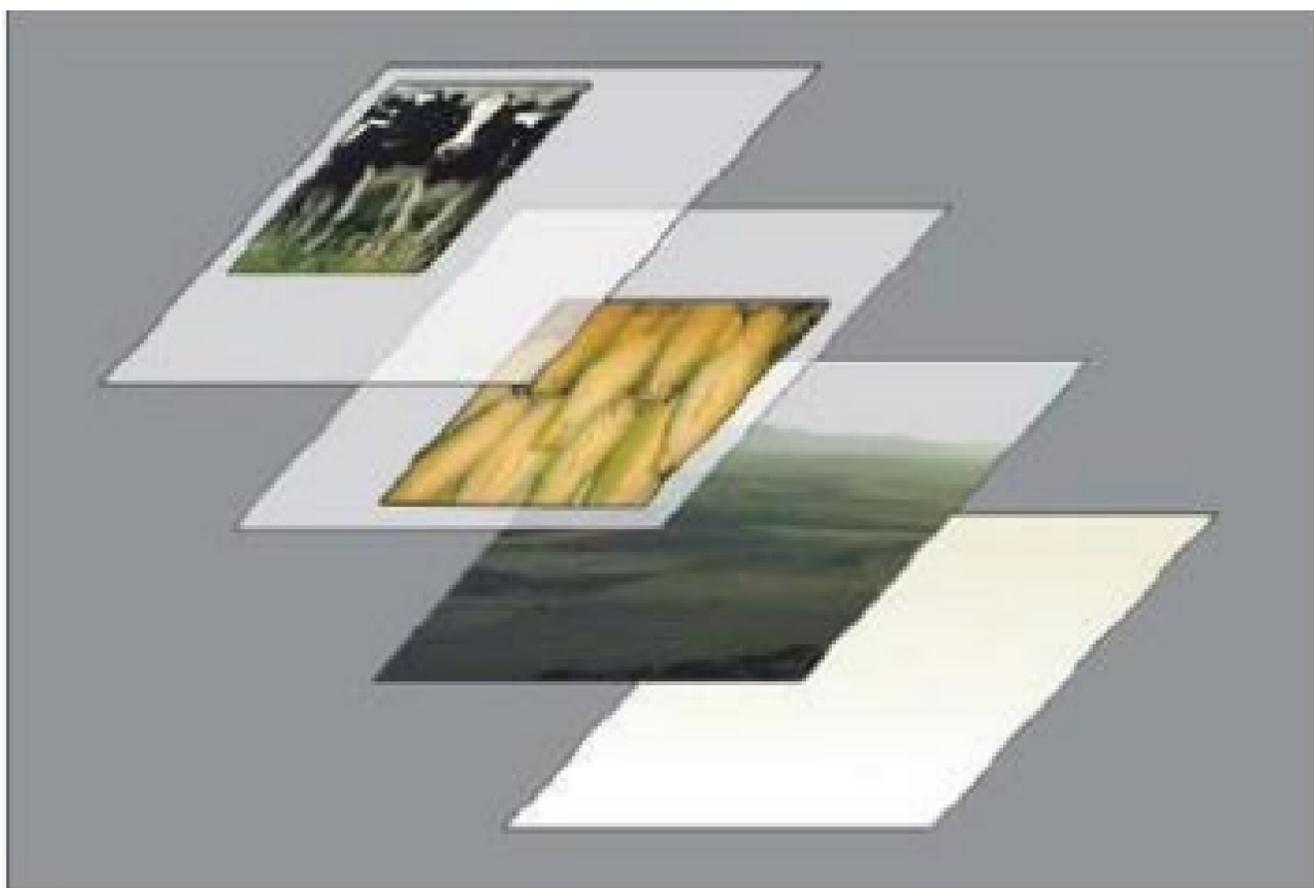


After completing this section, students will be able to: –

- define layers
- understand layer panel
- know about arrangement of layers
- learn about grouping of layers
- understand layer style
- comprehend updating the layer style
- understand about the adjustment layer
- understand smart objects

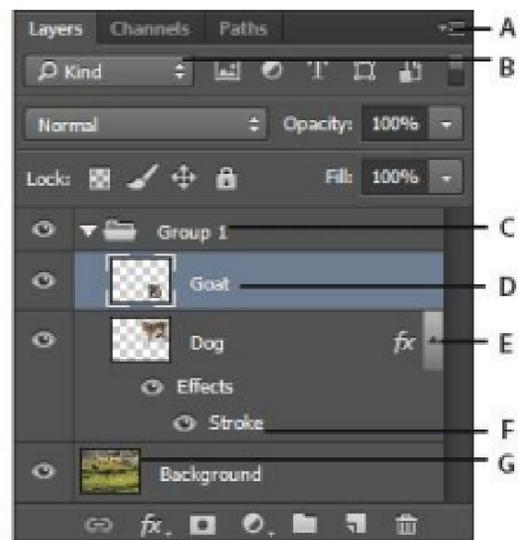
Layers

Photoshop layers are like sheets of stacked acetate. You can see through transparent areas of a layer to the layers below. You move a layer to position the content on the layer, like sliding a sheet of acetate in a stack. You can also change the opacity of a layer to make content partially transparent.



Photoshop Layers panel overview

The Layers panel in Photoshop lists all layers, layer groups, and layer effects in an image. You can use the Layers panel to show and hide layers, create new layers, and work with groups of layers. You can access additional commands and options in the Layers panel menu.



A. Layers panel menu B. Filter C. Layer Group D. Layer E.

Expand/Collapse Layer effects F. Layer effect G. Layer thumbnail

Display the Photoshop Layers panel

1- Choose Window > Layers. Choose a command from the Photoshop Layers panel menu

2- Click the triangle in the upper-right corner of the panel.

Change the size of Photoshop layer thumbnails

3- Choose Panel Options from the Layers panel menu, and select a thumbnail size. Change thumbnail contents

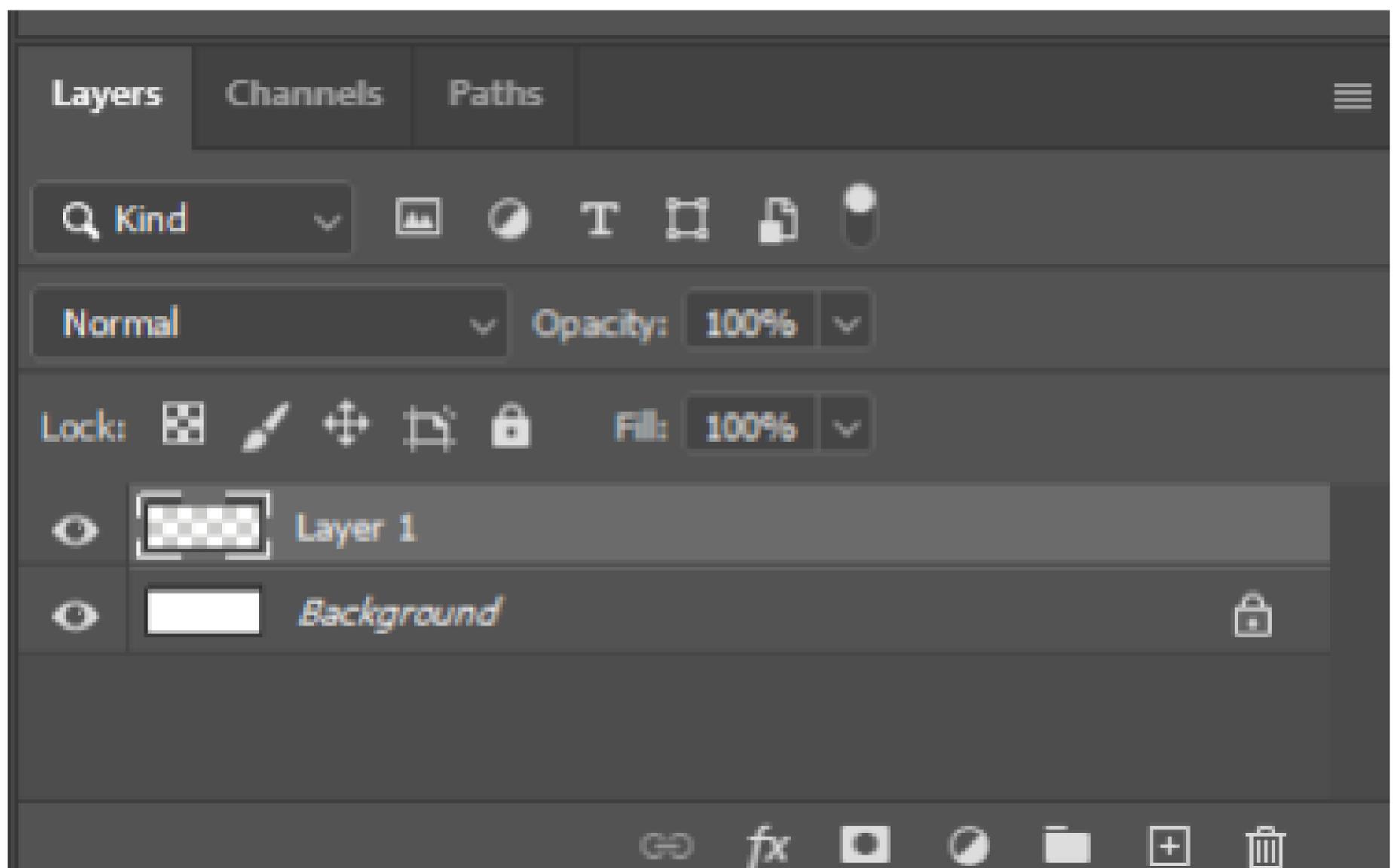
4- Choose Panel Options from the Layers panel menu, and select Entire Document to display the contents of the entire document.

Select Layer Bounds to restrict the thumbnail to the object's pixels on the layer.

Organizing Photoshop layers

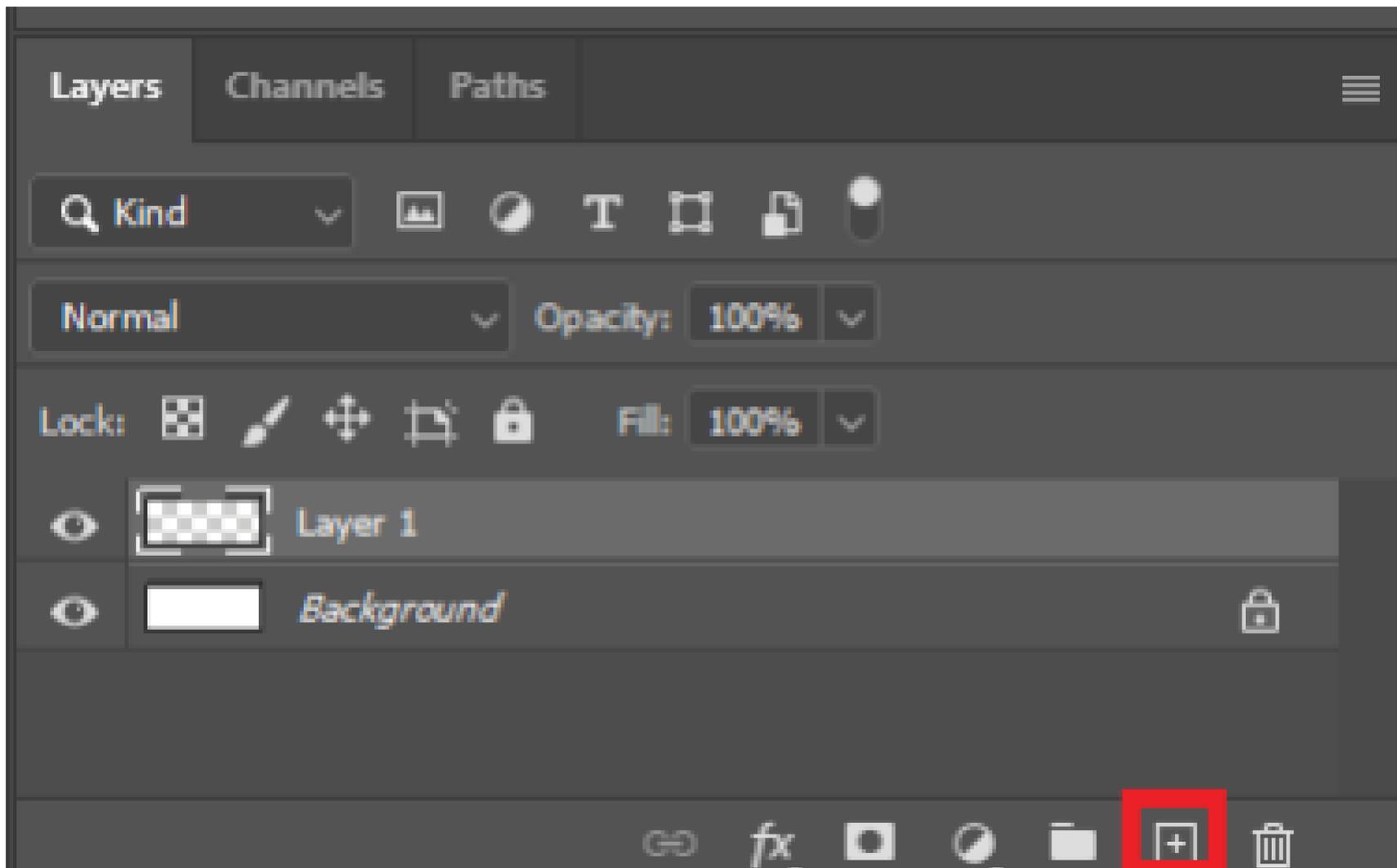
A new image has a single layer. The number of additional layers, layer effects, and layer sets you can add to an image is limited only by your computer's memory. You work with layers in the Layers panel. Layer groups help you organize and manage layers. You can use groups to arrange your layers in a logical order and to reduce clutter in the Layers panel.

You can nest groups within other groups. You can also use groups to apply attributes and masks to multiple layers simultaneously. Refer to the figure below:



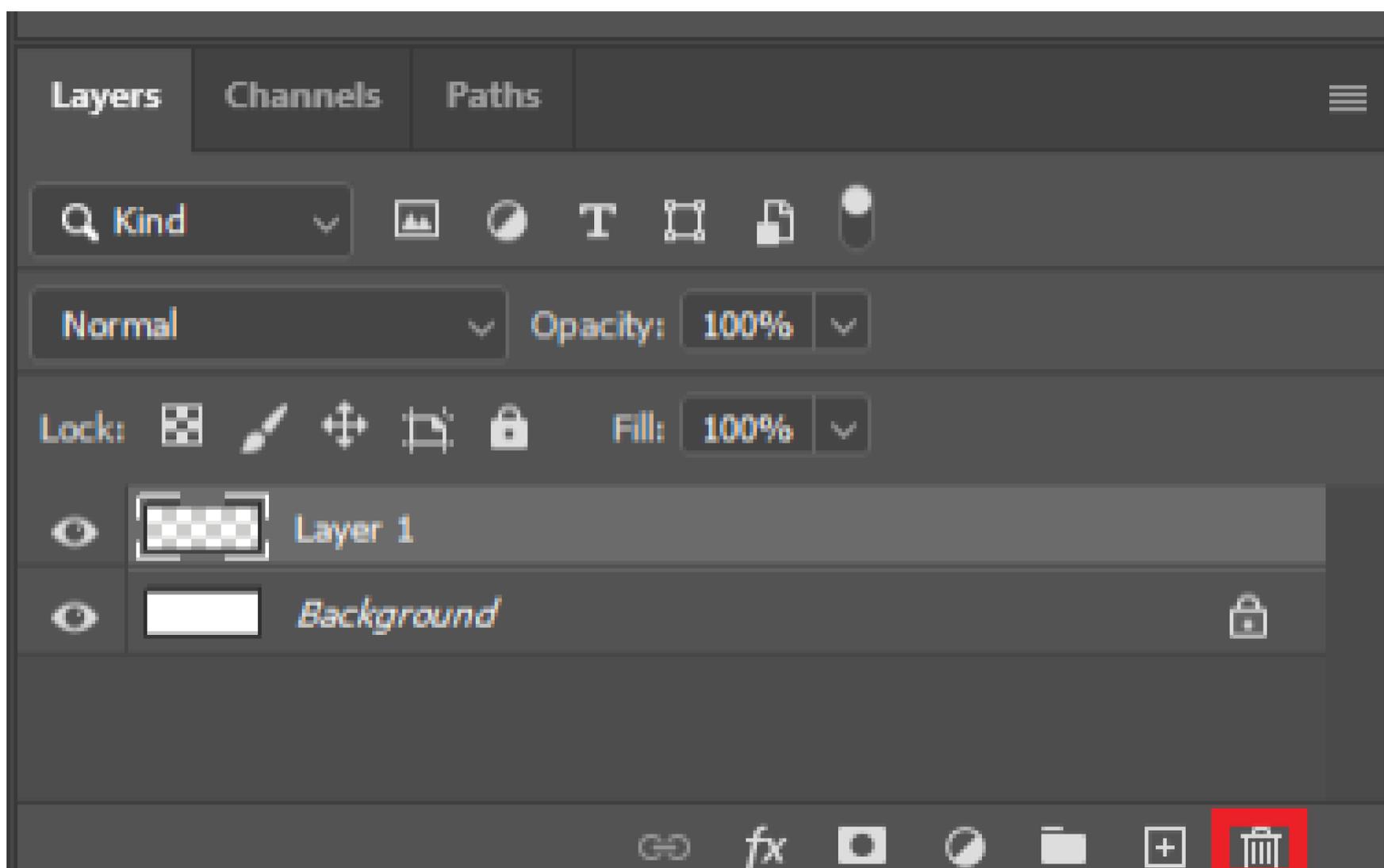
Layer Panel overview

You can add new layer by clicking on the 2nd last icon from bottom right



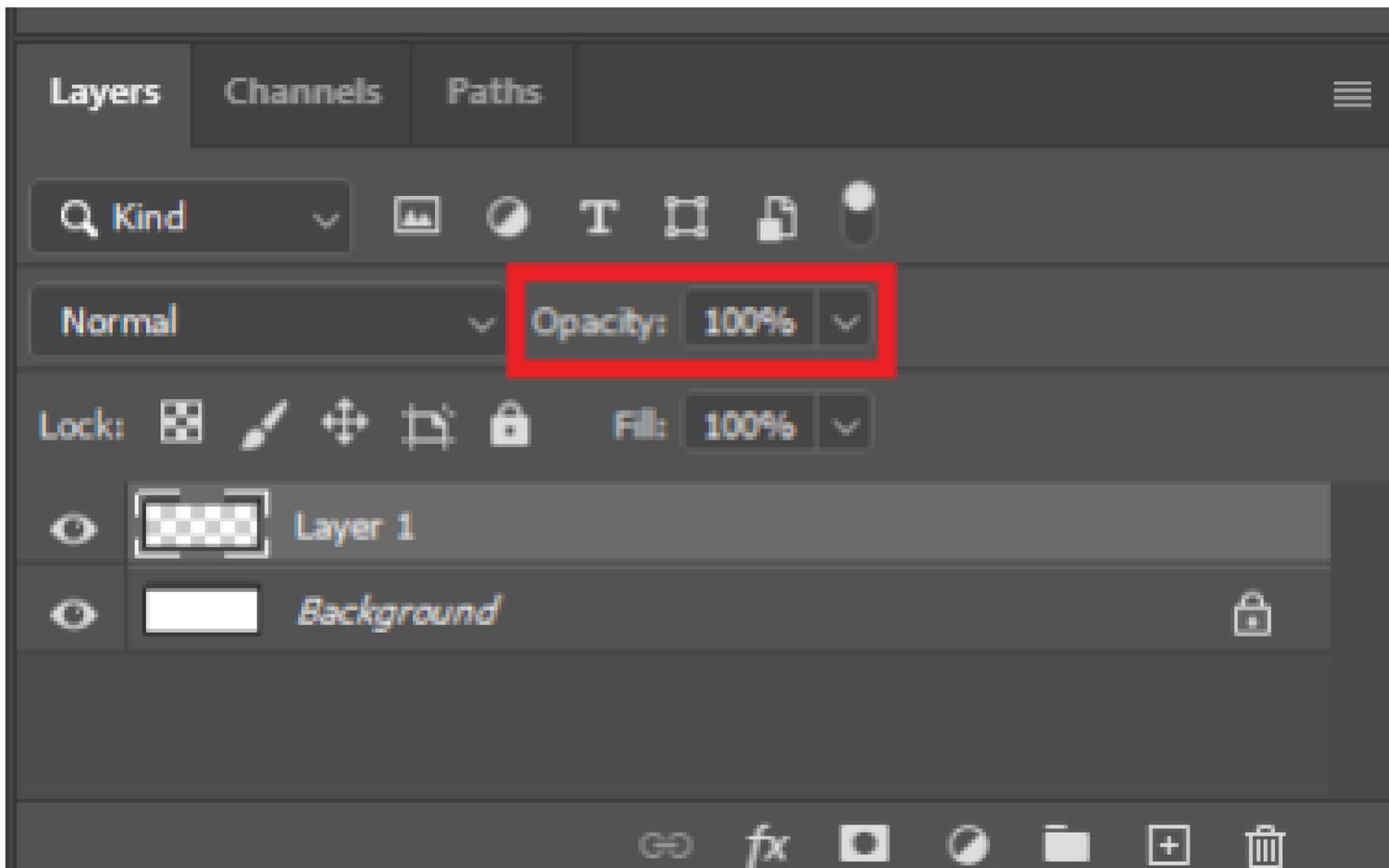
Layer Panel add

You can delete a layer by clicking on the last icon at bottom right



Layer Panel delete

You can change the transparency of a layer by opacity option



Layer Panel transparency

Layers for non-destructive editing

Sometimes layers don't contain any apparent content. For example, an adjustment layer holds color or tonal adjustments that affect the layers below it. Rather than edit image pixels directly, you can edit an adjustment layer and leave the underlying pixels unchanged.

A special type of layer, called a Smart Object, contains one or more layers of content. You can transform (scale, skew, or reshape) a Smart Object without directly editing image pixels. Or, you can edit the Smart Object as a separate image even after placing it in a Photoshop image. Smart Objects can also contain smart filter effects, which allow you to apply filters non-destructively to images so that you can later tweak or remove the filter effect.