Technical Lecture 4

Introduction to Layers

How do layers work: You isolate different parts of an image onto independent layers so that you can work with them separately. Think of each layer as a piece of glass, with the individual layers stacked on top of each other as if they were separate documents. By putting each image on its own layer, you can change your document’s look and layout freely without committing to the changes.

Every document you create will come with a background layer.

It is always 100% opaque. It is always locked and cannot be repositioned.

To create a new layer: Click the new layer icon. A new, blank layer will appear.

Toggle the eye icon to make layers visible/invisible

The checkerboard indicates that nothing is visible in the document.

Double click within a layers title to rename it.
**Active Layer:** the current layer is highlighted in the layers panel. To change the active layer, click the name of another layer.

**Layer Order:** to change the order of layers, drag the name of a layer above or below the name of another layer in the layers panel.

**Layer Opacity:** change the active layer’s opacity by using the opacity slider on the top right corner.

**Moving Layers:**
Use the move tool to move layers around in your composition.

Auto Select: If checked, the move tool will automatically select the layer you click within your composition. If not checked, the active layer will be moved with the move tool.

**Resizing Layers:**
Use the move tool to with “show transform controls” checked on to transform an image. Hold the shift key to constrain proportions. Press enter to commit to a change, escape to return to the original size.

**Transform Menu:**
With the layer selected, go to edit ➔ transform in order to make additional changes to your layer.
Selecting one of these commands summons a bounding box that looks and works just like a crop box, with tiny square handles on all four sides of the image. You can use transform command on objects you’ve selected, on individual layers, or across many layers.

Selecting Multiple Layers:
Hold down the command key

Duplicating Layers:
Drag the layer you would like to duplicate to the new layer icon

Deleting Layers:
Drag the layer you would like to delete to the trash icon
Layer Styles Menu:

Merging Layers:

- **Merge Down**: merges the active layer into the layer directly below it.
- **Merge Visible**: Merges all the layers that are currently visible in the main image window.
- **Merge Layers**: Merges all the selected layers.
- **Merge Group**: Merges all the layers that are within the active group.
- **Flatten Image**: Merges all visible layers into the background image, discards hidden layers, and fills empty areas with white.

Layer Blending Modes:

Work when you have two or more layers. The blending mode you choose determines how the active layer will interact with an underlying image.
Layer Organization

**Linking Layers:** If you need to move something in your image that’s made from several layers, you can link layers by clicking the tiny chain at the bottom of the layers panel.

**Locking Layers:** You can add layer locks to your layers, which prevents them from being edited or moved. At the top of the Layers panel you’ll see a row of four buttons that you can use to lock various aspects of your layers. First select the layer you want to lock and then click the appropriate lock button to prevent any changes.

- **Lock transparent pixels:** This protects the layer’s transparent pixels so they don’t change even if you paint across them.
- **Lock image pixels:** This won’t let you do anything to a layer but nudge it around with the Move tool. The button for this lock looks like the Brush tool.
- **Lock position:** If you’ve carefully positioned a layer and want to make sure it stays put, click this button. You can still edit, you just can’t move the layer.
- **Lock all:** This is your deadbolt. Use it to prevent the layer from being edited or moved.
**Grouping Layers into Folders**

Select Layers and then choose “new group from layers” in the layer panel’s menu. You can do the same things to layer groups that you can to do regular layers: duplicate them, hide them, lock them, and so on. You can also create nested groups by dragging and dropping one group into another.

To split apart grouped layers, select the group and then choose Layer → Ungroup Layers.

**Merging Layers:**

Merge Down: merges the active layer into the layer directly below it. Select the top layer and then select Layer → Merge Down from the Layers panel’s menu.

Merge Visible: Merges all the layers that are currently visible in the main image window. To merge just some of your layers, hide the ones you don’t want to squash, selected a pixel-based layer as your target, and then go to Layers → Merge Visible, or choose Merge Visible from the Layers panel’s menu.

Merge Selected: select the layers you want to merge (either pixel or vector based) and then go to Layers → merge layers.

Merge Linked: If you’ve linked layers together, you can merge them in one fell swoop by choosing select linked layers and the merging selected layers.

Stamp: a safer version of merging because it combines the selected layers on a new layer, leaving the original layers intact.

Stamp selected: choose the layers you want to stamp and then press command option e.

Stamp visible: turn off the layers you don’t want to stamp by clicking their visibility eyes and then press command shift option e.

Flatten: this command makes your file flatter than a pancake.

**Photoshop CS5: The Animation Panel**

Make example file: 1920 x 1080 (high definition)

Access the animation panel by going to the Window Menu → Animation.

In Photoshop Extended, you can use the Animation panel in either frame mode or timeline mode. We will use timeline mode.

But just FYI, here is Frame Mode.

Looping Options: Sets the number of times an animation plays when exported as an animated GIF file.

A. Selects the first frame.
B. Selects the previous frame
C. Plays animation
D. Selects the next frame
E. “Tweens” animation frames- Adds a series of frames between two existing frames, interpolating (varying) the layer properties evenly between the new frames.
F. Duplicates selected frames- Adds a frame to the animation by duplicating the selected frame in the Animation panel.
G. Deletes selected frames
H. Converts to timeline mode (Photoshop Extended only)- Converts a frame animation to timeline animation using keyframes to animate layer properties.
I. Animation panel menu
Frame Delay Time: Sets the duration of a frame during playback.

Timeline Mode

A. Enable audio playback
B. Zoom out
C. Zoom slider
D. Zoom in
E. Toggle onion skins
F. Delete keyframes
G. Convert to frame animation

Timecode or frame number display: Shows the timecode or frame number (depending on panel options) for the current frame.

Current-time indicator: Drag the current-time indicator to navigate frames or change the current time or frame.

Time ruler: Measures duration (or frame count) horizontally, according to the document’s duration and frame rate. (Choose Document Settings from the panel menu to change duration or frame rate.) Tick marks and numbers appear along the ruler and change in spacing with the zoom setting of the timeline.

Push play, will see only the top layer
Cached frames indicator: Displays a green bar to indicate the frames that are cached for playback.

Convert To Frame Animation: Converts a timeline animation using keyframes to frame animation.

Your layers are repeated in the timeline
Layer duration bar: Specifies a layer’s place in time within a video or animation. To move the layer to another place in time, drag the bar. To trim (adjust the duration of) a layer, drag either end of the bar.

Animation panel menu: Includes functions affecting keyframes, layers, panel appearance, onion skinning, and document settings. **Change the duration of your animation to 6 seconds for first example**

(Global Lighting track: Displays keyframes where you set and change the master lighting angle for layer effects such as Drop Shadow, Inner Shadow, and Bevel and Emboss.

Keyframe navigator ‍: Arrow buttons to the left of a track label move the current-time indicator to the previous or next keyframe from its current position. Click the center button to add or delete a keyframe at the current time.

Altered Video track: For video layers, displays a duration bar for altered frames. To jump to altered frames, use the keyframe navigator to the left of the track label.

Time-Vary stopwatch: Enables or disables keyframing for a layer property. Select this option to insert a keyframe and enable keyframing for a layer property. Deselect to remove all keyframes and disable keyframing for a layer property.)

Work area indicators: Drag the blue tab at either end of the topmost track to mark the specific portion of the animation or video that you want to preview or export.

In Photoshop Extended, as you add layers to a document, they appear as tracks in the timeline. Expand layer tracks to show layer properties that can be animated.

To show or hide layer properties, click the triangle to the left of the layer name.)

**To Edit layers on the timeline**

With the Animation panel in timeline mode, do any of the following:

- Drag the current-time indicator .
- Click a number or location in the time ruler where you want to position the current-time indicator.
- Drag the current-time display (in the upper-left corner of the timeline).
- Double-click the current-time display and enter a frame number or time in the Set Current Time dialog box.
- Use the playback controls in the Animation panel.
- Choose Go To in the Animation panel menu, and then choose a timeline option