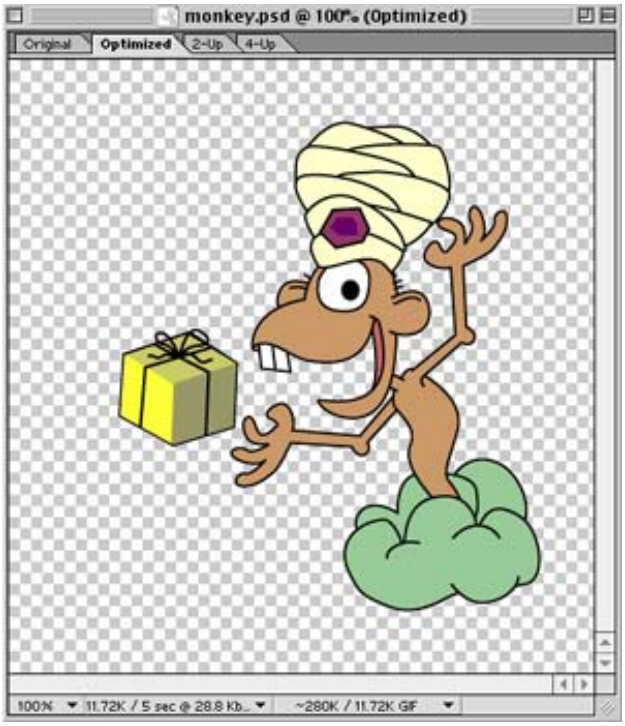
This will be a combined lecture and lab session. Do the exercises as we go along for the lab portion. We will cover optimization for files that contain transparency. This includes gif compression with transparency and other methods to make it appear as if transparency exists where it does not.

OPTIMIZING A GIF WITH TRANSPARENCY

Whenever you have an image that need transparency around it, the edge is always a problem. The edge will usually contain partially transparent pixels such as a drop shadow, a glow, or a feather. Often the edge will be an antialias edge such as with text. We have already discussed alias vs. antialias and you should be familiar with what the different edges look like and the number of colors that represent them.

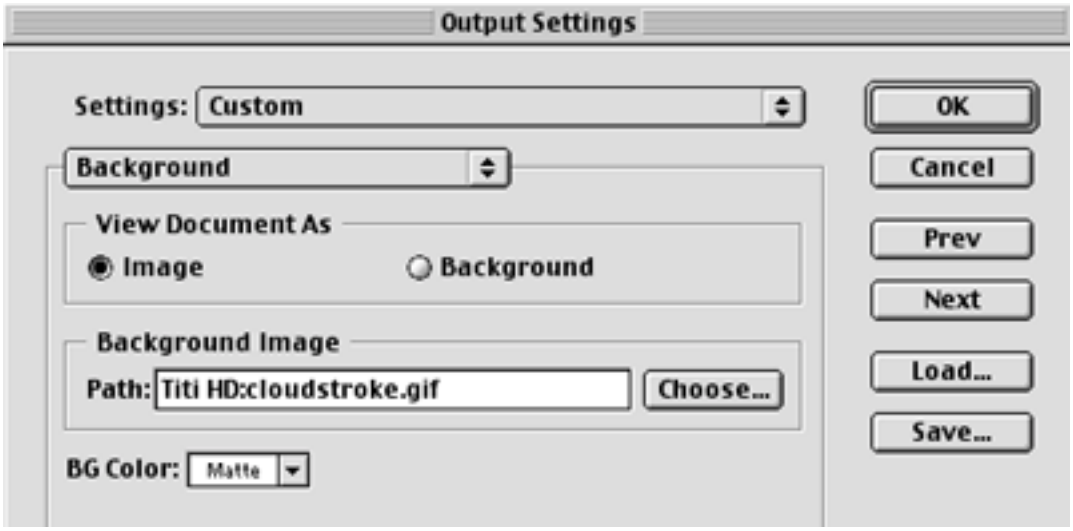
The first important thing to consider when dealing with tranparency is that the the image must have transparent areas for transparency to be recognized when optimizing a gif. This may seem obvious but sometimes we confuse that a solid white area is a transparent area. That is not so. In layers the image should have transparency around it and if there is another layer turned on so that the checker board of transparency is not visible, then turn off these other layers by clicking their eyes off. Now the image is ready to be optimized. Now let's see the optimization process and what happens when we try to get them onto a webpage.



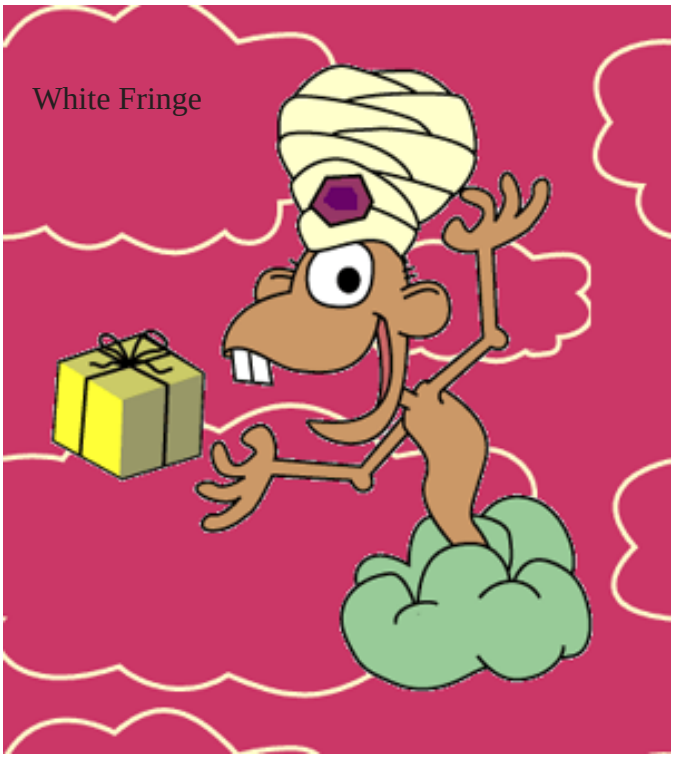
EXERCISE: Simple Transparency Against Different Backgrounds

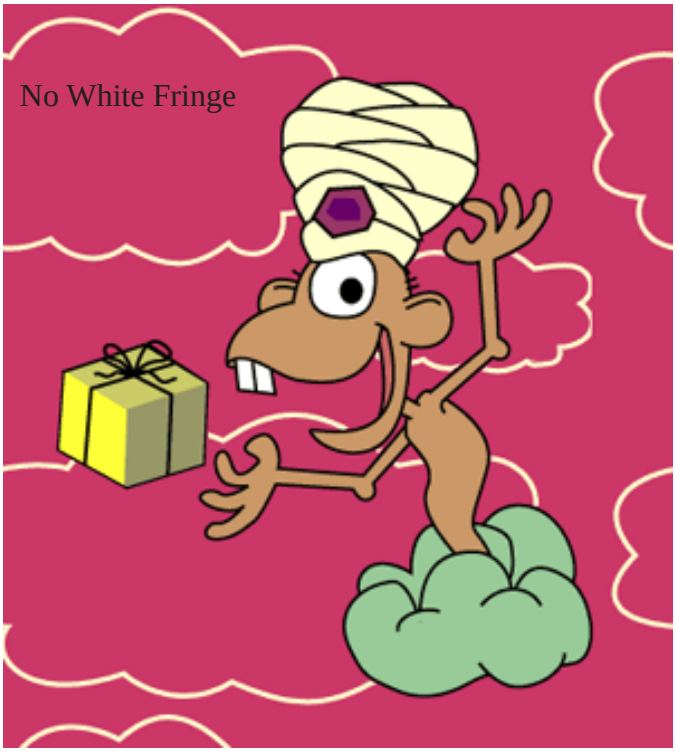
1. Open monkey.psd
2. Turn off the layer "magentabackground". The artwork must display the transparency in order to create a transparent GIF.
3. Click on the Optimized tab to view the image optimized.
4. Make sure the Optimize Palette and Color Table Palette are open. In the Optimize Palette set the following: GIF, Selective, 64 Colors, No Dither. Check the Transparency box. If you do not see it, click the double arrow next to Optimize and the palette will expand.

5. Now to view what you have done we will set the Output Settings. Go to FILE > OUTPUT SETTINGS > BACKGROUND. Select View As: Image. Click the CHOOSE button to select the image you want to use in the background. Find cloudstroke.gif (this image must be a gif) and click Open. Do you see the name of the file in your Output Settings? Good, click OK.



6. In the Toolbox click PREVIEW IN DEFAULT BROWSER button where you can select a browser to view your work. Hold down the button and go to the browser of your choice. You will now see the monkey image on the cloud background! The transparency is working but the edge has a white fringe. We'll fix that next.
7. Go back to the monkey image in ImageReady.
8. Open the cloudstroke.gif image.
9. With the eyedropper from the Toolbox, sample the magenta color in the image.
10. Now go back to the monkey image and use this color as the new matte color. In the Optimize Palette, click on the arrow next to the Matte color and drag down to Foreground Color. This will specify the color we chose with the eyedropper to be the matte color.
11. Preview your work in the browser by clicking Preveiw In Default Browser button. No more white fringe!
12. Go back to the monkey image and save it by FILE > SAVE OPTIMIZED. If you save it with the HTML file, the background will be saved too. Turn in both these files, the HTML and gif image.

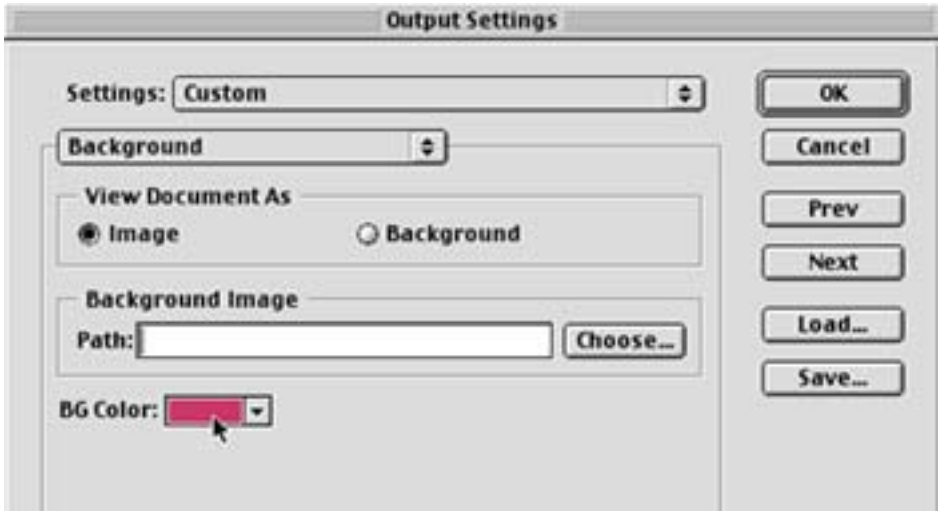




13. But what if your clouds are filled instead of outlines? Using the same monkey image ”monkey.psd”, change the background in FILE > OUTPUT SETTINGS > BACKGROUND to clouds.gif and click OK.
14. In the Optimize Palette make sure the Matte color is still the magenta and Preview it in the browser. What happened? Is the magenta line around the monkey more visible with these clouds? To correct for this you can set the Matte color to NONE. It will take away the antialiasing around the edge of the monkey, but sometimes a sacrifice is needed to get the result you desire.

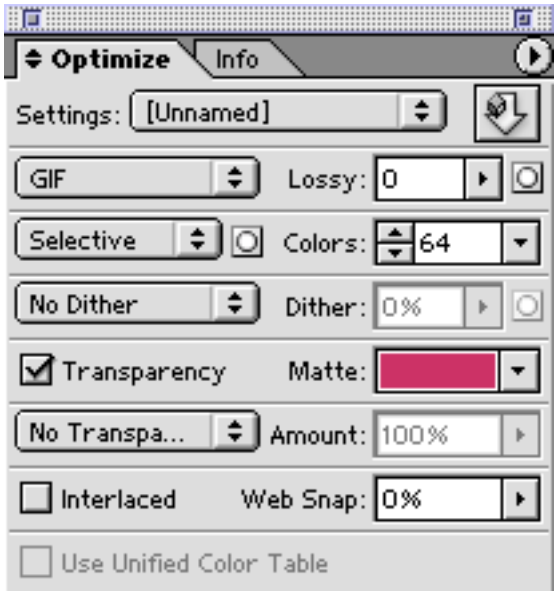
Magenta Fringe

No Fringe/Alias edge

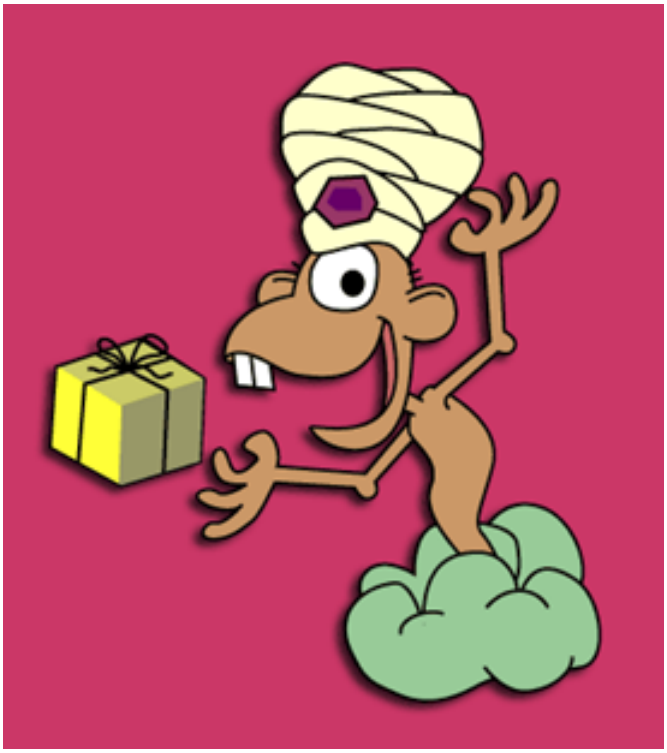


You can also just specify a Background Color (BG Color) that you will be using on your website and set your image's transparency for that background color. In the Output Settings Set: View Document As: Image and BG Color to whatever background color you want. In this case we denoted the background color of CC3366 by using the eyedropper. But you could also go to the Foreground color and put in your background color number. Then you can use it in the Output Settings and Optimize Palette.

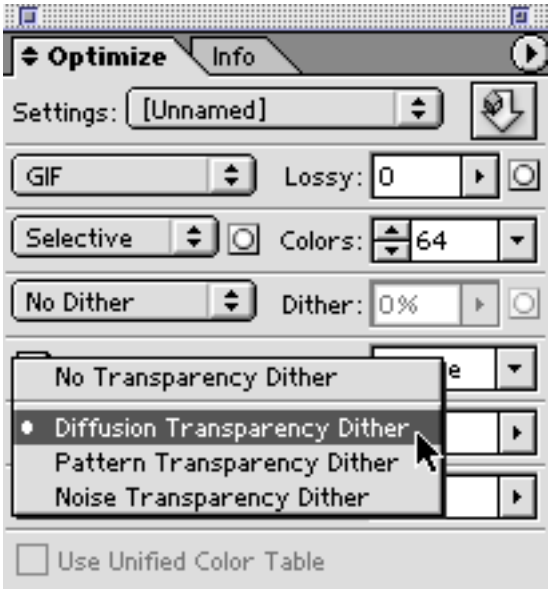
The Matte color in the Optimize Palette is the same as the Matte color in the Output Settings when it is set to Matte. When you pick a matte color in the Optimize palette it puts pixels of that color around your image so that it will match up with the background. When the background is very busy it is sometimes better to set the Matte color to None. It will create an alias effect around your image but at least it will not have a halo.



Try doing creating matte effects when using layer styles. Pictured here is a Drop Shadow on the left and an Outer Glow on the right. They are using a matte color of CC3366. Try these styles on the different cloud backgrounds. What happens? These work fine around a solid background but the more complex the background, the more difficult it is to get a smooth edge.



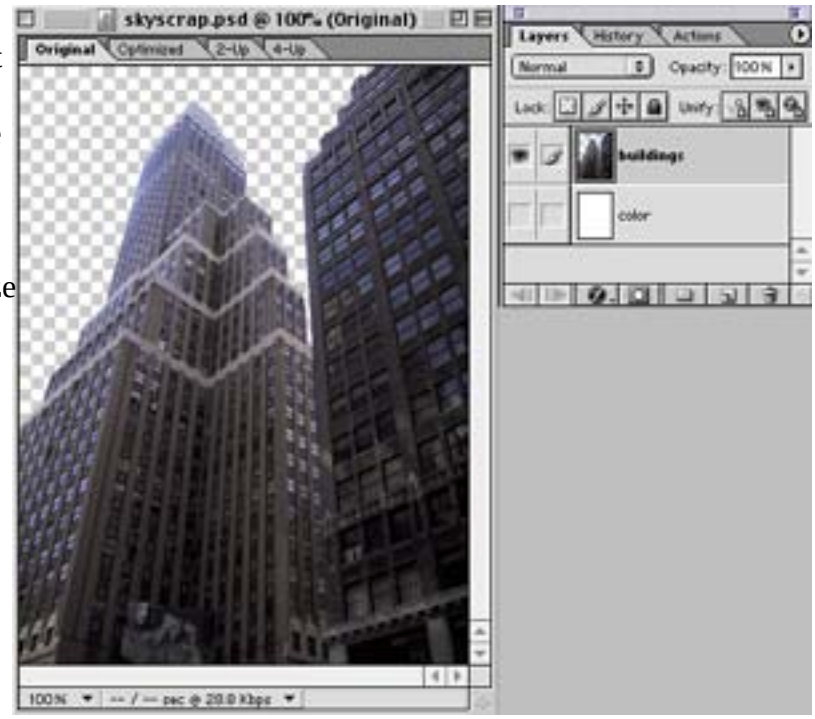
There is one more setting you make in the Optimize Palette. It is Transparency Dither. It sets three types of dithering effects for the transparent edge area. This end up causing a pixelated area around the image. It may be helpful if you have a very feathered edge like a vignette and you can't put the image on a solid background.



OPTIMIZING A JPEG WITH TRANSPARENCY USING MATTE COLOR

You can use the Matte feature of the Optimize Palette to create a transparent effect with a jpg. Here's how. First you must create an image with a transparent area (that will be the matte area). We did that already.

EXERCISE: Jpg Transparency Using Matte Color



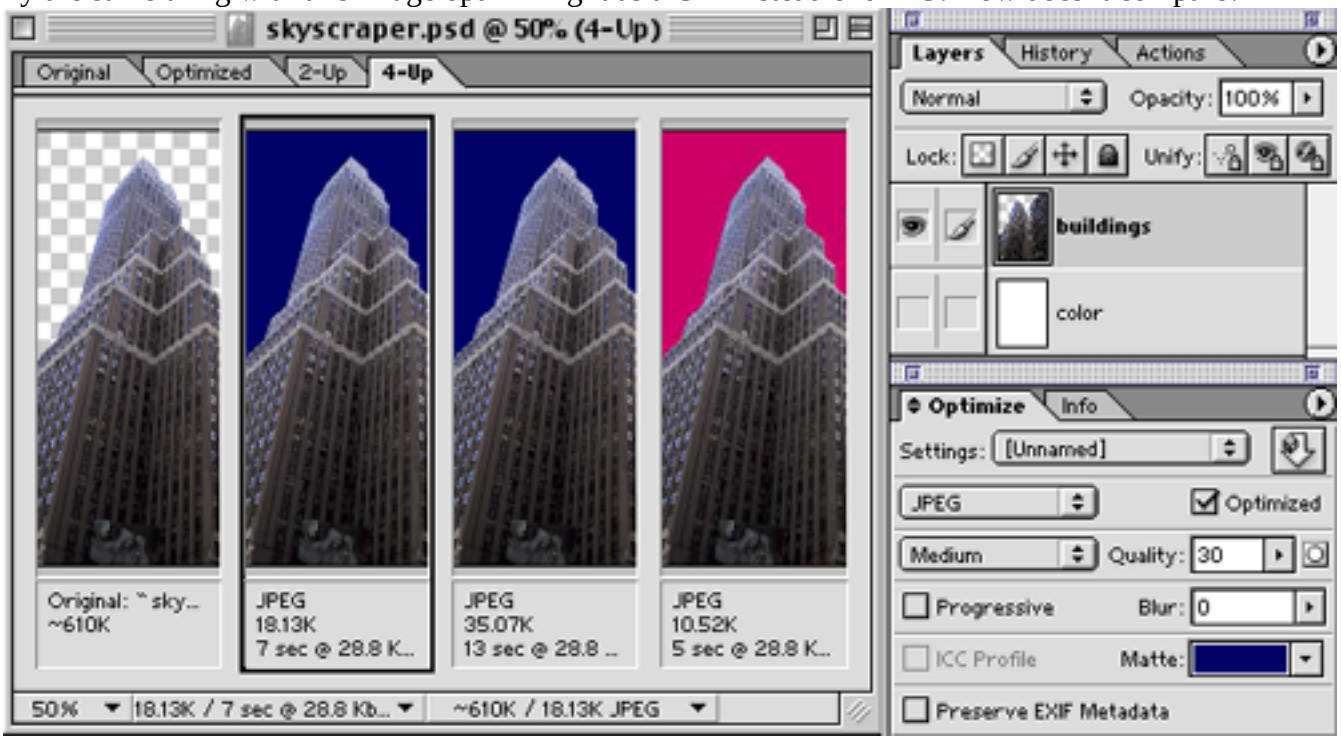
1. Open Skyscraper.psd
2. Go to the layers and turn everything off except the image with its transparency. In this example you will turn off the "color" layer by clicking the eye next to it.
3. Click on the Optimize tab. Notice the sky area (transparent area) filled in with white. That's because the default color is white. In the Optimize Palette set the Matte to whatever the background color of your webpage will be. In this example it will be blue, choose a blue.
4. Now click the 4-Up tab. Notice you can compare different matte colors.
5. Change the quality settings for views 2 to 4 and compare to determine the best quality jpg.
6. Add blur if necessary to get the image size smaller.
7. Save the best quality by highlighting it and going to FILE > SAVE OPTIMIZED
8. Now we will preview it to see what it will look like in the browser and write the HTML. Go to FILE > PREVIEW IN and select a browser. The browser will open up and show you what it looks like.
9. Now go back to ImageReady and go to FILE > SAVE OPTIMIZED AS

For the FORMAT: select HTML and IMAGES (You may also want to make a folder for these files to go into) Click Save. Turn in the skyscraper.html and skyscraper.jpg

10. Look for the files you just created on the hard drive: skyscraper.jpg and skyscraper.html

Double click on skyscrap.html. You should see the browser page with the skyscraper without the white box.

11. Try the same thing with this image optimizing it as a GIF instead of JPEG. How does it compare?



OPTIMIZING A GIF OR JPEG WITH FAUX TRANSPARENCY

You might say, why not just save the image with the background? But look what could happen if you do that. The monkey image may not align properly with the background.

However there are some cases where this trick technique will work, especially if you have a rather simple background. Here are some examples:

EXERCISE: A VIGNETTE ON A SOLID COLOR BACKGROUND

1. Open Vignette.psd
2. When you put this image on a white background, it will give the appearance of transparency. This may not always work with a JPEG. If the background color is not a JPEG also, you could see a dithering in the color around the vignette. White and black are safe colors to use for this example. Try it with a color.
3. Optimize the Vignette using a color matte both in jpg and gif format.
4. Preview the gif and jpg in the browser. Which one works the best?
5. Save the best version optimized with the HTML and gif or jpg to turn in.

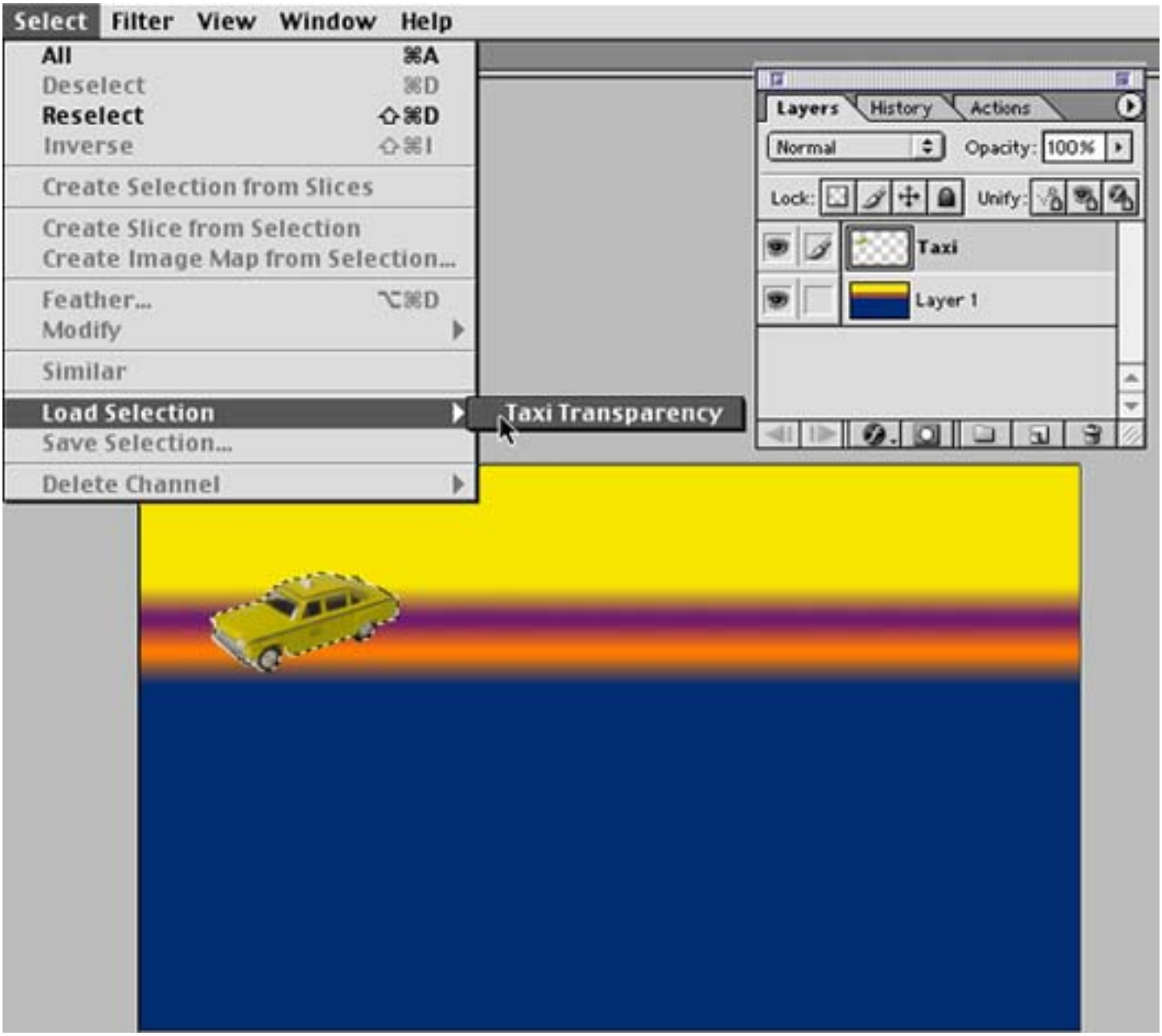
FYI: To Make a Vignette

1. Open your image and double click on the Background layer to turn it into a normal layer.
2. Make an elliptical selection around the portrait.
3. Apply a feather in the Select Menu: SELECT > FEATHER. Use a value of 8 or more.
4. Go to the menu SELECT > INVERSE (this will inverse your selection which makes the pixels outside the portrait active)
5. Press the Delete/Backspace Key and the area becomes transparent. You just made a vignette.

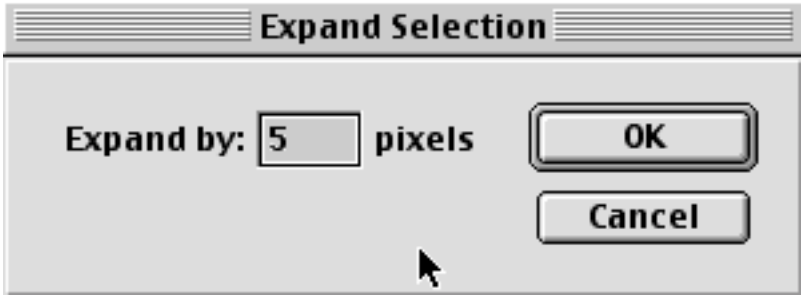
EXERCISE: CREATING YOUR OWN MATTE EFFECT

This exercise shows how a custom matte can be created. The matte can be many colors, not just one. It is a very cool trick.

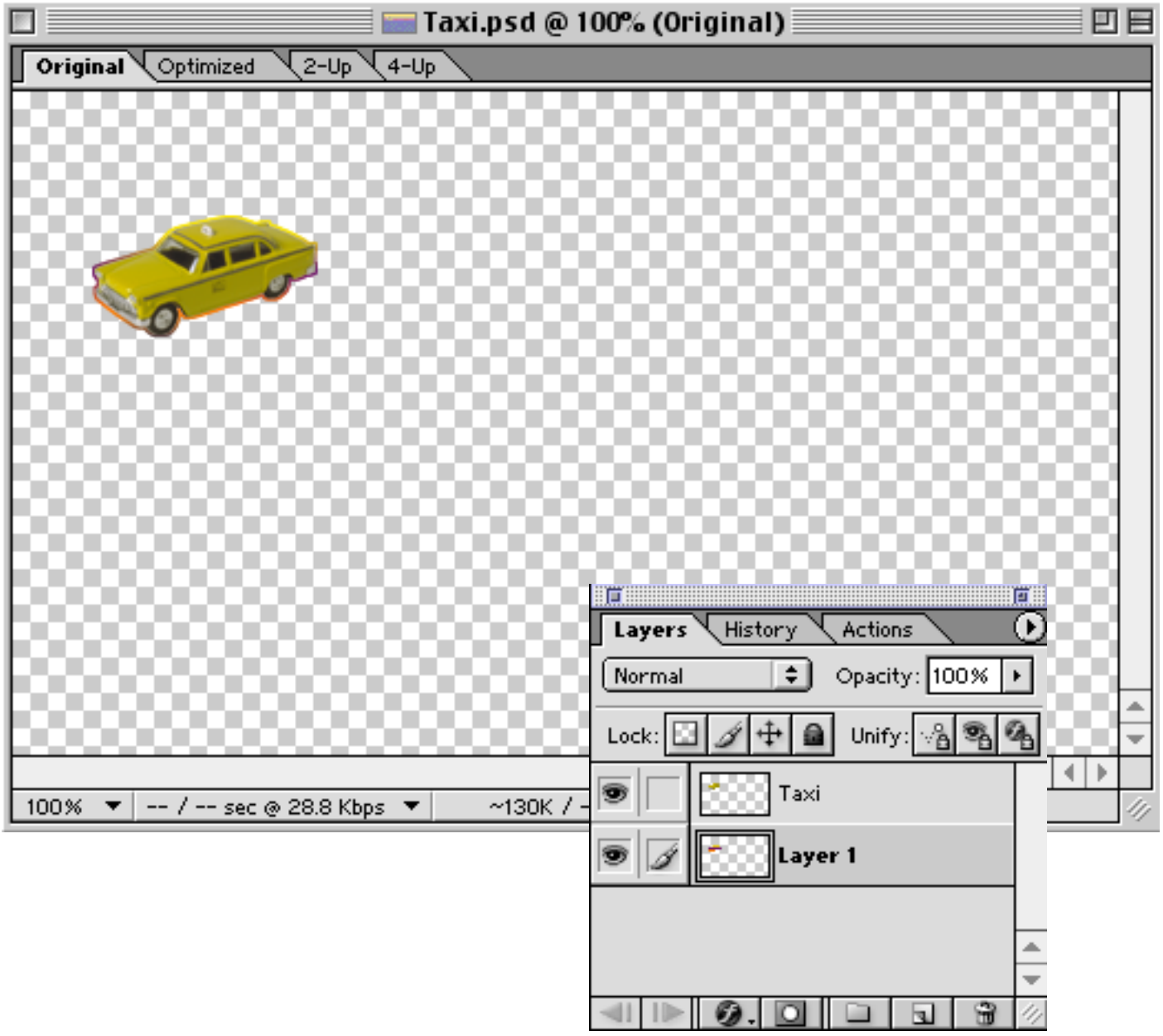
1. Open Taxi.psd
2. Notice the taxi is on a different layer than the background stripes. We are going to assume for this exercise that the stripes is the background that will be used on the website.
3. Select the Taxi using the menu or by Control/Command clicking on its layer.



4. Increase the size of the selection by going to the menu SELECT > MODIFY > EXPAND. Put in 1 pixel.

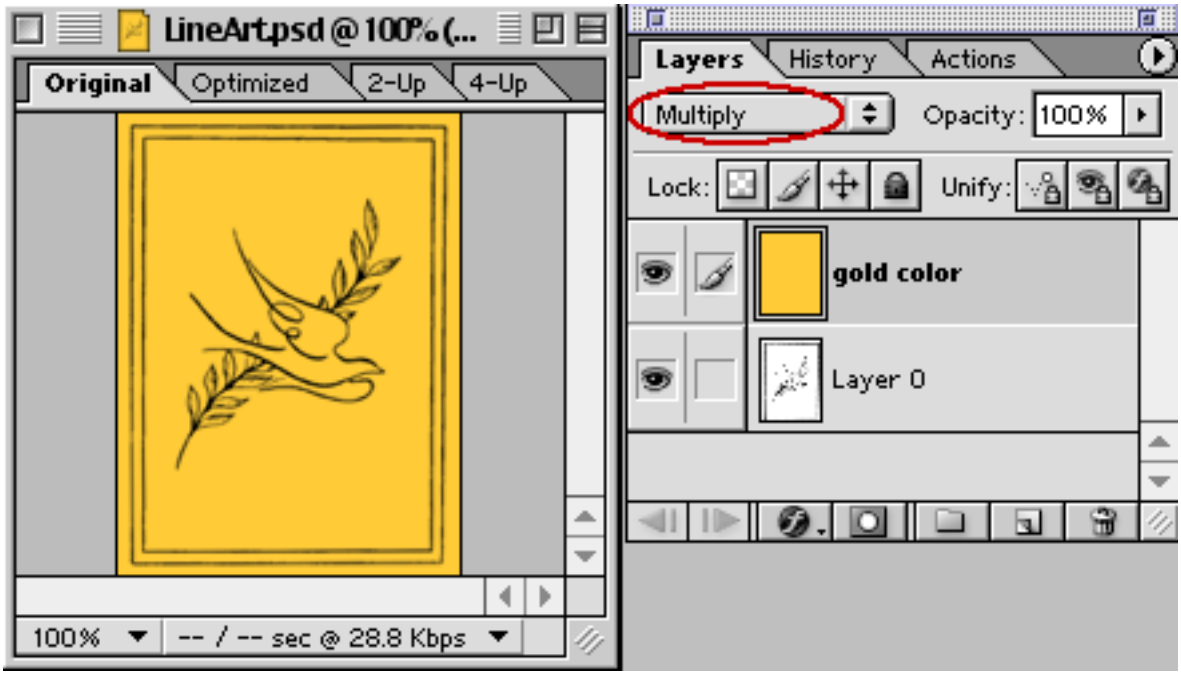


5. The next part is tricky. Click on the stripe layer. Then inverse your selection, SELECT > INVERSE
With the inverse selection on the stripe layer, press the Backspace/Delete key. The stripes will disappear except for a 1 pixel line around the taxi. You have just created your own matte.
6. Flatten the image and optimize it as a GIF with the matte set to NONE. It will now align to the stripe background pretty good provided it doesn't get so offset that it would end up in the blue area. Turn in the gif.



EXERCISE: A BLEND MODE WITH BLACK AND WHITE LINEART ON A SOLID COLOR BACKGROUND

1. Open Lineart.psd
2. Create a new layer and fill it with a color you want your background color to be on your website, I used gold.
3. Highlight the color layer by clicking on it. Make sure it is above the Lineart image.
In the Layers Palette change the Blend Mode (top of the Layer Palette) to Multiply. Notice the Lineart appears to have the color background now. This is another trick to give the appearance of transparency. Again if it is done with a JPEG, dithering may occur in the color area behind the lineart.
4. Save it as the best format gif or jpg and turn it in.



Let;s summerize the files that need to be submitted for this Lecture/Lab.

Exercise1: monkey with cloudstroke background - html and gif (the other monkey files do not need to be turned in)
Exercise2: vignette - html and best format jpg or gif
Exercise3: skyscraper - html and jpg
Exercise4: taxi - gif
Exercise5: lineart - best format gif or jpg

This totals 8 files. Put them in a folder and zip them or stuff them to turn in.