

Unit 6: Photoshop

6.1

Introduction

Adobe Photoshop is a powerful and widely-used raster graphics editing software developed by Adobe Inc. It is an essential tool for graphic designers, photographers, and creative professionals, enabling them to manipulate and enhance digital images.

Purpose:

Photoshop is primarily used for photo editing, retouching, and manipulation.

It's also employed for creating graphics, illustrations, web designs, and other visual elements.

Interface:

Photoshop has a user-friendly interface with various panels, tools, and menus.

The workspace includes the main canvas where you work on images, and numerous tools for different tasks.

Zooming:

1. Zoom Tool:

Select the Zoom tool from the toolbar. It looks like a magnifying glass.

You can also press the 'Z' key to activate the Zoom tool.

2. Zoom In:

To zoom in, click on the area you want to magnify.

Alternatively, you can press 'Ctrl' (Windows) or 'Cmd' (Mac) and click.

3. Zoom Out:

To zoom out, press 'Alt' (Windows) or 'Option' (Mac) and click.

Alternatively, use the Zoom Out tool in the toolbar.

4. Keyboard Shortcuts:

Use the keyboard shortcuts 'Ctrl + +' (Windows) or 'Cmd + +' (Mac) to zoom in.

Use 'Ctrl + -' (Windows) or 'Cmd + -' (Mac) to zoom out.

5. Fit to Screen:

Press 'Ctrl + 0' (Windows) or 'Cmd + 0' (Mac) to fit the entire image to the screen.

Panning:

Panning is especially useful when you're zoomed in on an image, and you want to navigate to different parts of it without changing the zoom level. It allows for precise navigation and editing in detailed areas of your project.

1. Hand Tool:

Select the Hand tool from the toolbar.

You can also press the 'H' key to activate the Hand tool.

2. Pan the Image:

Click and drag with the Hand tool to move around the image.

3. Spacebar Shortcut:

While using any other tool, hold down the Spacebar to temporarily switch to the Hand tool for quick panning. Release the Spacebar to return to the previous tool.

Screen Modes:

1. Standard Screen Mode:

The default screen mode in Photoshop, where you have the image surrounded by panels and menus.

Press 'F' to toggle through different screen modes, including the standard mode.

2. Full Screen Mode with Menu Bar:

Hides panels and tools, giving you a larger view of the image, but keeps the menu bar visible.

Press 'F' again to toggle to this mode.

3. Full Screen Mode:

Hides all panels, tools, and the menu bar, providing the maximum view of your image.

Press 'F' once more to enter this mode.

4. Full Screen Mode with Tabs:

Similar to Full Screen Mode, but with the tab bar visible. This is useful when working with multiple open documents.

Press 'F' again to cycle through the screen modes.

5. Presentation Mode:

This mode is designed for presenting your work. It hides all panels, tools, and menus, leaving only the image visible on a neutral gray background.

Access Presentation Mode by pressing 'Shift + F'.

Switching and saving workspace

Switching Workspaces:

1. Access Workspaces:

Go to the "Window" menu at the top of the screen.

2. Choose Workspace:

Hover over the "Workspace" option.

A submenu will appear with various predefined workspaces (like Essentials, Photography, Painting, etc.).

3. Select a Workspace:

Choose the workspace that best suits your current task or preference.

Photoshop will rearrange panels and tools according to the selected workspace.

Save a Custom Workspace:

1. Adjust Your Workspace:

Arrange panels, tools, and menus to your liking.

2. Window > Workspace > New Workspace:

Go to the "Window" menu.

Choose "Workspace," then select "New Workspace."

3. Enter a Name:

In the dialog box that appears, enter a name for your custom workspace.

4. Choose Options:

Decide whether to include menu and keyboard shortcuts, as well as the current tool and color settings.

Click "Save."

Reset to a Default Workspace:

1. Window > Workspace > Reset [Workspace Name]:

If you want to return to the default arrangement, go to the "Window" menu.

Choose "Workspace," and then select "Reset [Workspace Name]."

Customizing the toolbar

Rearrange or Remove or Add Tools:

1. Access Toolbar Options:

Right-click (or Control-click on Mac) on the toolbar at the left side of the screen.

2. Choose "Edit Toolbar":

From the context menu, select "Edit Toolbar."

3. Customize the Toolbar:

In the "Edit Toolbar" dialog box, you'll see a list of available tools on the left and the current toolbar configuration on the right.

4. Rearrange Tools:

To rearrange tools, select a tool from the right side, and use the arrow buttons in the center to move it up or down in the list.

5. Add Tools:

On the left side of the "Edit Toolbar" dialog box, you'll see a list of available tools.

Select a tool you want to add and use the arrow buttons in the center to move it to the right side.

6. Remove Tools:

To remove a tool from the toolbar, select it on the right side and click the "Remove" button. The tool will no longer appear on the toolbar.

7. Restore Defaults:

If you want to revert to the default toolbar arrangement, click the "Default" button.

8. Done:

Once you've made your changes, click "Done" to apply the modifications.

Reset to Default:

1. Access Toolbar Options:

Right-click (or Control-click on Mac) on the toolbar.

2. Choose "Reset Toolbar":

Select "Reset Toolbar" from the context menu.

3. Confirmation:

Photoshop will ask for confirmation. Click "OK" to reset the toolbar to its default configuration.

Modify Keyboard Shortcuts:

1. Access Keyboard Shortcuts:

Go to the "Edit" menu.

Choose "Keyboard Shortcuts."

2. Select a Set:

In the Keyboard Shortcuts and Menus dialog box, select a set from the dropdown menu (e.g., "Photoshop Defaults" or a custom set).

3. Choose a Section:

Choose a section from the left side of the dialog box (e.g., "File," "Edit," "Image").

4. Select a Command:

In the right panel, find the command for which you want to modify the keyboard shortcut.

5. Enter New Shortcut:

Click on the current shortcut next to the command.

Enter your new keyboard shortcut.

6. Check for Conflicts:

Photoshop will notify you if the shortcut is already in use. If there's a conflict, consider using a different key combination.

7. Accept Changes:

Click "Accept" to apply the changes.

8. Save Custom Set (Optional):

If you've made several changes and want to save them as a custom set, click the "Save Set..." button.

Reset to Defaults:

If you make changes and want to revert to the default keyboard shortcuts, click the "Use Default Set" button.

Search Function:

Use the search function in the Keyboard Shortcuts and Menus dialog box to quickly find the command you're looking for.

Popular Keyboard Shortcuts for Speed:

1. Ctrl + J (Windows) / Cmd + J (Mac):
Duplicate selected layer(s).
2. Ctrl + E (Windows) / Cmd + E (Mac):
Merge selected layers.
3. Ctrl + Alt + Z (Windows) / Cmd + Option + Z (Mac):
Step backward in the history.
4. Ctrl + Shift + Z (Windows) / Cmd + Shift + Z (Mac):
Step forward in the history.
5. Ctrl + A (Windows) / Cmd + A (Mac):
Select all.
6. Ctrl + D (Windows) / Cmd + D (Mac):
Deselect.
7. Ctrl + T (Windows) / Cmd + T (Mac):
Free Transform.
8. Ctrl + 0 (Windows) / Cmd + 0 (Mac):
Fit to Screen.

6.2

Color Modes:

1. RGB (Red, Green, Blue):

Description: Represents colors using the additive color model. It is the standard for digital images and is used for web graphics, photography, and screen displays.

Common Uses: Web design, digital photography.

2. CMYK (Cyan, Magenta, Yellow, Black):

Description: Represents colors using the subtractive color model. Primarily used for print, as it reflects the way ink colors mix on paper.

Common Uses: Print design, offset printing.

3. Grayscale:

Description: Uses shades of gray to represent colors. Each pixel is a varying level of brightness.

Common Uses: Black and white photography, simple graphics.

Bit Depth:

1. 8-Bit:

Description: Each color channel (Red, Green, Blue) is represented by 8 bits. Results in 256 possible values per channel.

Common Uses: Standard for most web images and digital photographs.

2. 16-Bit:

Description: Each color channel is represented by 16 bits. Provides a broader range of color values, resulting in smoother gradients and more color accuracy.

Common Uses: Professional photography, image editing requiring high precision.

3. 32-Bit:

Description: Uses floating-point values for each channel. Supports a vast range of colors and is often used for high-dynamic-range (HDR) images.

Common Uses: HDR photography, 3D rendering.

Setting Color Mode and Bit Depth in Photoshop:

1. Color Mode:

Go to Image > Mode and choose the desired color mode (RGB, CMYK, Grayscale, etc.).

2. Bit Depth:

Go to Image > Mode and choose the desired bit depth (8 bits/channel, 16 bits/channel, etc.).

Understanding Document Size:

1. Dimensions (Width and Height):

The dimensions of an image represent its width and height in pixels, inches, centimeters, or another unit of measurement. For web and screen graphics, pixel dimensions are often used, while print projects may use inches or centimeters.

2. Resolution:

Resolution is the number of pixels per unit of measurement (e.g., pixels per inch or dots per inch). Higher resolution generally means more detail but can result in larger file sizes.

3. File Size:

The file size is the amount of space the image occupies on disk. It is influenced by dimensions, resolution, and file format.

Multiple Undo:

1. Keyboard Shortcuts:

The default keyboard shortcut for undoing an action is 'Ctrl + Z' (Windows) or 'Cmd + Z' (Mac). Pressing it multiple times will undo successive actions.

2. Step Backward:

To step backward through multiple undo states, you can use 'Ctrl + Alt + Z' (Windows) or 'Cmd + Option + Z' (Mac). This allows you to jump back to various points in your editing history.

3. Edit Menu:

You can also use the "Edit" menu and select "Step Backward" to undo multiple actions.

History Panel:

1. Open the History Panel:

Go to Window > History to open the History panel.

2. View History States:

The History panel displays a list of states, each representing a step in your editing history. Each state shows the state of the document at a specific point.

3. Undo in History Panel:

Click on any state in the History panel to revert the document to that specific point in your editing history. This is equivalent to using the undo command but provides a visual representation of each step.

4. Create a Snapshot:

Click on the camera icon at the bottom of the History panel to create a snapshot of the current state. This allows you to save a particular point in your editing process, and you can revert to it later.

5. Delete History States:

You can delete specific history states or clear the entire history by right-clicking on a state or using the panel menu.

History Brush Tool:

The History Brush tool allows you to paint from a previous state in your history onto the current state. Select the History Brush tool from the toolbar, choose a state in the History panel, and paint on the image.

6.3

Layers:

In Adobe Photoshop, layers are fundamental components of your digital canvas, allowing you to stack, organize, and edit different elements independently. Understanding how layers work is essential for effective image editing and design. Here are some basics of working with layers in Photoshop:

Creating Layers:

1. Background Layer:

When you open a new document, it typically starts with a background layer. This layer often has a lock icon, indicating that it's a special layer type.

2. Creating New Layers:

To create a new layer, use the "New Layer" button at the bottom of the Layers panel or go to Layer > New > Layer.... You can also use the keyboard shortcut 'Ctrl + Shift + N' (Windows) or 'Cmd + Shift + N' (Mac).

Layer Types:

1. Background Layer:

Usually the bottom-most layer, often locked. To unlock, double-click on the layer in the Layers panel and choose "OK."

2. Text Layer:

Created when you add text to your document. Text layers are editable, and you can apply various text formatting options.

3. Shape Layer:

Created when you draw shapes using the shape tools. Shape layers can be edited, resized, and filled with color.

4. Adjustment Layer:

Allows you to make non-destructive adjustments to the layers below. Adjustment layers affect the layers beneath them without altering the actual pixel data.

5. Smart Object:

A layer that embeds an external file or object. Smart Objects retain their original quality when transformed, and you can go back to the original file for edits.

Layer Visibility and Opacity:

1. Visibility Eye Icon:

Click on the eye icon next to a layer to toggle its visibility on and off.

2. Opacity Slider:

Adjust the opacity slider to make a layer more transparent. Useful for blending layers or creating subtle effects.

Layer Order:

1. Rearrange Layers:

Drag and drop layers in the Layers panel to change their order. Layers at the top of the panel appear in front of those below.

2. Layer Groups:

Use layer groups to organize and manage multiple layers. Select the layers, right-click, and choose "Group from Layers." Or, you can use 'Ctrl + G' (Windows).

Layer Styles:

1. Layer Effects:

Add effects like shadows, glows, and strokes by clicking on the "fx" icon at the bottom of the Layers panel.

Transformation

Transforming refers to changing the size, position, and orientation of a layer or selection. This allows you to manipulate elements within your image.

Basic Transformations:

1. Select the Layer:

Click on the layer in the Layers panel that you want to transform.

2. Access Transform Commands:

There are several ways to access transform commands:

Press 'Ctrl + T' (Windows) or 'Cmd + T' (Mac) for the Free Transform command.

Right-click on the layer and choose "Free Transform" from the context menu.

Go to Edit > Free Transform from the menu.

3. Handles and Control Points:

After initiating Free Transform, you'll see handles around the selected layer. You can drag these handles to resize, rotate, or skew the layer.

4. Maintain Aspect Ratio:

To maintain the aspect ratio while resizing, hold down the 'Shift' key while dragging a corner handle.

5. Rotate and Skew:

Move your cursor outside a corner handle until it becomes a curved double-headed arrow to rotate. Hold down 'Ctrl' (Windows) or 'Cmd' (Mac) to skew.

6. Flip Horizontal/Vertical:

Right-click during Free Transform and choose "Flip Horizontal" or "Flip Vertical."

7. Commit the Transformation:

Press 'Enter' or click the checkmark in the Options Bar to apply the transformation.

8. Cancel the Transformation:

Press 'Esc' or click the "Cancel" icon in the Options Bar to cancel the transformation.

Aligning Layers:

1. Select Layers:

Select the layers you want to align. Hold down 'Ctrl' (Windows) or 'Cmd' (Mac) and click on each layer in the Layers panel.

2. Access Align Options:

Go to Layer > Align Layers to Selection or Layer > Align Layers depending on your requirements.

3. Choose Alignment Options:

In the Align panel that appears, choose the alignment option you want:

Top Edges

Vertical Centers

Bottom Edges

Left Edges

Horizontal Centers

Right Edges

Distribute Horizontal Centers

Distribute Vertical Centers

4. Click "OK":

Click the "OK" button to apply the alignment.

Working with layer group

Layer groups in Adobe Photoshop provide a way to organize and manage multiple layers together. They are especially useful for maintaining a structured and easily navigable layer hierarchy, especially in complex projects. Here's a guide on working with layer groups:

Creating a Layer Group:

1. Select Layers:

Select the layers you want to group together. Hold down 'Ctrl' (Windows) or 'Cmd' (Mac) and click on each layer in the Layers panel.

2. Create Group:

Right-click on any of the selected layers, and choose "Group from Layers." Alternatively, you can use the keyboard shortcut 'Ctrl + G' (Windows) or 'Cmd + G' (Mac).

3. Name the Group:

Double-click on the default group name ("Group 1," "Group 2," etc.) to enter a descriptive name for the group.

Expanding and Collapsing Groups:

1. Expand Group:

Click on the small triangle icon next to the group name in the Layers panel to expand the group and reveal its contents.

2. Collapse Group:

Click on the same triangle icon to collapse the group and hide its contents.

Rearranging Groups:

1. Move Group:

Click and drag the group in the Layers panel to rearrange its position.

2. Nesting Groups:

You can nest groups within other groups by dragging one group onto another.

Applying Layer Styles to Groups:

1. Apply Layer Style to Group:

You can apply layer styles to a group by clicking on the "fx" icon at the bottom of the Layers panel and choosing the desired style. The layer styles will be applied to all layers within the group.

Applying Masks to Groups:

1. Group Masks:

You can add a layer mask to a group, affecting all layers within that group simultaneously.

Keyboard Shortcuts:

Use keyboard shortcuts such as 'Ctrl + G' (Windows) or 'Cmd + G' (Mac) for creating groups and 'Ctrl + Shift + G' (Windows) or 'Cmd + Shift + G' (Mac) for ungrouping.

Selecting Layers in a Group:

Hold down 'Ctrl' (Windows) or 'Cmd' (Mac) and click on the group icon in the Layers panel to select all layers within the group.

Merging and flattening layers

Merging layers in Adobe Photoshop involves combining two or more layers into a single layer. This can be useful for simplifying your layer structure, reducing file size, or applying certain adjustments or effects to a group of layers.

Merge Two Layers:

1. Select Layers:

In the Layers panel, hold down 'Ctrl' (Windows) or 'Cmd' (Mac) and click on the layers you want to merge. You can also click and drag to select multiple layers.

2. Merge Visible:

If the layers you want to merge are not adjacent in the Layers panel or include hidden layers, you can use the "Merge Visible" command.

Press 'Ctrl + Shift + E' (Windows) or 'Cmd + Shift + E' (Mac) to merge visible layers.

3. Right-Click and Choose "Merge Layers":

Right-click on one of the selected layers, and from the context menu, choose "Merge Layers."

4. Keyboard Shortcut:

Use the keyboard shortcut 'Ctrl + E' (Windows) or 'Cmd + E' (Mac) to merge the selected layers.

Flattening Layers:

Flattening layers refers to combining all visible layers into a single background layer. This process is irreversible, and once layers are flattened, individual layer editing is no longer possible.

1. Ensure Visibility:

Make sure only the layers you want to include in the flattened image are visible.

2. Flatten Image:

Go to Layer > Flatten Image. This combines all visible layers into a single background layer.

6.4

Text tools:

Adobe Photoshop provides a range of text tools and features for adding and formatting text in your designs. Here's an overview of the text tools and how to use them:

1. Horizontal Type Tool:

Shortcut: Press 'T' to select the Horizontal Type Tool.

Usage:

- Click on your canvas to create a text layer.
- Type your text.
- Use the options in the Options Bar to adjust font, size, color, and other text properties.
- Press Enter to commit the changes.

2. Vertical Type Tool:

Shortcut: Press 'T' and then choose the Vertical Type Tool from the toolbar.

Usage:

- Similar to the Horizontal Type Tool, but it creates vertical text.

3. Horizontal Type Mask Tool:

Shortcut: Press 'T' and then choose the Horizontal Type Mask Tool from the toolbar.

Usage:

- Creates a selection in the shape of the typed text on the active layer.

4. Vertical Type Mask Tool:

Shortcut: Press 'T' and then choose the Vertical Type Mask Tool from the toolbar.

Usage:

- Similar to the Horizontal Type Mask Tool but creates a vertical selection.

5. Type on a Path Tool:

Shortcut: Press 'T' and then choose the Type on a Path Tool from the toolbar.

Usage:

- Type text along a drawn path or shape.

6. Vertical Type on a Path Tool:

Shortcut: Press 'T' and then choose the Vertical Type on a Path Tool from the toolbar.

Usage:

- Similar to Type on a Path but for vertical text.

7. Text Warp:

Usage:

- Select the text layer.
- Go to Type > Warp Text to apply various text warping effects like arch, bulge, flag, etc.

8. Character and Paragraph Panels:

Shortcut: Press 'Ctrl + T' (Windows) or 'Cmd + T' (Mac) to access the Free Transform tool for text.

Usage:

- Use the Character and Paragraph panels (Window > Character and Window > Paragraph) to adjust advanced text formatting options.