This lesson covers making an animation in ImageReady to use on a website. The HOT book Chapter 13 describes this process excellently. I will not duplicate all this but summerize it and augment it with some tips. Read this chapter for a detailed explanation. Supplied are gif animation examples and some of the ImageReady psd files explained in this lecture.

GIF ANIMATION IN IMAGE READY

An animated gif is a sequence of images displayed one after the other giving the illusion of motion. There are benefits of using gif animations. Firstly, no browser plug-ins are needed as with Flash or Quicktime. There is no extra programming since the HTML code is the same code used for normal gif images, and you can loop (repeat) the playing of your gif animation a number of times or just once.

The HTML code would look like this: IMGSRC=”animation.gif” where the name of your document is animation.

Animations in Image Ready are made in the Animation Palette. You can set all the paramenters for your movie here. Instead of layers, you create frames in the animation palette. Each frame represents a change in your image. These changes can take on one of four types in Image Ready. They are as follows:

Frame by Frame Animation: turning on and off different layers (in Layer Palette) over a series of frames.

Position Tween: artwork changes position over a number of frames. A tween means that you have two frames know as keyframes, and the frames inbetween them are automatically generated. For a Position Tween this would mean that one layer of artwork changes position over a number of frames.

Opacity Tween: a layer changes opacity over a number of frames.

Layer Effect Tween: a layer effect applied to a layer that changes over a number of frames.

These four types can be used together to created combined effects.

All gif animations need to be compressed like any normal gif. Solid colors compress better than noisy areas. But the trick with an animation is to find the right compression for the sequence of images. For this reason an animated gif will be larger than a normal gif. Photographic images used should have lossy compression added to them to substantially decrease their size. Image Ready has two animation compression features: Bounding Box and Redundant Pixel Removal that are turned on by default that help to reduce the file size by only adding the file size for areas that change in the animation. For example, if you have a photograph that is in the background with a logo moving over it, the photograph is constant and does not need to be written every frame saving file size. It does not work for animations in which every pixel of the animation is changing.

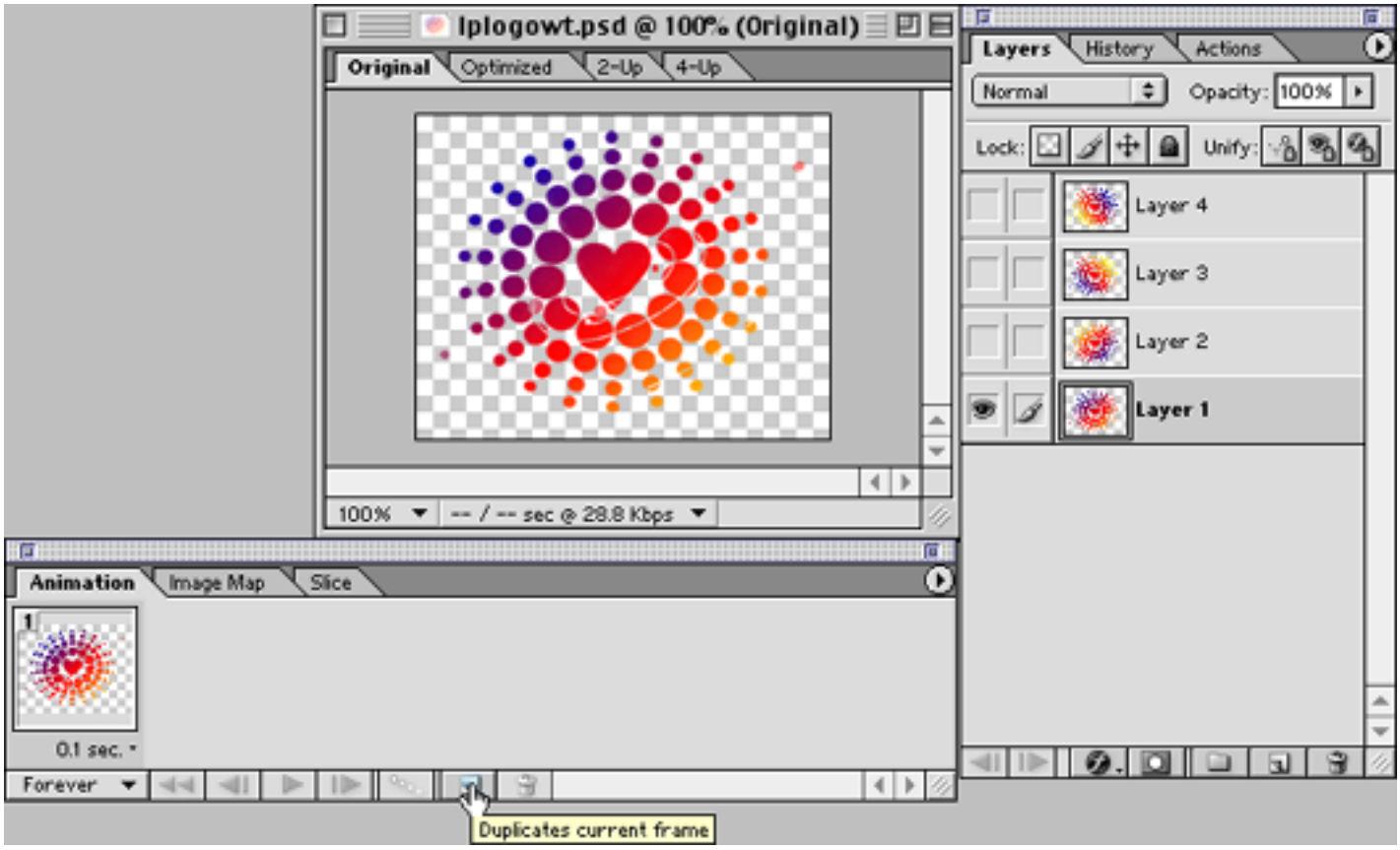
One other thing to consider when doing animations is timing. Animations can have delays between frames which allows timing to change during playback depending on the speed of the computer it is being viewed on. The animation will be streaming, meaning that frames will be viewed before the entire animation is downloaded. Therefore you could think of your file size smaller. The rule is usually divide the file size by the number of frames for a more accurate file size. That means if you have a 100K document with 10 frames, each frame would be 10K and that’s not so big!

When working in ImageReady to create an animation you will want to have several palettes open at once, the Animation palette, Layers palette, and Optimize palette, all under the Window menu.

FRAME BY FRAME ANIMATION

In this method it is necessary to have all your graphics in layers and ready to go before starting your animation.. Creation of the layers is the most time consuming part. The tricky part about making a frame by frame animation is keeping straight which layer you are turning on and which you are turning off. In the animation palette frames are created to house each step of the animation. These frames directly relate to whatever layers are visible (have a eye on next to it). Below Layer 1 is viewed and that is what is in Frame 1. In this example a Love Parade logo has a color change.

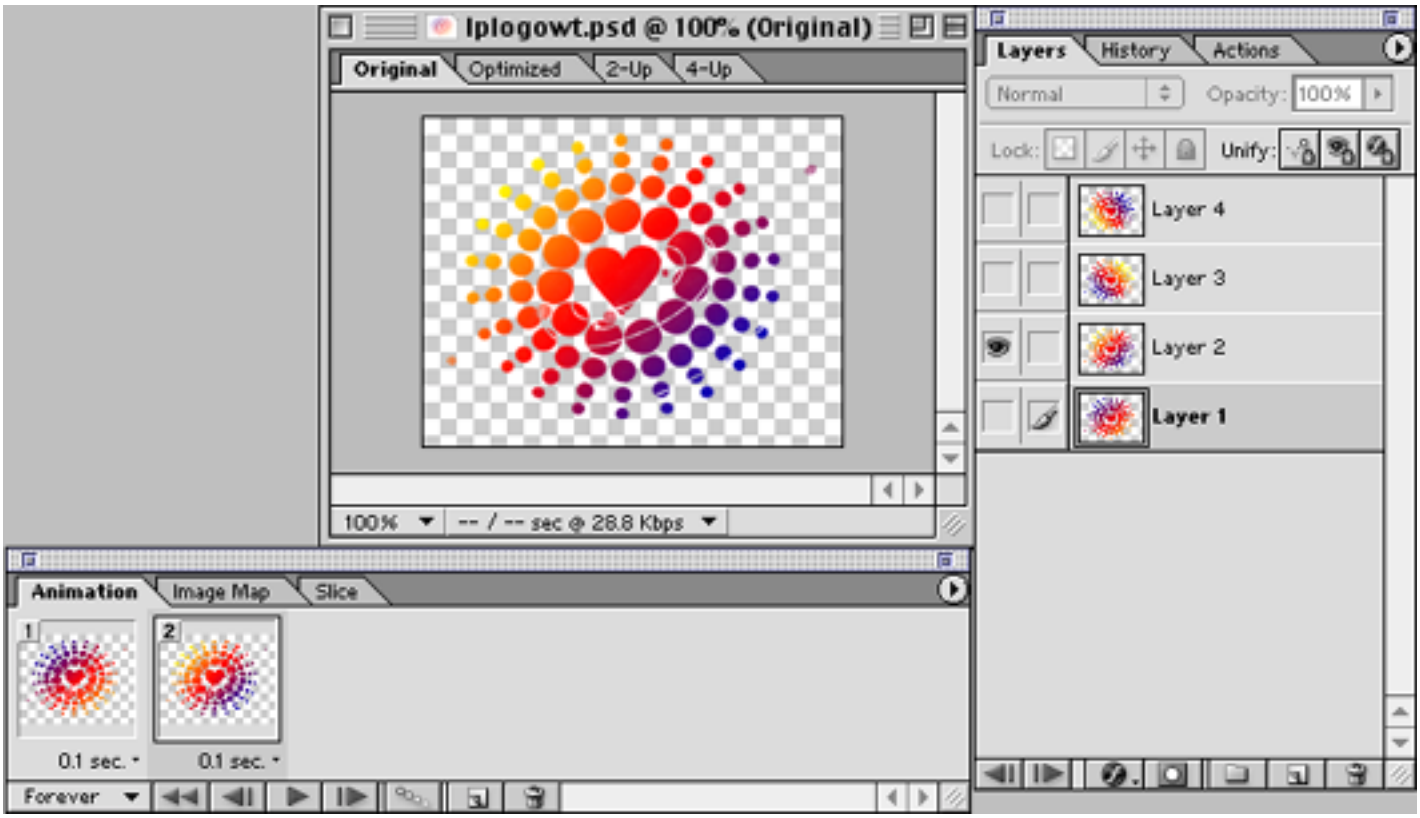
EXAMPLE: lplogowhite.gif



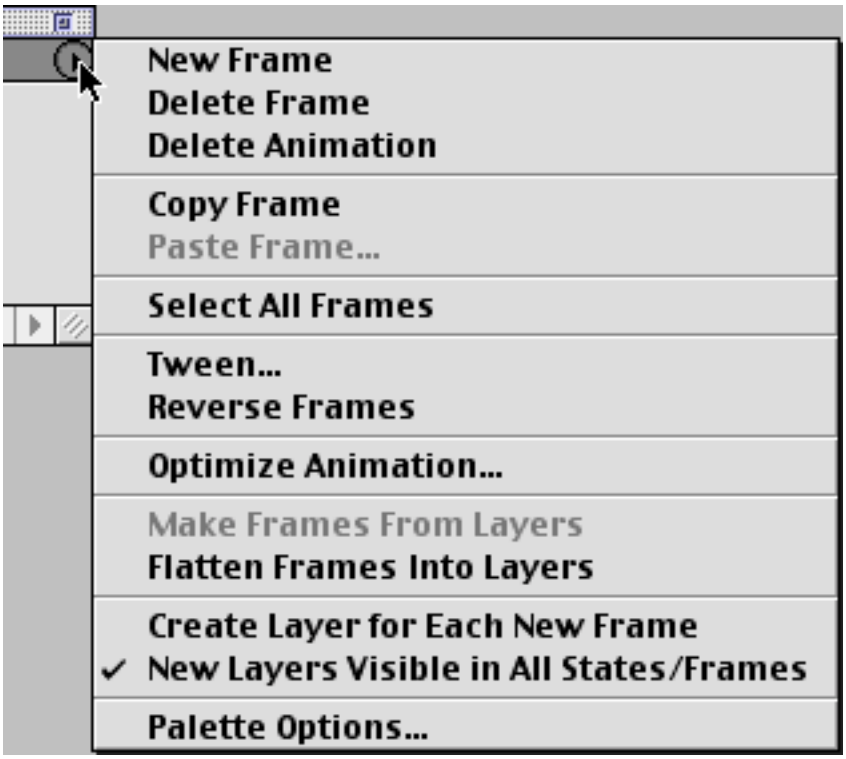
STEP 1 Turn on only the layer s that you want in Frame 1. In this example Layer 1.

At the bottom of the Animation palette are many settings. The first one where it says Forever refers to how long your animation will play. The arrows next to this work just like a VCR, with the middle arrrow being Play or Stop. Next to the controls is an icon with little squares which is used for tweening frames. You can duplicate a frame or make a new frame by clicking the page icon, the next setting at the bottom of the Animation palette.

STEP 2 Create a new frame and turn on appropriate layers.
To change what is in the new Frame, Frame 2, we turned on Layer 2 and turned Layer 1 off.

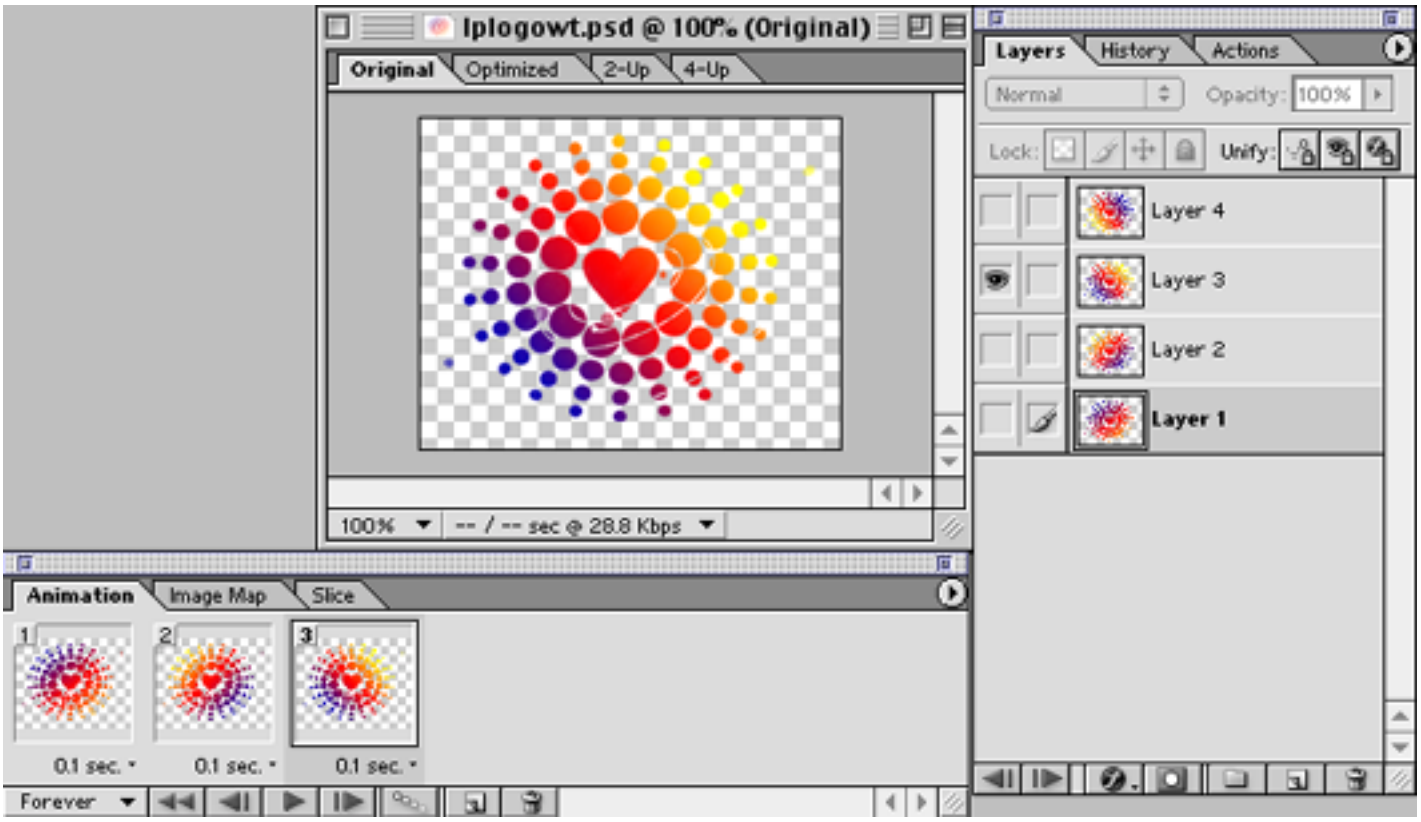


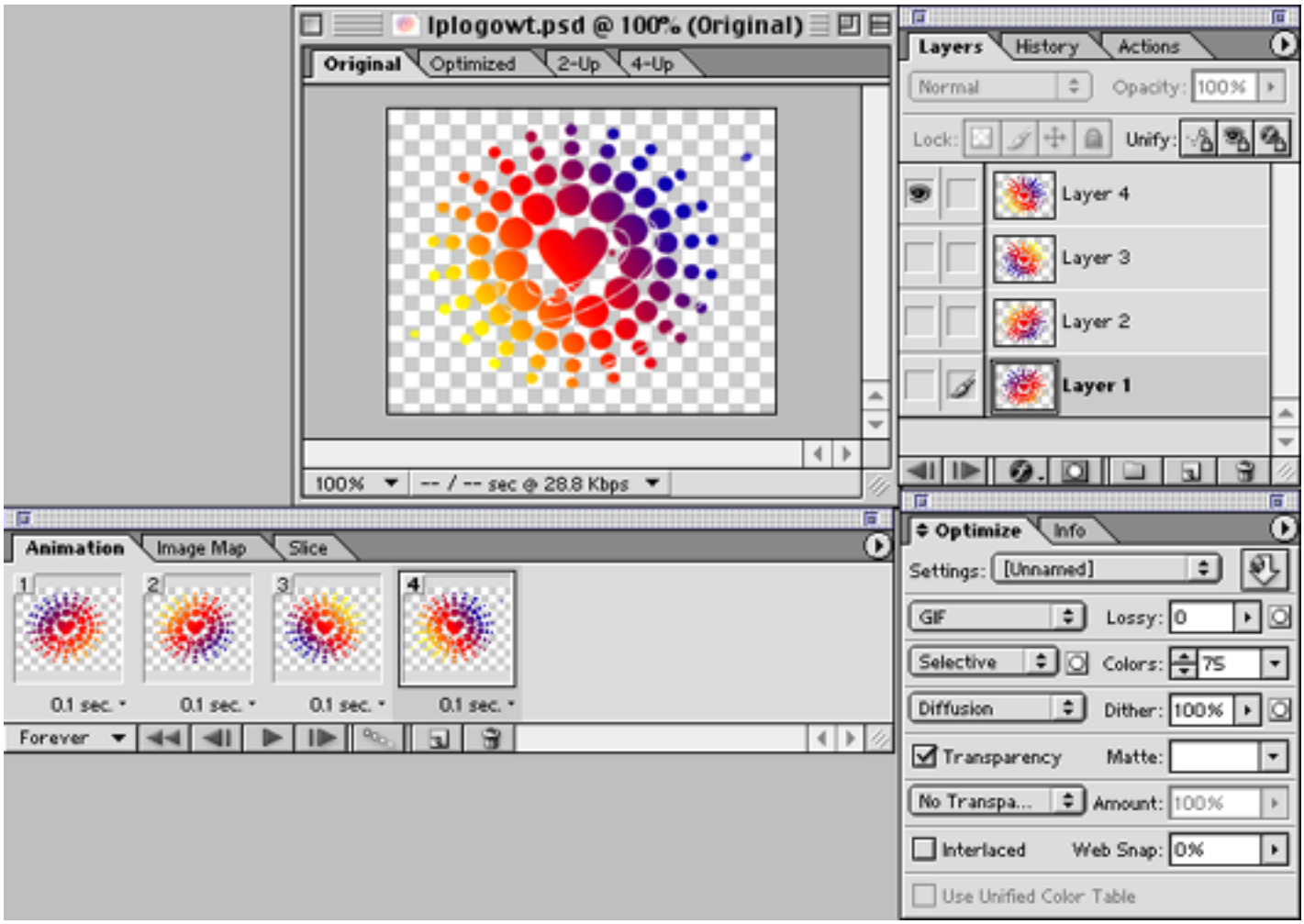
New Frames can also be created using the pop-out window from the Animation palette. You can create new frames, delete frames, delete the entire animation, copy frames, paste frames, select all the frames, tween, reverse the order of the frames, and create layers from the frames. If you want to select frames in the Animation palette click on the first frame you want to select and then shift click on the last frame you want to select. You can change multiple frames at one time this way, for instance to add a background to all of them or in this example the delay of the animation was set to 0.1 sec. Delay referes to how long one frame will be shown. To change the delay click and drag below the frame where the sec indication is and choose the time you want. Delays can be set differently for each frame at a time or Select All Frames to do them all at once. Be aware, the animation can be faster once it is viewed in a browser. Always test it in the browser for speed.



Optimize Animation is also a choice in the pop-out window (Bounding Box and Redundant Pixel Removal). This does not optimize your gif animation but rather sets the optimization so that redundant areas are used effectively and the animation will run smoother.

STEP 3 Repeat adding frames and turning on and off layers.
The same steps were repeated for Frame 3 and Frame 4 respectively in this example.



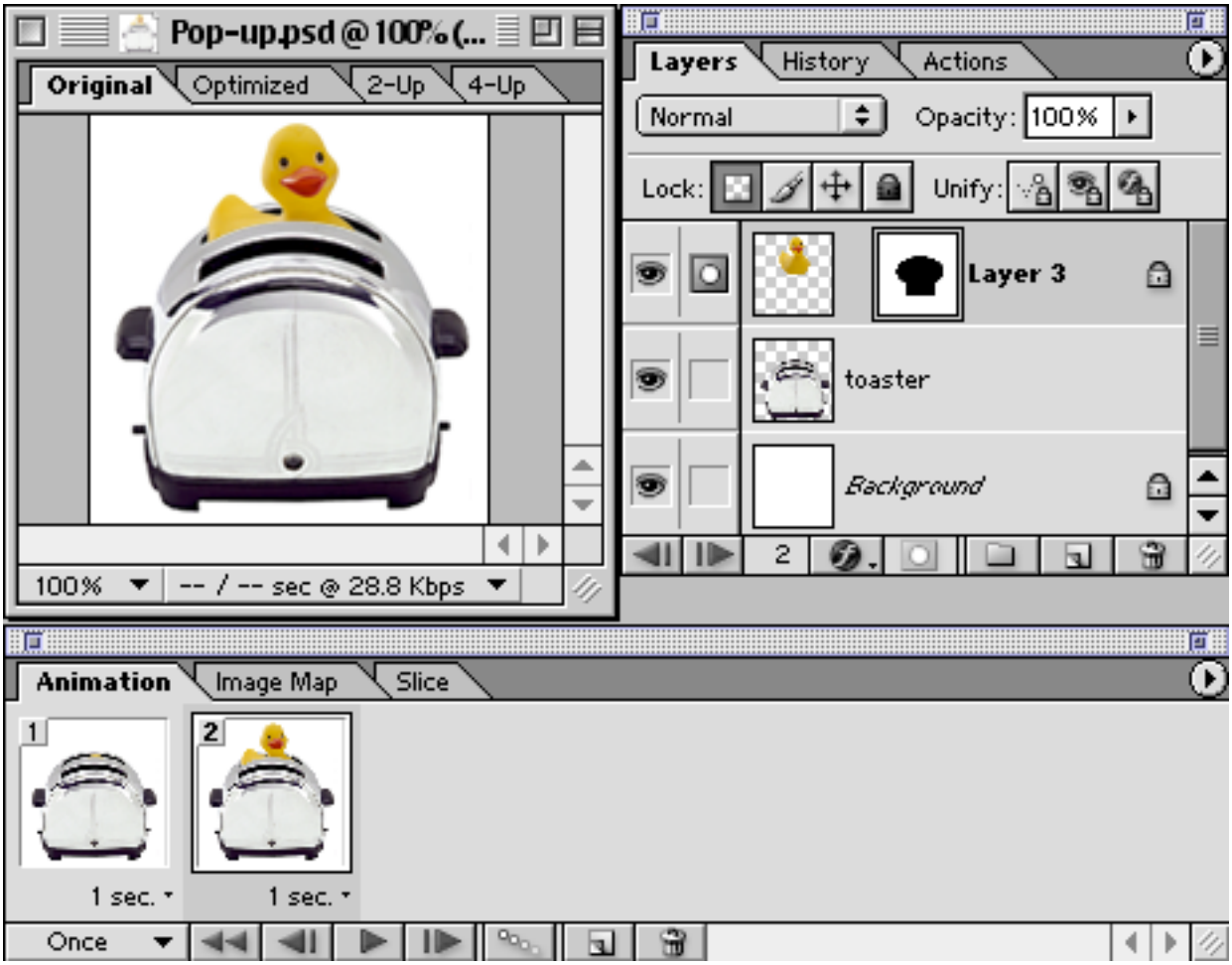


STEP 4 Play back animation and adjust Delay of frames if necessary.
Delay was set to 0.1 sec. in above example.
STEP 5 Optimize animation and save it as a gif.
In above example the Optimize palette is viewed showing the settings that were used for the Love Parade logo.

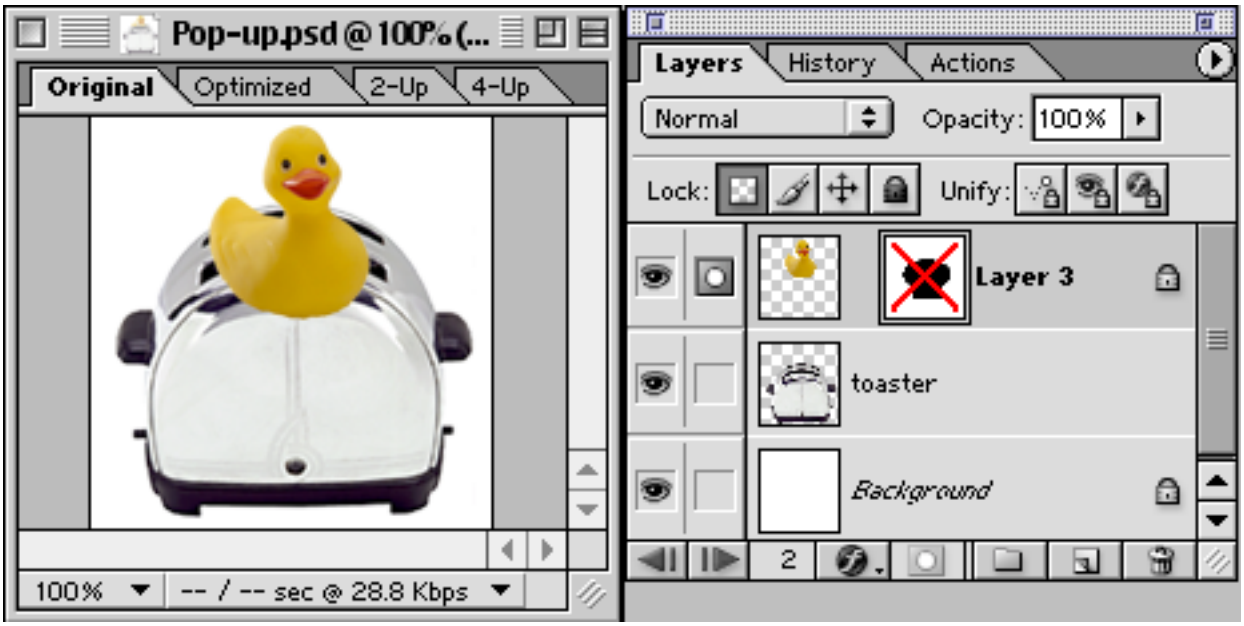
After you have all your frames set up and you have played back the animation and everything looks in order, it is time to optimize it. Open the Optimize palette. Gif animations are optimized like any other gif except that now you have multiple frames. All the frames are optimized at one setting. Whichever frame is highlighted will be the determination of the 2-Up or 4-Up view. You can click around to different frames to see how they look while you are in 2-Up or 4-Up view. Use whatever techniques you can to get the file small, Lossy, transparency, reduction of colors etc. The smaller the file the smoother the animation will run. You only need to save the Images Only format and not the HTML file. To view your gif animation in a browser, just click and drag it into any browser window. I recommend this process over the Preview In in ImageReady because it shows the speed of the animation more accurately. This gif can now be used on any web page just as any image would be using HTML, Dreamweaver, GoLive, ImageReady or even in Flash.

Frame by Frame Animation can be very complex. Using masks, groups,and opacity fills you can create very unique animations. However this takes more skill knowledge. Below is a very simple use of a layer mask to create the animation. This could be extended to other more complexed ideas.

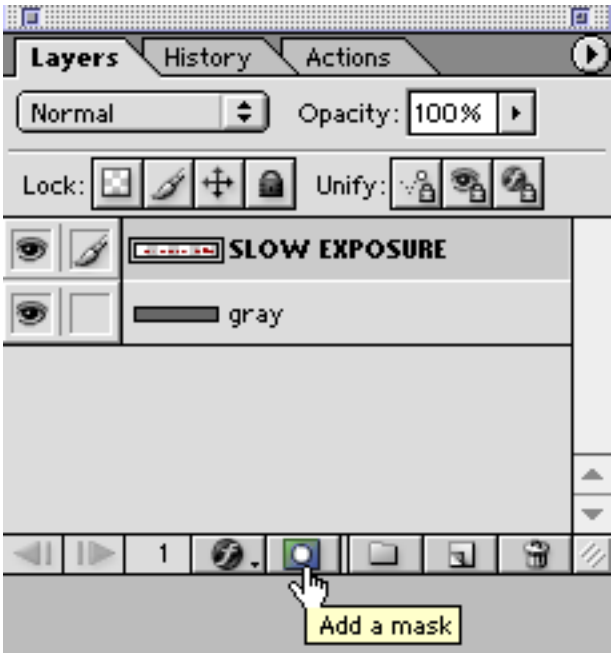
EXAMPLE: popupduck.gif

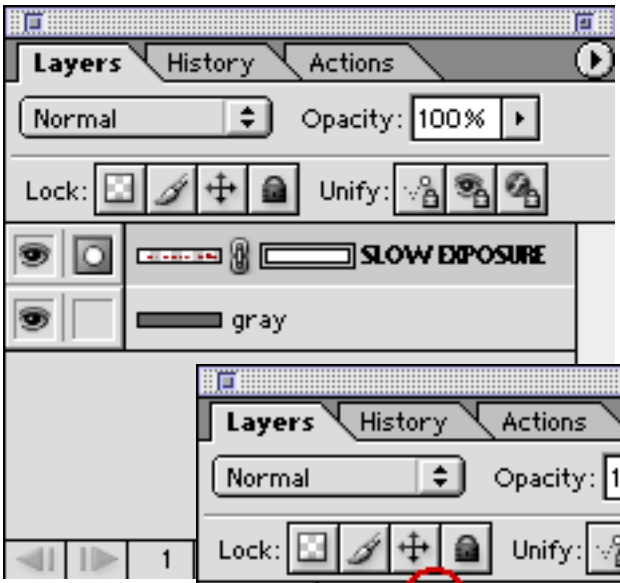


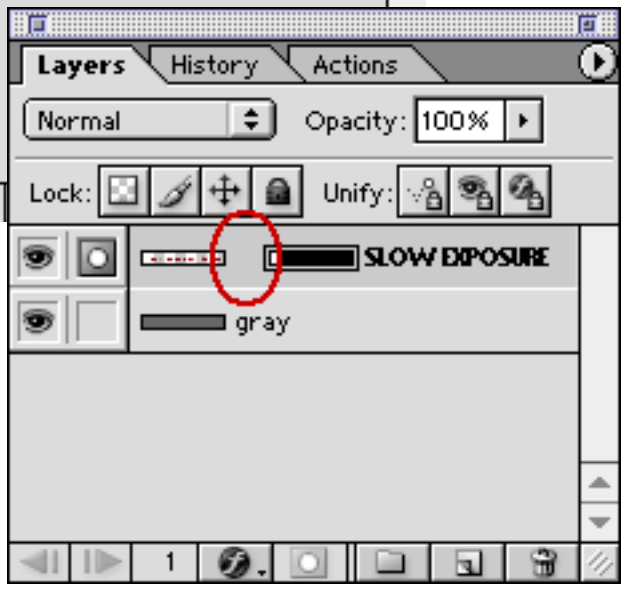
This is what the file looks like when the layer mask is turned off. The duck is totally exposed.



EXAMPLE: slowexposure.gif







This is another example of using a layer mask. Here the mask is used to slowly revveal the words Slow Exposure.

STEP 1 Fill a layer with gray

STEP 2 Create the red type

STEP 3 Rasterize the type: Layer > Raterize> Type

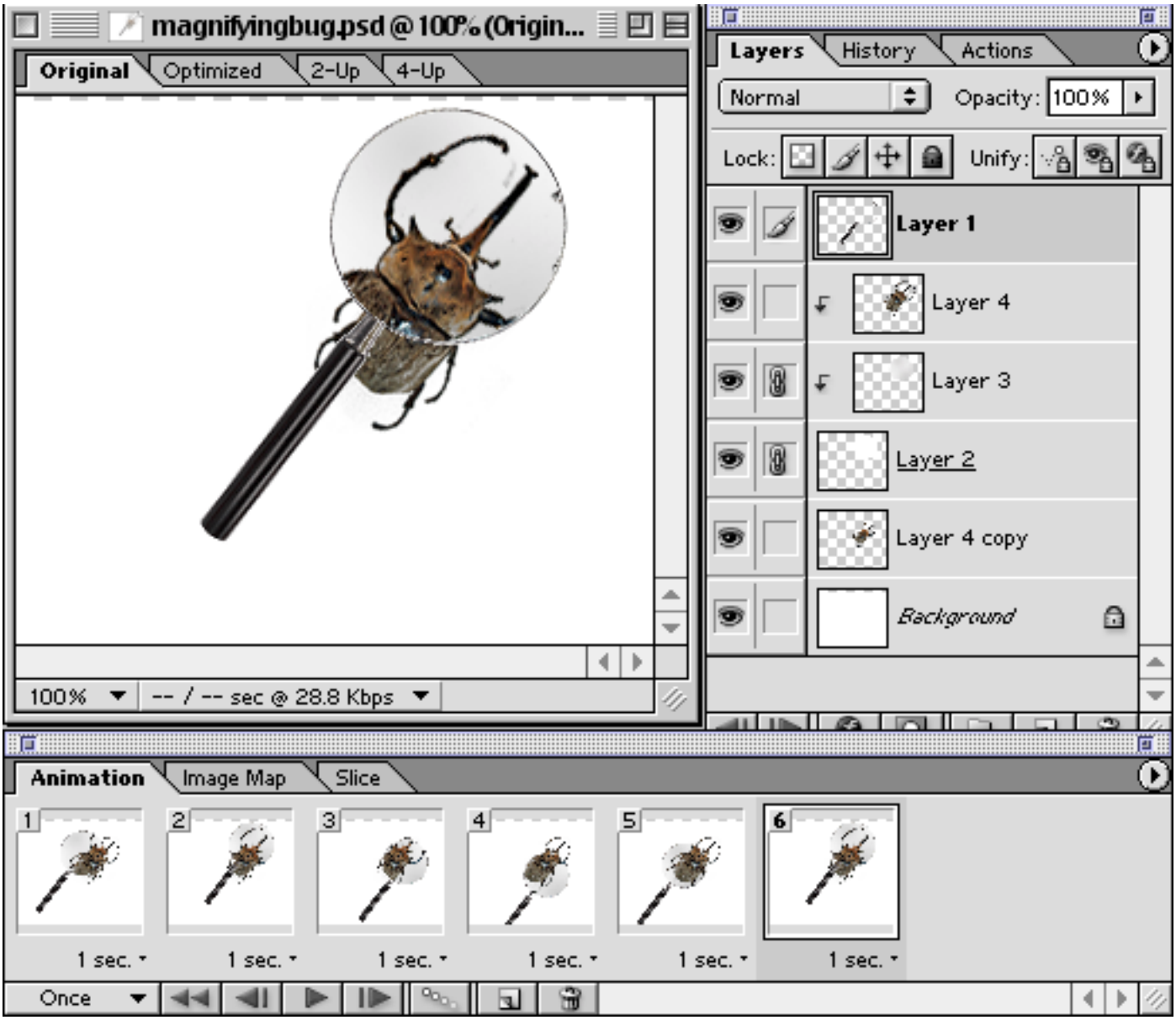
STEP 4 Add a Layer mask to the type layer

STEP 5 Make a selection that covers all the type and Fill it with black. The text should disappear, hidden by mask.

STEP 6 Unlink the type and mask by clicking on the link

STEP 7 Create Frame 1, both layers are on and frame is gray, type is still hidden.
STEP 8 Create Frame 2, click on the mask in the type layer to activate it, click and drag the mask until all the type is revealed.
STEP 9 Create a Position Tween (see later in this lesson) by clicking on icon at bottom of animation palette. Add 10 frames using a Position Tween. This will create 10 frames that reveal the type more and more. (Below is a view of Frame 7 and its layers.)
STEP 10 Set delay, optimize and save as gif.

EXAMPLE: magnifyingbug.gif
Here is an example using a clipping group and linking layers to create the animation. Moving Layer 1 around with the Move tool for each frame created this animation. In your folder of images, you will find this file along with the gif. Other files you might want to check out to see different ways to use these advanced techniques are in the Samples folder in your Photoshop 7 application folder. There is an ImageReady animation folder within this folder with several examples.



POSITION TWEEN

In a position tween artwork changes position over a number of frames. A tween means that you have two frames know as keyframes, and the frames inbetween them are automatically generated. For a Position Tween this would mean that one layer of artwork changes position over a number of frames.

EXAMPLE: quackingduck.gif

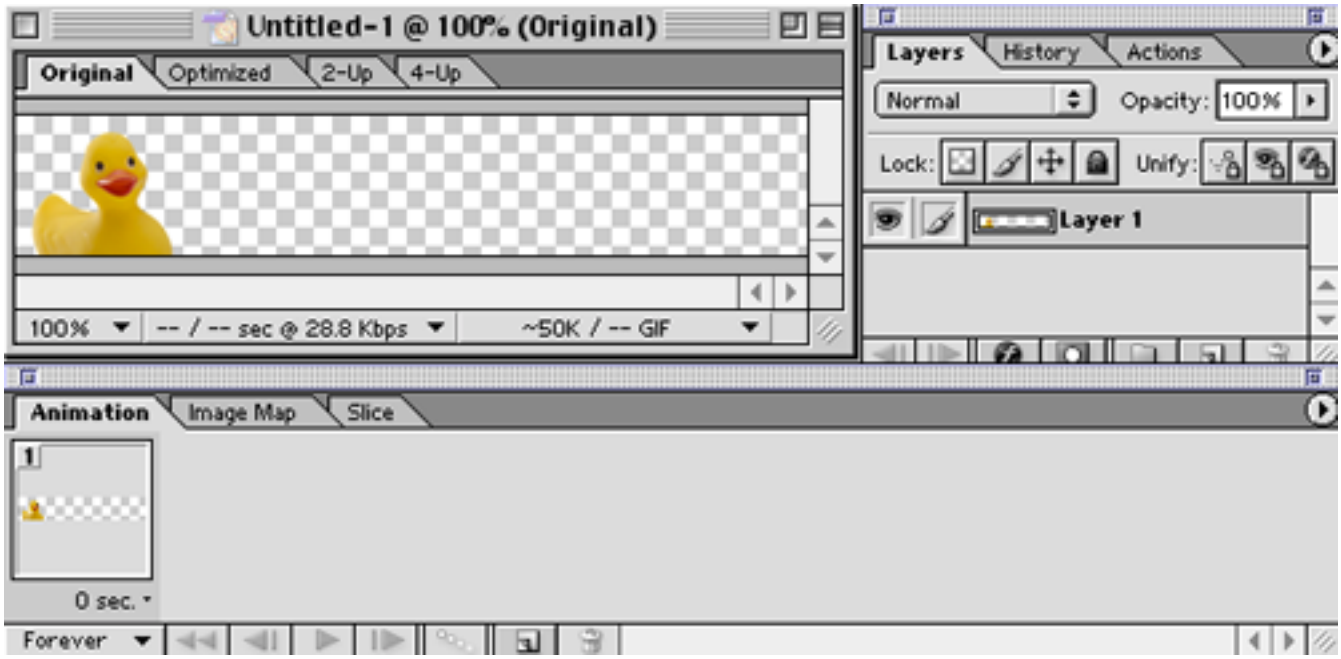
STEP 1 Create a new frame with your image.

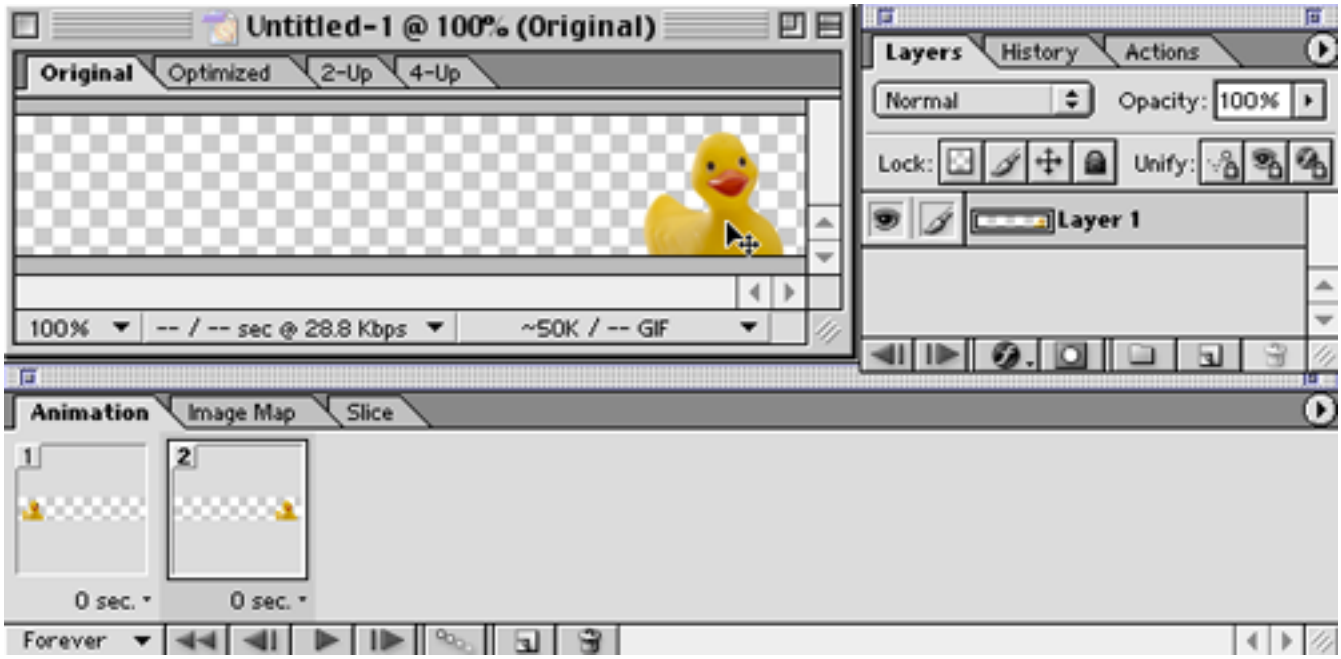
STEP 2 Create a new frame, while it is highlighted, move your image.

STEP 3 While the last frame is still highlighted, click the tween at the bottom of the animation palette or pop-out window. Choose With Previous Frame or First Frame, number of frames you want added (the more frames the smoother the animation but also larger), All Layers or Selected Layer and Position. Of course you may check all tween possibilities as a Position tween can be combined with a Opacity tween and Effects tween. New frames will be added to the animation.

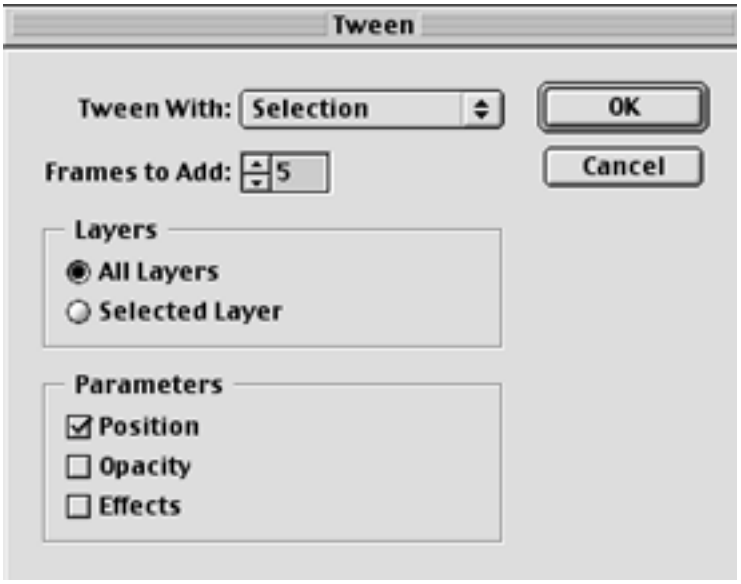
STEP 4 Play back animation, set delays if necessary and optimize animation.

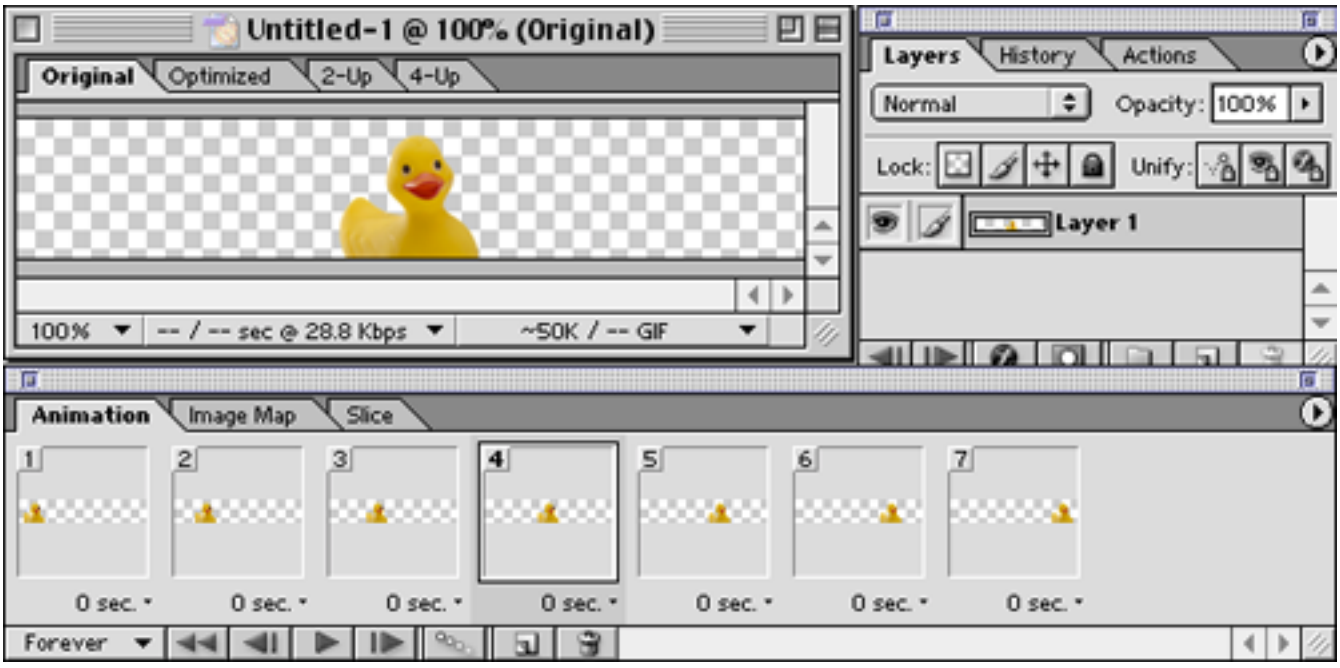
In this example the duck was moved from the left side to the right side.

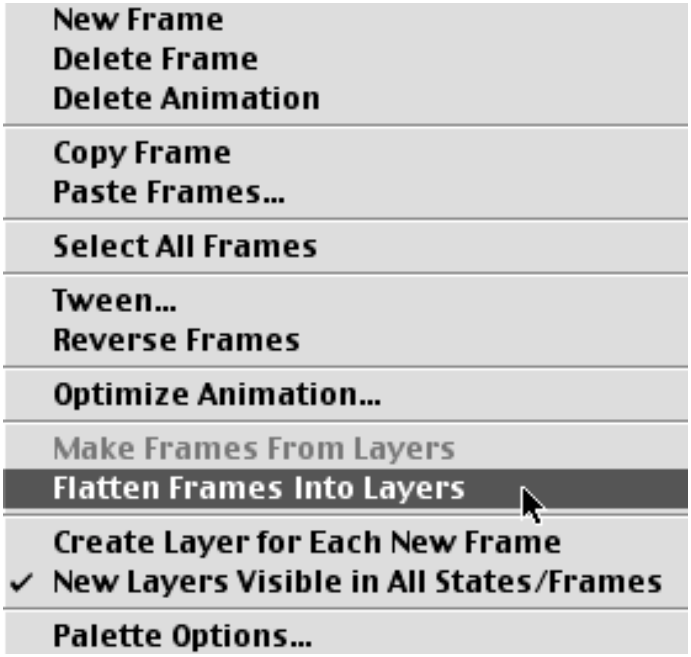


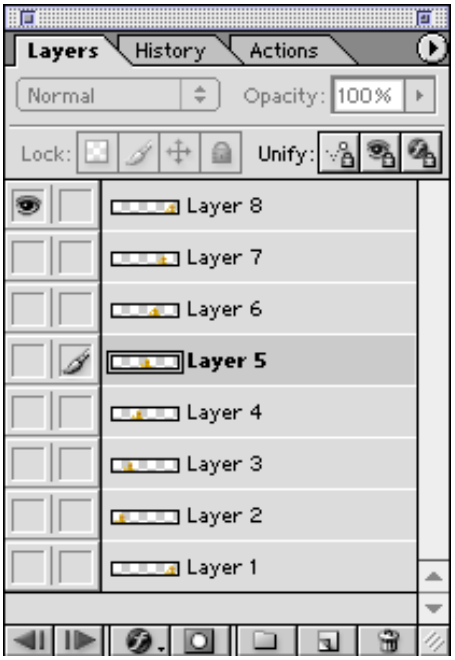


A position tween was then created using Previous Frame (you can also do this from a selected area as pictured left) and 5 frames were added each positioning the duck slightly more to the right. There are now 7 frames. However the duck is only moving in a straight line left to right. To change the orientation of the duck so he is swimming and to make him quack, all the frames including the tween frames were put into the Layer palette by choosing Flatten Frames Into Layers found in the pop-out menu of the animation palette. Note: If Create Layer from Each New Frame is checked in the pop-out menu, new layers will be generated each time you create a new frame automatically.





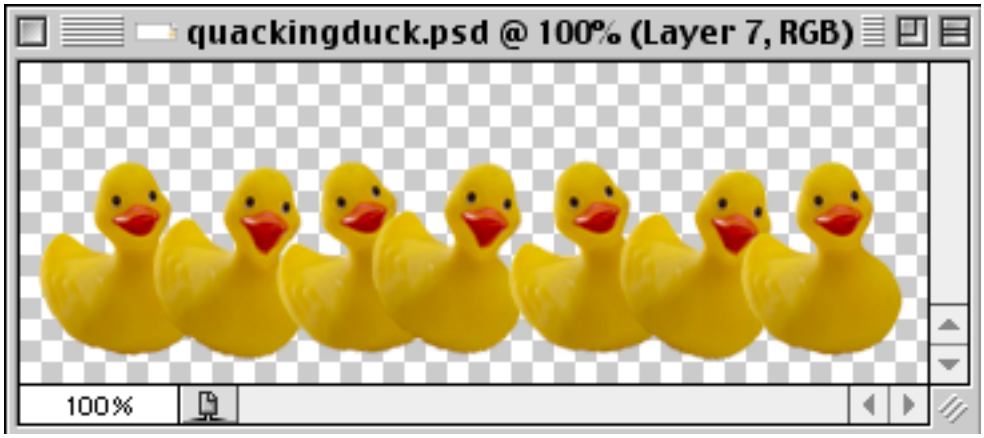




New Layer palette after Flatten Frames Into Layers

Once the frames are in the Layers palette, they can individually be alter, in this example Frames 2, 4, and 6 were rotated and a Liquify filter was applied to the duck beak.

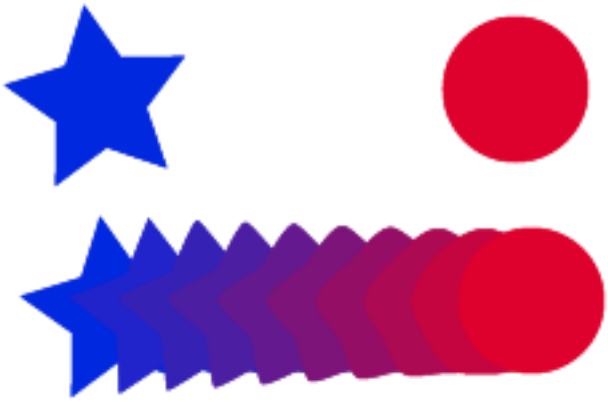
This is what the layers look like when they are all turned on. But caution when you turn on layers in ImageReady they apply to the current Frame of the animation!



The animation was set to a 0.3 sec delay for all frames and to play just Once. Then it was otimized at 32 colors with transparency giving a 12k file.

You can also jump back to Photoshop to tweak your layers if ImageReady will not do what you want it to. Unforunately this is only a change in position and not shape or size. What can be done in programs such as Macromedia Flash, Director and Fireworks know as shape tweening or a morphing type of effect where you can change one shape into another and change the size as well cannot be done in ImageReady. ImageReady has no tweening for shape or size. However it is possible to perform a shape tween in another program such as Illustrator and bring it into ImageReady to use in an animation.

EXAMPLE: blending.gif
If you know Illustrator you can create a blend like this shape and color blend. It is similiar to a shape tween. Create your two shapes. Select them and blend: Object > Blend > Blend Options. Choose number of steps. Then expand your blend: Object > Blend > Expand In Layers click on the Group and from the pop-out menu choose Release to Layers (Sequence). Move the blend layers so they are not nested. Then you can export them into Photoshop or ImageReady by: File > Export. Select Photoshop psd Format. A dialog box will open, select RGB, 72 dpi and check Write Layers. Save this psd document and open it in Photoshop or ImageReady. When you are ready to make your animation jump to ImageReady. From the Animation palette's pop-out menu choose Make Frames from Layers. You now have made this shape tween or blend into a gif animation!

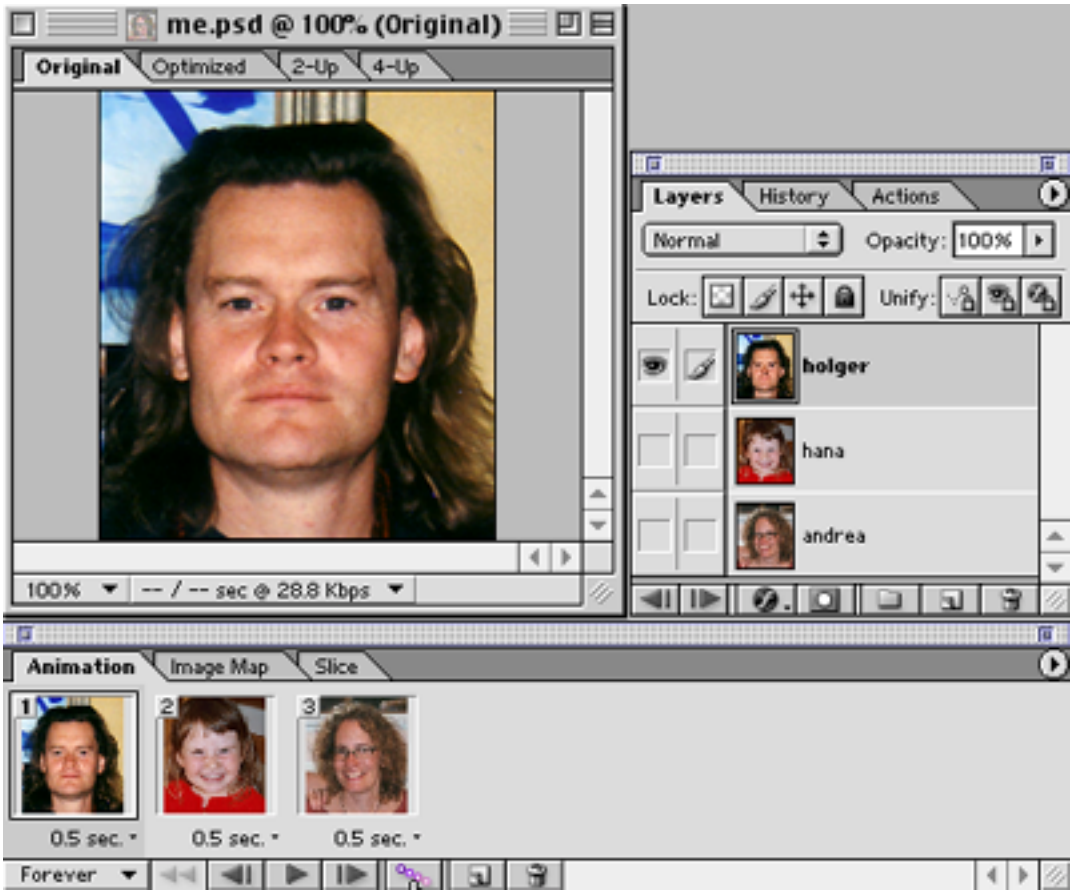


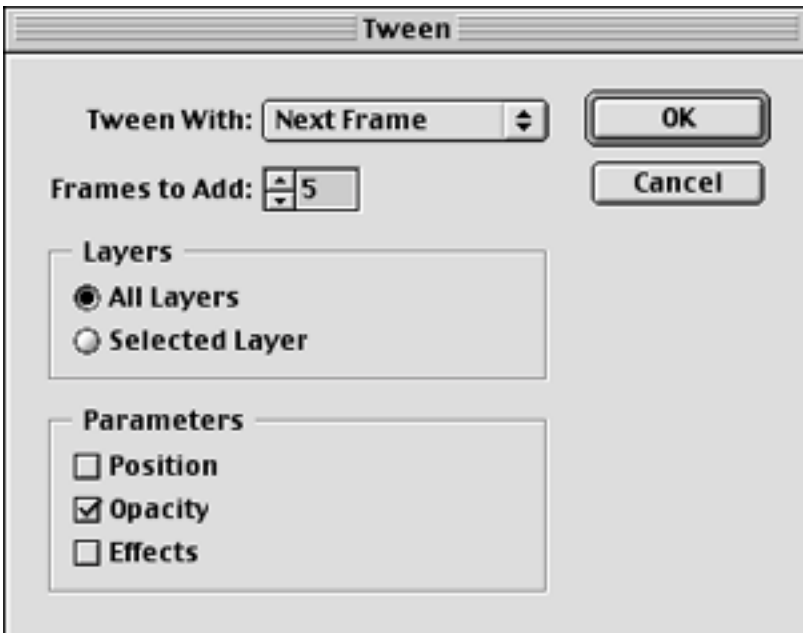
OPACITY TWEEN

Opacity Tween is when artwork changes opacity over a number of frames. Just as with Position tween, inbetween frames are generated from two keyframes.

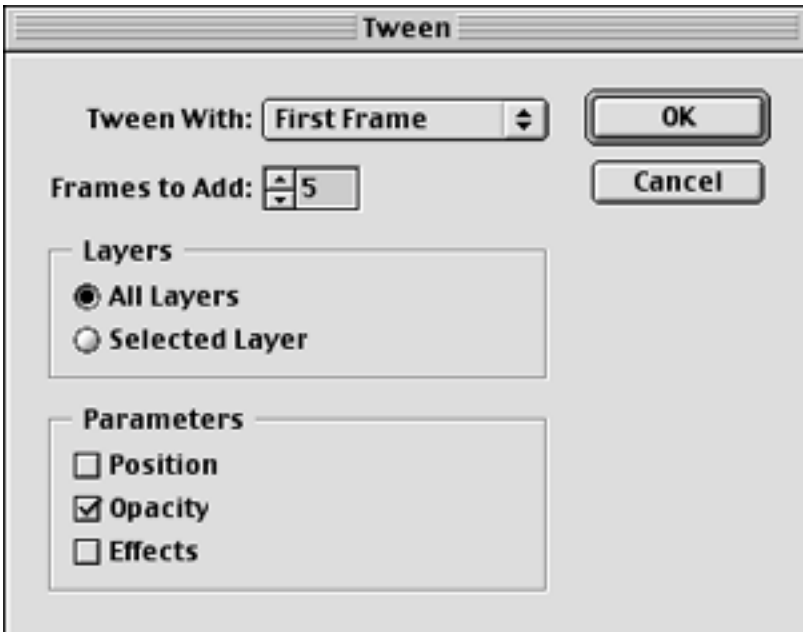
EXAMPLE: allofus.gif

Here is an example of such an animation that creates a morph type effect using three portraits. Frame 1 was highlighted, then tween was made with Next Frame and 5 frames added.





After tweening the first two images, Frame 7 (now the middle portrait of Hana) was tweened with the Next Frame of Andrea. To complete the morph effect the last frame (Andrea) was tweened with the FirstFrame (Holger) using opacity again.



The animation was then optimized as shown. Particular examination of Frames 1, 7, and 13 in the 2-Up window during optimization was taken since these were the images at 100%. You can click from frame to frame to see how it will look at the set optimization. The animation was then set to play 5 times by clicking on Forever at the bottom of the Animation palette and going to Other. It was then saved as a gif.

EXAMPLE: berlinbanner.gif
This is an example of images playing left to right, set to an Opacity tween of 2 frames for each image.

For an Effects Tween see the book. It is a great example of using a gradation to create color flow. There are infinite combinations of these four animation types. Experimentation is the key. But as always you need a reason to use an animated gif. Be careful not to make the viewer annoyed with your decision and that it enhances your message. This ends Lecture 09.