

Wilderness Coast Public Libraries
Presents
Editing Images for the Web with Adobe Fireworks CS4

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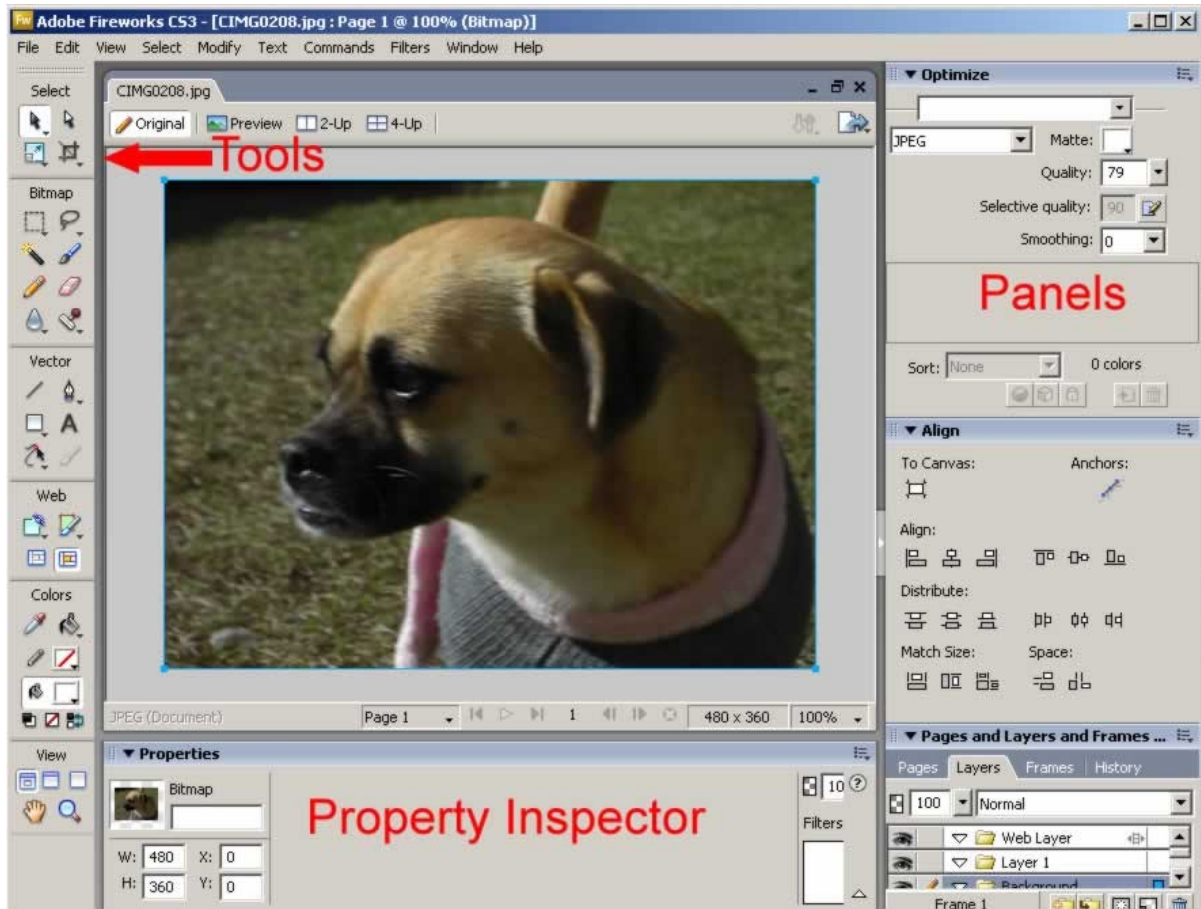
Length: 3 hours

SYLLABUS

- I. Introductions
- II. Description (or recap) of Web courses
- III. How images work on the World Wide Web
- IV. Bitmap vs. Vector
- V. Basic tools
- VI. Cropping images
- VII. Prototyping sites
- VIII. Color-schemes
- IX. Creating buttons
- X. Backgrounds
- XI. Images in CSS (Accessibility)
- XII. Optimization settings

Adobe Fireworks CS4

Adobe Fireworks CS4 blends the best qualities of Adobe Photoshop and Adobe Illustrator, while simplifying both. And because the World Wide Web is full of both photographs and illustrations, Fireworks is the natural solution for editing images or other graphics to go online.



Panels give many different options for editing and changing your images. For example, the **Layers Panel** displays any layers you have in your image so they can be edited separately. The **Colors Panel** provides many color options to create for stroke or fill colors, as well as preset swatches to choose from.

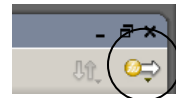
The **Property Inspector** allows you to view or change properties of a tool or an object. For example you could change the size or type of stroke of your brush. The Property Inspector is context sensitive. So each time you choose a different tool or select an object the options in the Property Inspector will change accordingly. The Property Inspector can be viewed at full size or half size. The small triangle in the bottom right hand corner of the Property Inspector is the toggle switch for full and half view.

The **Tools Panel** shows all the available tools you have to make selections, draw shapes, edit images, and crop images. The **Tools Panel** has 6 sections: **Select**, **Bitmap**, **Vector**, **Web**, **Colors**, and **View**. **Select** allows selection and resizing of objects. **Bitmap** has tools for selecting and editing pixels. **Vector** has tools for creating and changing vector shapes and text. (See the section on Bitmap vs. Vector). **Web** has tools specific to Web applications such as hotspot tool or the slice tool. **Colors** has options for choosing stroke or fill colors. **View** allows you to zoom or pan your image.

If you have more than one image open at a time and the window is maximized there are tabs at the top of the Document Window. You can quickly move between images just by clicking on the tab of the image you want to view.

If you want a larger view of the Document Window you can use the F4 toggle to turn on and off all the panels and the tools.

The Document Window also has a couple of unique buttons in the upper right hand side under the standard minimize, maximize and close buttons. The one on the right with the Fireworks symbol opens the **Quick Export** menu and allows you to easily export your image to other programs or to preview it in a browser. The double arrows are for **putting or getting** your file from a remote web site.



The bottom of the document window has the image size, a drop down menu for zoom options and an edit bitmap mode circle. The small circle with the white X, when red signifies you are editing in bitmap mode.



Creating and Saving a New Image

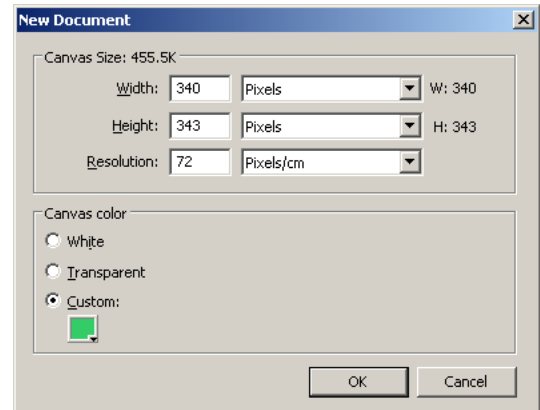
From the Fireworks Start Page click on the Fireworks File in the Create New section. Alternately, from the File menu, click on **New**. Either option will open the **New Document** dialog box.

Choose the width and height (for web applications it is best to use a pixel dimension and 72 pixels/inch is a good resolution). The **Canvas**, which is what you build your image on, can be white, transparent (no color at all) or you can choose a Custom color.

If you have an image copied to the clipboard and then open a new document it will default to the correct size of the item on the clipboard. Then you paste in your image and it fits the canvas.

Save your file early and often so you don't have to worry about losing any of your changes to your file. There is also a **Save as a Copy** option. If you save your file and choose Save as a Copy, it will save the file as it is but leave the original open for you to continue working on. If you just **Save As**, it will close the original file and open the newly created file.

Fireworks creates images in a **.PNG** file format. That is a **Portable Network Graphics** file. The .PNG file can have transparency and uses a lossless data compression. That means it compresses (makes smaller) a file with minimal loss of quality. The .png file was created as a replacement for the .gif file which was a patented file format. .PNG files are not universally recognized by browsers, so when creating an image the best practice is to save it in the native Fireworks format .png and then **Save As** a .jpg or .gif to use on the internet. Your image can be saved in many file formats. The .jpg format is usually the best for photos with many colors and color shades. The .gif format is usually the best for an illustration or an image with lines and solid color fills.



Open an Existing File

You can open existing files from the file menu. For a recently opened file choose **File > Open Recent** and choose from the up to 10 last viewed files. Or go to **File > Open** and navigate to the file you want.

Bitmap vs. Vector

Before learning to edit or manipulate images, it is important to know the difference between a **bitmap** (also called **Raster**) image and a **vector** image.

Bitmap

The Bitmap is probably the most common type of image you find. A bitmap image is like a grid with a color in each cell. On screen a pixel is a square of color. If you print a bitmap the printer prints dots of color. Since there are a limited number of colors of ink, a printer overlaps colors to make the color needed. The computer screen is capable of displaying over 16 million colors, so each pixel is just one color. To make a smooth transition, each pixel changes color just a little to fool the human eye to see a specific color.

Because each pixel is a different color it is hard to resize bitmap images perfectly. If you want to make your image smaller you have to throw out some pixels. That works pretty well. However, if you are trying to increase the size of a bitmap image the program will have to create pixels using a formula to add them into the image. This works pretty well in small increases, but if you try to increase the size considerably, the colors may not match as well as could be desired. This type of image is called resolution dependent as it is dependent on the number of pixels that are in the file.

Vector

A vector image is a resolution independent image because it does not rely on pixels. Instead a vector image uses lines, curves and fill colors to make up the image.

A vector image could be described as

- Circle: (200cm)
- Fill color: Gradient
- Gradient type: Radial
- Colors: Black, Red
- Line color: none

This is quite different than literally mapping out each and every pixel.

Vector graphics size very well as the only thing that needs to change is the size. Vector objects consist of many points all of which can be edited. Vector graphics are good for illustrations and logo type images. Images with many colors and color changes would not look good in a vector format.

Fireworks Tools



In order to edit or manipulate images Fireworks provides many different tools. The tools are in six sections: **Select, Bitmap, Vector, Web, Colors, and View**. To choose a tool, click and release. Any tool that has a small dark triangle next to it has alternate tools underneath. To choose the alternate tools, click and hold over the tool. Each tool also has a tool tip giving the name of the tool. To get the tool tip, hover over the tool.

Each tool selected brings up various options in the **Property Inspector**. If you can't see the tool options, you may have the image selected. Deselect the image from the menu **Select > Deselect**.

Select

The Select tools are used to select, move and resize images. The dark pointer selects or drags objects or images. To select more than one image or object click to select the first object and shift click the other objects.

Under the selection tool is the Select behind tool. Use this if objects are stacked and the one you want is behind (actually under) another object.

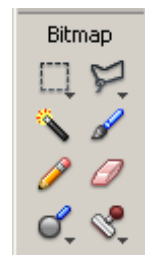
The smaller white arrow is the subselection tool. This tool will select individual points in a vector image or objects in a group.

Under the white arrow is the crop tool. Cropping deletes areas of the image outside the rectangular area you want to keep. Click and drag the crop tool in a bitmap image to select the part of the image you want to keep. You can resize crop area by clicking and dragging on the sizing handles. Click and drag the crop area to reposition it. Hit the Enter key to activate the crop.

The last tool in the Select area is the Distort tool. Using this tool allows you to scale, skew or rotate your image.

Bitmap

The Bitmap tools allow you to select or alter pixels in a bitmap image. The **marquee** tool creates a selection area. Choose the marquee tool bring your cursor into your image and click and drag to create a rectangle area or hold the shift key while dragging to create a perfect square. Under the marquee is the **Oval marquee** tool to create oval or round selections. Once a selection is created, you can hold the shift key and make a new selection to add to the original selection. Hold the Alt key and make a new selection to subtract that selection from the original. Holding the CTRL key will allow you to move the selected area of the image. Selections can be hard edge which will select pixel by pixel, anti-alias which will soften the edges by adding less opaque pixels to smooth out the square stair stepping of the pixels or feather which will start out opaque and move



to transparency with a size you set in the feather option in the Property Inspector. A quick way to deselect is to use the keyboard shortcut CTRL + D.

The **lasso tool** is similar to the marquee, but you control the selection by hand. Under the lasso tool is the **polygon lasso** tool which selects in straight lines creating a polygon selection.

The **pencil** and **brush** are very similar and allow you to draw on your image. The brush is different from the pencil in that you can change the width and density. Change colors in the property inspector.

The **eraser** deletes selected pixels in bitmaps only

The **magic wand** tool selects by color. The tolerance factor is how many similar colors to the one pixel you click on you want to select. The tolerance can be from 1 which would select only the exact color you chose, up to 255 which would choose all colors.

Fireworks provides a wide range of tools to help you retouch your images. You can alter an image's size, reduce or sharpen its focus, or copy and "stamp" a part of it to another area.

- The **Rubber Stamp** tool lets you copy or clone one area of an image to another.
- The **Blur** tool decreases the focus of selected areas in an image.
- The **Smudge** tool picks up color and pushes it in the direction that you drag in an image.
- The **Sharpen** tool sharpens areas in an image.
- The **Dodge** tool lightens parts of an image.
- The **Burn** tool darkens parts of an image.
- The **Red-eye Removal** tool reduces the appearance of red eye in photos
- The **Replace Color** tool paints over one color with another color

Vector

Vector tools allow you to create vector graphics or manipulate points in a vector graphic. You can create straight lines with the **line** tool, curved lines with the **pen** tool, vector paths with the **path** tool, vector shapes with the **shape** tool, **text** with the text tool.

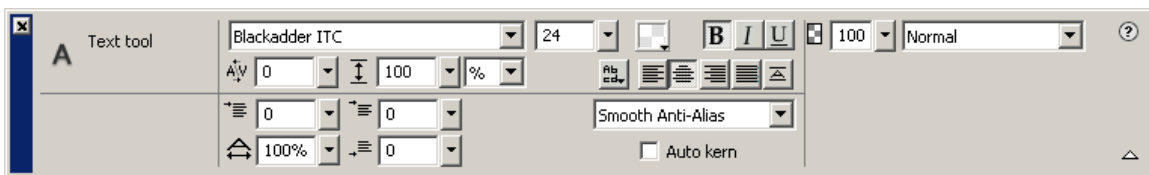
To create straight lines, choose the **line** tool and click and drag on your canvas. There are several **vector shapes** to choose from. Click on the shape you want and click and drag on your canvas to size the shape. In the property inspector choose a fill color or stroke color if desired.

The **knife** tool cuts vector objects apart.



The **pen** tool can be very tricky. Click a point to start and to make a straight line just drag to the next point and click. You can continue to make a straight line or when you click you can make a corner point. To make a curve, click and drag. This creates a direction line with “weights” on either end. Depending on how you maneuver the weights on the end of the direction line changes the depth and angle of the curve. This really takes practice to get the curves to behave. To edit a curve use the subselection tool to select a point. Move the direction handles to change the curve. To change just one side of the curve click the Alt key. When you are done with your line double click to end it, or move off the path and Ctrl + Click.

Text can be altered in the property inspector. You can change font, color, size, kerning, leading and other options in the property inspector.

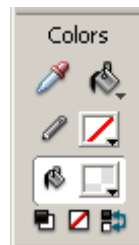


Web

The web tools allow you to create hot spots or slice an image. A **hot spot** allows hyperlinks on sections of an image. **Slicing** an image allows for optimizing (making the best quality for the smallest file) of different sections of an image.

Colors

In the colors section you can set the color of the **stroke** (the edge of your object) or the **fill** color. The pencil color picker sets the stroke and the paint bucket color picker sets the fill. The **eyedropper** allows you to choose a color on screen and set your stroke or fill to that color. Under the paint bucket is the **gradient** tool which allows for a gradient fill. The property inspector gives many options for fill colors and opacity. The small icons on the bottom of the Colors section will reset the default colors, create no color and swap the stroke and fill color.



View

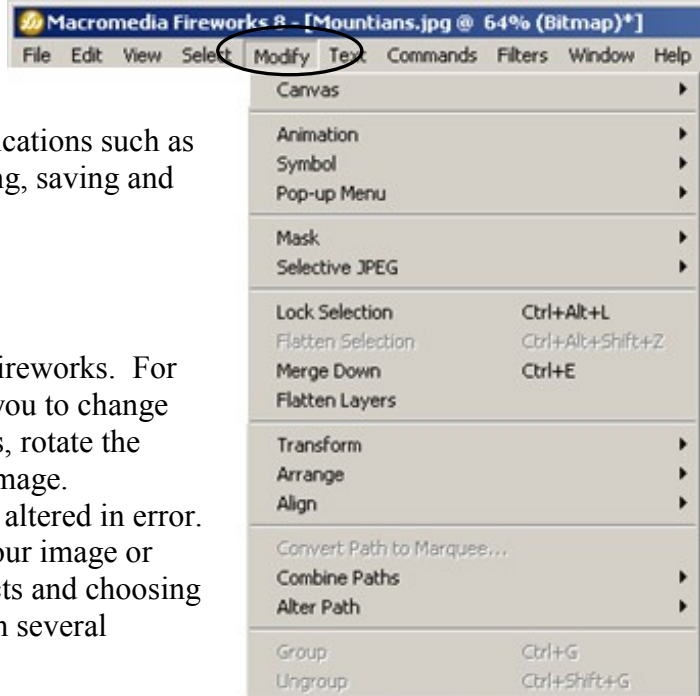
The view section allows for different screen views from standard to full screen. Another way to get a larger work area is to use the F4 toggle to hide the tools. The **Hand** tool allows you to move an image that is larger than the work area around so you can see all the parts of the image. The **magnifier** zooms in on the image. Holding down the Alt key while clicking with the zoom tool zooms your image out.



Menus

The Fireworks menu bar offers many ways to manipulate images/graphics/objects.

Many options are similar to other applications such as the File menu offers options for opening, saving and closing images.



Modify

The **Modify** menu is more unique to Fireworks. For example the **Canvas** selection allows you to change image size, resize or recolor the canvas, rotate the image and trim the canvas to fit your image.

You can **lock a selection** so it can't be altered in error.

Transform allows you to transform your image or your selection. Selecting several objects and choosing

Align allows you to align the objects in several different ways.

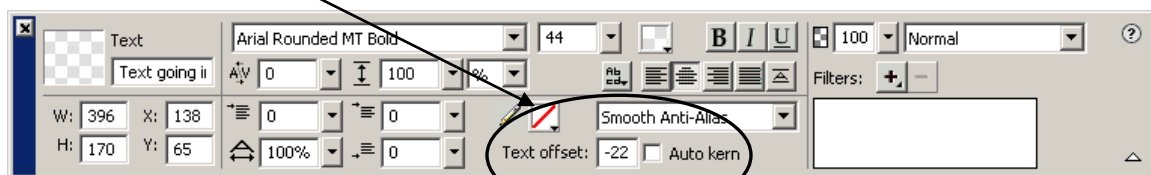
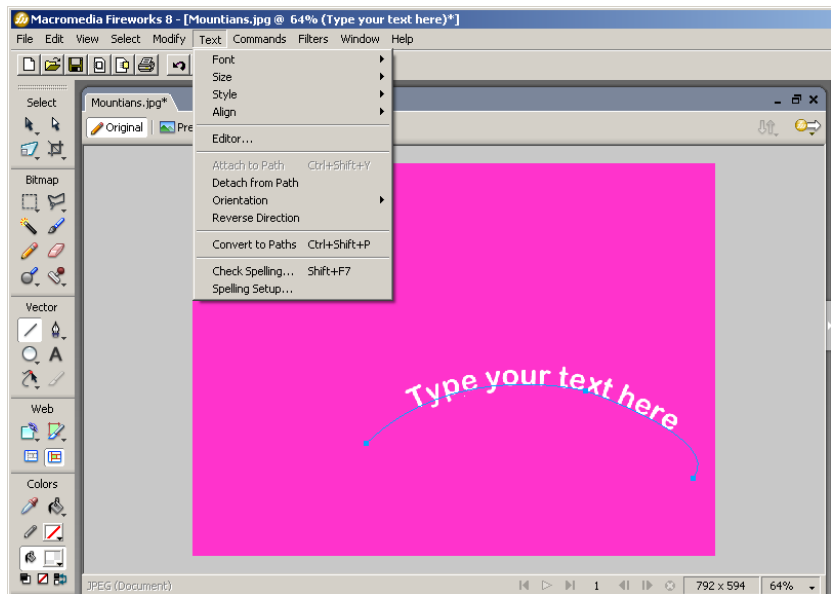
Text

One interesting thing you can do with text in Fireworks is that you can draw a path and then attach your text to it.

To Align text to path:

1. Create the text.
2. Create the path
3. Shift-select both the path and the text.
4. Choose the text menu and click on **Attach to Path**

To change the starting point of the text change the **text offset** in the Property Inspector

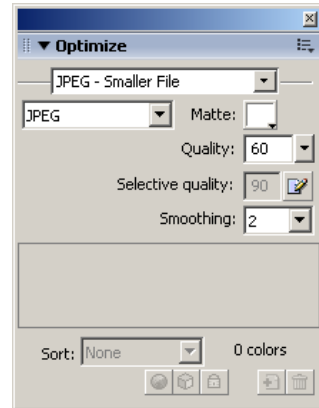


Panels

The panels in Fireworks can be opened or closed by clicking on the name of the panel. They can be turned on and off by going to the Window menu. They toggle off and on, if there is a check in front of the panel name it is on. If you are looking for a panel and you can't see it look in the Window menu.

Optimize

To get the smallest file with the best quality you want to optimize your image before exporting it to Dreamweaver or saving the file. Use the Optimize panel with the previews to get the best image. Here you can change the type of file and the quality. Using the 4-up preview with the optimize panel allows you to see the different ways your image will look when you change options. Usually a jpeg is best for photo type images while a gif is best for illustrations or logos or images with few colors.



Layers

Your images may include many different layers. Layers in Fireworks are used for organization. Layers in Fireworks are more like a folder for holding bitmap images or vector objects. All Fireworks images have a Web layer on top. The layers can be visible or hidden by clicking on the eye toggle. Layers can be locked to prevent them from being moved or altered.

