

# Hands-On Lesson

to accompany

## *Curriculum Webs*

*A Practical Guide to Weaving the Web into Teaching and Learning*

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# LESSON 8: Using layers and simple behaviors

DREAMWEAVER MX 2004

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## Goals for this lesson

- Learn about some advanced features in your software that allow you to build in movements and interactivity.
- Create several examples of movements and interactivity.

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## Positioning layers

Layers and positioning are ways of placing layout elements at various positions within a page.

Warning: layers and positioning only work in browsers version 4.0 and later. Also, the placement of layers is not an exact science. You may find that your layers appear in a different location when you look at them in a browser than where you placed them.

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### *Dreamweaver*

- Use Insert | Layout Objects | Layer. The layer will appear at the cursor, on the left side of the window.
- To move the layer around on the screen, you can click on the edge of the layer, selecting it, and then click and drag the tab at the top left of the layer:



Notice what happens to the layer's properties when you move it around on the screen. See Figure 8-1.

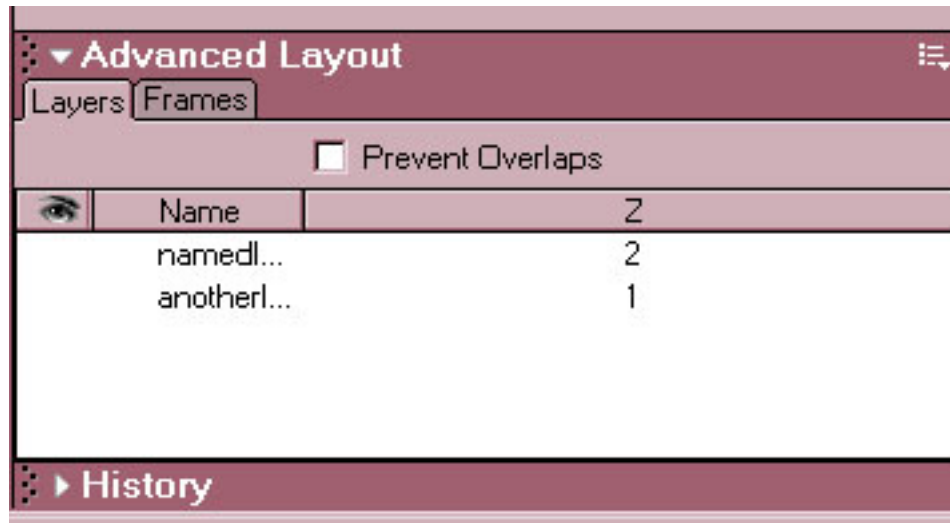


**Figure 8-1: The Dreamweaver Property Inspector showing the properties of a layer.**

When you move a layer, the "L" and "T" fields are changed to reflect the position of the layer, measured in pixels (px) from the left (L) and the top (T) of the page. You can also change the position by typing numbers directly into these fields.

Notice also the other fields on the Property Inspector:

- Layers can be named. This is useful when creating a behavior (about which, see [below](#)). "W" and "H" are the width and height of the layer measured in pixels. The "Z-Index" is a way of controlling which layers appear on top and which below. The higher the Z number, the closer the layer is to the "top". All the layers in a page have a different Z number. As you create the Layers, each one will (generally) have the next highest Z-index. Vis stands for visibility. This controls whether the layer is initially visible, invisible, default (set the default for new layers you create by using Edit | Preferences | Layers), or inherited (from it's "parent" if the layer is nested inside another layer, or from the page's body, which is always visible).
  - Note that when you click INSIDE the layer, the properties inspector changes to the normal text formatting choices. These choices only affect the text that is selected or that is typed immediately after the properties are set.
  - The "Overflow" field can be left blank, or set so that any overflow (that goes beyond the set size of the layer) is hidden, visible, with scroll bar always present, or with scroll bar only when necessary. Note you cannot directly make a layer too small for its content. But layer properties (including size) can be set using timelines, behaviors, or scripts, and so the Overflow field might be helpful then.
- You can see all the layers listed in the Layers palette by using Window | Layers: See Figure 8-2.



**Figure 8-2: The Dreamweaver layers palette.**

You may also add a background color by selecting the layer and picking a color on the properties palette and you may add a background image by clicking on the folder in the properties palette and browsing to the image. See Figure 8-3.

Once the image is in a layer, you may move it to anywhere on the page.



**Figure 8-3: Two layers in Dreamweaver. One has a background color and the other has a background image.**

Layers can be positioned so that they overlap one another. (Any other elements in HTML cannot overlap.) Figure 8-4 shows two layers (both selected, therefore you see the 'handles'), one partially underneath the other.

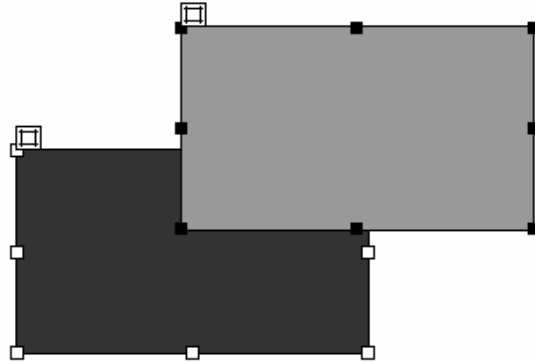


Figure 8-4: Two selected and overlapping layers in Dreamweaver.

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## Placing text on an image



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### *Dreamweaver*

- Place an image in a layer.
- Type some text in another layer. You can format the text by changing attributes in the Property Inspector. (Be sure to choose a color for the text so that it will show up against the picture.)
- Set the Z-Index of the layer with the picture to a lower number than the layer with the text.
- Position the text layer over the one with the image.

## Animating layers

Web page animation (as opposed to GIF animation) uses something called Dynamic HTML, or DHTML.

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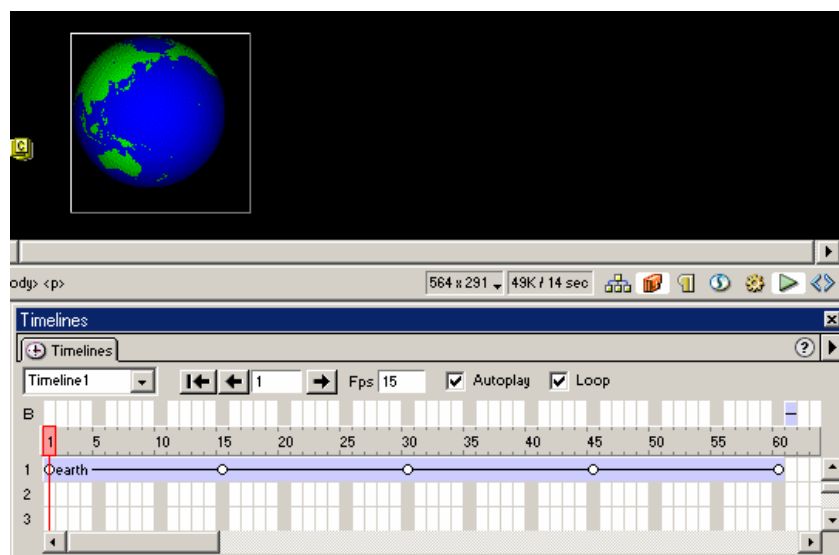
### *Dreamweaver*

(NOTE: the original release of Dreamweaver MX 2004 did not include a functionality for templates. This has been reinstated with the updater that brings it to version 7.0.1. Be sure your version has been updated before attempting this section. See [http://www.macromedia.com/support/dreamweaver/downloads\\_updaters.html](http://www.macromedia.com/support/dreamweaver/downloads_updaters.html) to get the update.)

To **animate layers**, you'll need to detach your page from any templates. (Dynamic HTML writes code into the head area of the HTML page, and this area is usually locked in a template.) Then click Window | Timelines.


The Timelines palette works like digital video editing software. Figure 8-5 shows the timeline palette with a layer containing a revolving image of the earth that will be moved across the screen.

Time proceeds from left to right. Each column represents a "frame." The frame rate can be set. (In the image it is 15 FPS or Frames per second). The red or pink thing represents the "head" of the player, and indicates the current frame.



**Figure 8-5: Dreamweaver's timeline panel, showing a layer the will be moved across the screen.**

Each row represents a separate layer. If you animate many layers on a page, you'll use many rows.

Now, create the layer you want to animate. Name the layers. Now select a named layer (by clicking and dragging the little box that appears above the layer: ) and drag the layer onto the timeline window. You will see a blue bar in layer one of the timeline window.

At each end of the blue bar is a circle. The circles represent "keyframes," that is, frames that have been defined. (The final frame is automatically set, but can be changed.)

- Select the key frame you want to edit. If you want to make the animation longer, click and drag the final keyframe.
- Then, with the final keyframe still selected, move the Earth layer to where you want it at the end of the animation. (If you want it to return to the same place, leave it.)
- To add intermediate key frames, press Ctrl and click on the bar. A keyframe is added.
- With the new keyframe still selected, move the layer to where you want it at that point. Dreamweaver automatically smooths out the movement between keyframes. To make a fluid circular movement, need to define multiple keyframes.
- To have the animation start when the page loads, click Autoplay. To have the animation repeat, click Loop.

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## Swapping images

Behaviors are incredibly powerful, and we can't begin to cover them here. But let's do a sample activity. Layers (or floating boxes) can be made visible or not, moved, and sized, using behaviors. You can have one image appear in place of another when the user points the mouse to the image.

For this exercise, you need two image files that are the same size. If you wish, you can download two images from our companion web site at

<http://curriculumwebs.com/lessons/resources>. Put them in your Local Root Folder (or a subfolder).

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### ***Dreamweaver***

Note: You cannot attach behaviors to your Dreamweaver page if a template is applied to it, because behaviors alter the "head" of the document and this is (usually) a locked area of the page.

Behaviors can be attached to links or to objects such as images and buttons. You cannot attach a behavior to plain text. However, if you put "javascript:;" into the "link" field of some text, that text can then initiate a behavior without actually linking to anything.

For example, if you hold the mouse over **some text**, you can make an image disappear. When you move the cursor off the text, it will reappear.

Behaviors are incredibly powerful, and we can hardly cover them here. But let's do a sample activity.

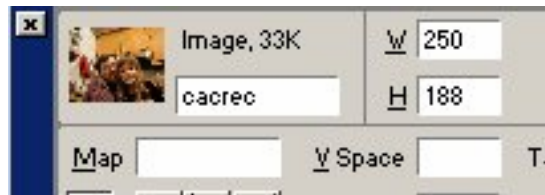
For this exercise, you need two image files that are the same size. If you wish, you can download the two images shown in Figure 8-6 from our companion web site at <http://curriculumwebs.com/lessons/resources>. Put them in your Local Root Folder (or a subfolder).



**Figure 8-6: Pictures that will be swapped in this activity.**

- Now, create a new layer. Call it photos. Insert the cac&ro-smaller.jpg image into the layer.

- You can name an image in Dreamweaver and you must name it in order to swap it with another image. Click on the image and put "cacrec" into the empty field on the top left of the Property Inspector: See Figure 8-7.



**Figure 8-7: The Dreamweaver Property Inspector showing where the name “cacrec” is entered.**

- Now you're ready to define your behavior. Type some text to be the anchor for the behavior, such as:

Point here to swap the image.

- Highlight the text and type "javascript;" into the link field (no quotation marks; that is a colon and then a semi-colon at the end of the word). Click on Window | Behavior to show your behavior palette. To create a new behavior, click the + button. A menu gives the choices available to you. (This will vary depending on how you set your browser preferences for each event.) Choose Swap Image. From the list of images, find "cacrec in the photos layer." Click it. Then browse to the other image, rowan&cheryl-smaller.jpg. Leave Preload images and Restore on mouse out checked.
- Now, save your file and preview it to see if it works.

You can also assign behaviors to buttons, change the text that appears in a layer, change the property of many items on the page, start and stop animations, and all sorts of other things.