

ADOBE® FIREWORKS® CS5



CLASSROOM IN A BOOK®

Instructor Notes

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Adobe® Fireworks® CS5 Classroom in a Book®

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INSTRUCTOR NOTES

Getting Started

The Adobe® Fireworks® CS5 Classroom in a Book® course presents students with tips, techniques, and solutions for using the Adobe Fireworks CS5 software.

The Instructor Notes are intended to complement the information in the Adobe Fireworks CS5 Classroom in a Book®. The information is organized to follow the sequence of instruction in each lesson. These notes are not a play-by-play of each subsection of the book; rather, they point out specific areas where we feel you can expand on the lesson, or perhaps introduce tangential subjects that may not be covered in the text.

Course strategy

If you're teaching a 15-session class, you can teach approximately one chapter of this book per class. The book contains 11 lessons, plus two supplemental lessons on the companion disc, some of which may take a while to complete. If you are teaching a 10-session class, you may want to combine some of the lessons in a single class.

For example:

- Lesson 1 is focused on learning about the Fireworks user interface.
- Lesson 2 covers the Pages, States, and Layers panels in detail. These are very important panels in Fireworks and crucial to almost all but the most basic work in Fireworks.
- Lessons 3 and 4 cover related aspects of photo retouching and bitmap selections.
- Lesson 5 is about working with and creating vector objects. Also, Lesson 6 covers effects that are based on masking using both vector objects and bitmap selections. Lesson 7 focuses on working with text.
- Lesson 8 is an in-depth introduction to creating web objects, optimizing images for web use, and exporting files for use in HTML-based prototypes. Exporting a single page as a standards-based CSS/HTML layout is also covered in this lesson.
- Lesson 9 is focused on the three different types of symbols you can create within Fireworks. Symbols can save you time and file size because they can be used over and over again within a file, and because editing symbols affects all children (instances) of a symbol that are in a design.

- Lessons 10 and 11 are focused on creating interactive prototypes. Lesson 10 covers the important workflow of creating wireframe mockups and ends with the student exporting this wireframe as an interactive PDF file. Lesson 8 should definitely be covered before moving to these lessons, as web objects are used in both Lessons 10 and 11.
- Lessons 12 and 13 (found on the companion disc) take the student beyond the basic functionality of Fireworks and cover topics such as using Adobe Bridge, using batch processing, adding metadata to files, and working with other applications such as Photoshop, Flash, Dreamweaver, AIR, Flash Catalyst, and Device Central.

Enhanced and new features

Lesson 1—A new feature, Gradient Dithering, is demonstrated in this lesson. Also, while not discussed until later, the Gradient Editor has a new feature—a one-click button for reversing the direction of a gradient. Lesson 1 also describes another new feature: the ability to lock object proportions in the Properties panel.

Lesson 2—The context and options menus for Pages and Layers are a little more robust in this version of Fireworks. In particular, you can now turn off page numbering in the Pages options, and you can right-click or Control-click to export a selected page independently from a multipage design. You can also select any number of pages in the Pages panel and use the Options menu to export those specific pages.

Importing files also has a slightly different workflow now. Any Fireworks PNG file that has been saved in CS5 now has page previews attached to the file. This allows you to preview specific pages in a multipage file and only import a specific page. Only one page at a time can be imported.

Lesson 3—Using the Lock Proportions feature in the Properties panel is demonstrated in this lesson. This is a real time-saver, but make sure students don't try scaling up bitmap images, as the results—while in proportion—still won't look good.

Lesson 5—This lesson introduces the student to a new vector feature—the Compound Shape tool. With this tool, users can create complex vector artwork using simple vector shapes. The shapes are temporarily grouped together, but are also easily editable using the Subselection tool. Students can experiment with effects such as punching or cropping vectors with no permanent change made to the artwork. This exercise is near the end of the lesson starting on page 100.

Lesson 7—About a dozen enhancements were added to text handling in CS5. A few enhancements are specifically described in the lesson, but here is a list of all the text enhancements:

- Ability to multiselect the text characters inside a text block.
Use the Shift key to select multiple different characters present at different locations inside a single text block. After highlighting some text characters using the mouse, we can keep the Shift key pressed and highlight characters at some other place in the text block.
- Ability to select similar characters inside a text block.
 - Press Alt/Option and then double-click on a single word/character that has styled attributes (bold, for example) to select all other words/characters with the same attributes present in that text block.
 - Press Shift+Alt/Option and single-click on any word to get that word added to the already made selection.
 - Press Shift+Alt/Option and then double-click on any word/character with another styled attribute/property to add all such second types of similar characters to the previous selection made, and so on.
 - Press Alt/Option and single-click on any word in the selection to deselect that word from the selection.
- Ability to undo the changes made while in text editing mode. In other words, undo at a character level is now possible in the editable mode.

Earlier we were able to undo changes made to the text element at the object level. Now we can undo any changes made while inside text editing mode itself. All the changes made (even typing of characters) are stored internally and can be undone by pressing Ctrl/Command+Z and redone by pressing Ctrl/Command+Y.

- Kerning between the characters can be changed by keeping the cursor in-between and using the keyboard arrow keys. The slider value has also been increased to 200.

This ability to increase or decrease the kerning or tracking value has been restored to what it was in Fireworks 8 and Fireworks CS3. By keeping the cursor between two characters, we can change the kerning value using a keyboard shortcut.

Here are the ways in which we can increase or decrease the kerning or tracking values:

- By keeping the cursor between any two characters, we can increase or decrease the kerning value by 10 points by pressing Ctrl/Command+Left/Right arrow key or by using the slider in the Properties panel.
- By keeping the cursor between any two characters, we can increase or decrease the kerning value by 100 points by pressing Ctrl/Command+Shift+Left/Right arrow key or by using the slider in the Properties panel.
- By selecting a range of characters inside a text block, we can increase or decrease their tracking value by 10 points by pressing Ctrl/Command+Left/Right arrow keys or by using the slider in the Properties panel.
- By selecting a range of characters inside a text block, we can increase or decrease their tracking value by 100 points by pressing Ctrl/Command+Shift+Left/Right arrow key or by using the slider in the Properties panel.
- CS3 kerning and tracking values will automatically be mapped when opened in Fireworks, and the look will be preserved.

Kerning and tracking values that would have been applied to CS3 or legacy text objects would not be the same when opened in post-CS4 builds (essentially due to the change in text engines from CS3 to CS4). When opened in Fireworks CS5, CS3 kerning and tracking values are mapped automatically.

- The text overflow indicator will appear if extra characters are not fitting for text-in-path or text-on-path.

If you have chosen to attach some text inside a path or on a path, it may be possible that the text characters are greater than the path length that was chosen. In cases where some of the text characters are not being shown because of insufficient path length, a text overflow indicator appears. This gives a visual indication to the user that more text characters are present.

- Text blocks now support line breaks, even if there is a paragraph break set to it. If a text block contains paragraph space settings (double spacing, for example), pressing Return (Enter) will move the cursor down, as per the paragraph space setting. To override this, you can now press Shift+Enter/Return to take the cursor down to the immediate next line (paragraph space settings will be overridden in this case).

Lesson 9—Although no new features are discussed, Lesson 9 introduces students to the concept of wireframing a website or application. This is an important step in the development of software, websites, and applications.

Lesson 12—A new feature that many beginners will love is demonstrated in this chapter: document templates. There are five template categories that ship with Fireworks: Document Presets, Grid Systems, Mobile, Web, and Wireframe. Take some time to study these templates and get comfortable with how to use them, especially the presets, grids, and mobile categories.

Lesson 13—This lesson introduces the student to the integration between Device Central and Fireworks, and the workflow between Fireworks and Flash Catalyst.

Managing student projects

One way to simplify file storage and retrieval in classroom situations is to ask students to create a folder on their hard disks, name it [*student's name*] Lessons, and then copy each project folder into the main Lessons folder. Having students keep all their working files in their own Lessons folder makes it easy for you to clean up files when a class is over.

Lesson 1: Getting to Know the Workspace

The first lesson presents an introduction to the Adobe Fireworks CS5 software.

Using the basic commands, tools, and panels, your students will learn general techniques for using the work area efficiently, obtaining information about the image in front of them, and selecting tools or entering values to change the image. This lesson also introduces students to the History panel, a valuable tool in undoing and stepping backward in their work.

Goals for this lesson

How much time you should schedule for this lesson depends on whether your students already have any knowledge of Fireworks and on their computer skills in general. The overall objective for Lesson 1 is to make them sufficiently familiar with the user interface so that they can locate the controls they need to do the procedures in the rest of the lessons. Additionally, by learning how to help themselves, students gain confidence and independence. In general, they should be able to do the following:

- Identify and name the key areas of the interface, including the Tools panel, panels (in general), document windows, and the Properties panel.
- Open the main menus and submenus across the top of the work area (File, Edit, and so forth), context menus, and panel menus.
- Access and search Adobe Community Help, which includes the full Fireworks CS5 Help, as well as links to other Adobe and third-party Fireworks resources online.

Finding tools in the work area

You may want to introduce students to the Fireworks environment by providing a general tour of the work area. This helps orient the students and provides a review of the names of the elements on the screen. For example, you may point out the title bar and remind students that it indicates which document is currently active. Then point out the menu bar, the rulers, the page icons, the panels, and the Tools panel.

Students may already be used to keyboard shortcuts as a simple alternative to using the mouse. Fireworks and other Adobe products allow you to combine keys with mouse clicks to perform tasks quickly.

Many Fireworks professionals keep one hand on the mouse and the other over the keyboard to switch tools and modes. You may want to demonstrate how this method allows you to keep the pointer directly over the part of the image that you're editing.

Encourage students to use commands at first, so they understand what they're doing and how it relates to the application. As they become more comfortable with the tools and concepts, remind them that shortcuts can help them accomplish tasks more quickly.

Using the Application Frame and the Application bar

By default, the Application bar is enabled and the Application Frame is not. Some lessons include steps that use the Application bar, so it's best for students to leave it visible, though they may prefer to hide it when they work on their own.

If your students are working in Mac OS, suggest that they enable the Application Frame to minimize distractions from other applications and items on the desktop. If you reset preferences at the beginning of each lesson, you'll need to enable the Application Frame each time.

Viewing designs

Double-clicking the Zoom tool displays one image pixel for each monitor pixel. This magnification displays an image at exactly the same size as it will appear in a web browser. But because monitors can be set to different resolutions, the real size of an image viewed in Actual Pixels view or in a web browser will vary depending on the monitor in use.

Point out that you can also change magnification of a design by choosing a Zoom level in the Application bar or from the Zoom level in the document window at the lower-right corner.

Many users are unaware that the monitor resolution can be changed so you may want to demonstrate this. Increasing the resolution makes more room for panels and images on the screen, but with the trade-off of making everything smaller.

Finally, you may want to demonstrate how to see a single image at two magnifications simultaneously. To do so, choose Window > Duplicate Window and then drag the tab of the new window to the left or right side of the document area to show both views at the same time. You can zoom into one view to make detailed changes while viewing the full image in another window to see the changes in context.

Using the Properties panel

Students should understand that the Properties panel is not the same as the toolbar (or button bar) found in products such as Microsoft Office. In Fireworks, the controls that appear in the Properties panel change depending on the selected tool. Similarly, the Properties panel cannot be customized because it always represents options for the current tool. Take care to refer to the Properties panel by its complete name and not as a “toolbar” or “button bar.”

Using the History panel

You can use the History panel simply to undo steps, or to automate certain workflows by replaying history steps. Make sure students understand that history states aren't saved with the document. You can suggest that if students want to keep different versions across sessions, they should set up a design as separate pages or documents instead.

To supplement the information in this section of the book, you can tell students about the Save Steps As A Command feature in the History panel menu. This lets the student save a series of history steps as a JavaScript command, which they can invoke from the main Commands menu any time they wish. Point out that they can use this feature by selecting a series of history steps generated from menu or keyboard commands (steps such as moving objects on the canvas with the mouse cannot be saved as part of a custom command) and then clicking the Save Steps As A Command icon.

Configuring panels and the panel dock

The Tab keyboard shortcut lets you hide all panels instantly so that you can quickly evaluate designs without distraction. When you're working on a small screen, it also lets you use the entire screen to edit images. The Tab key returns the panels just as quickly.

The F key will cycle between different workspace views (Standard view, Full screen with menus and panels, and Full screen). In Full screen view, mousing over any of the four sides of the workspace will reveal the panels in that area.

Show students how easy it is to collapse panels to icons, and then expand the panels again with a click. In this lesson, students will look at customizing a workspace. They will define a custom workspace in Fireworks that shows and hides specific panels, based on the type of task they are performing.

You do not need to go into this feature in-depth now, to avoid the risk of information overload in the first lesson.

Using a context menu

Although not covered as a specific section in this lesson, demonstrate how context menus change depending on the content under the pointer. Right-click (Windows) or Control-click (Mac) the following examples:

- Different layers
- An active object on the canvas
- Text with an insertion point
- In any list panel

If your students use graphics tablets, encourage them to program their stylus button to display context menus.

Using Fireworks Help

Choosing Help > Fireworks Help opens Adobe Community Help, which includes the entire Fireworks Help, as well as links to other online resources. Show students that Fireworks Help includes access to a variety of tutorials, both written and in video format.

Using Adobe Online services

Students may inquire about privacy concerns related to the Adobe Online service. You can reassure them that no personal or configuration-related information is sent from their computer, except that which is explicitly typed in by the user as part of the voluntary online registration process.

Questions

The following questions are not in the student's Classroom in a Book.

- 1 What do you do if you can't find a tool that you know exists?
- 2 How can you find the keyboard shortcut for a tool?
- 3 How can you instantly hide or show all panels?

- 4 What are other ways to switch to a specific preset zoom percentage?
- 5 What magnification is the best representation of an image's size on a web page?
- 6 How do you view multiple documents at the same time?
- 7 What is the difference between a panel and a document window?

Answers

- 1 Look in the Tools panel for a related tool with a small black triangle. That triangle symbol indicates that holding down the mouse button on that tool opens a list of hidden tools at that location.
- 2 Hold the pointer over the tool until the tooltip appears containing the keyboard shortcut for that tool.
- 3 Press the Tab key (when you're not editing text).
- 4 Choose the zoom level from the Application bar or from the lower-right corner of the document window.
- 5 100%
- 6 Undock a document by dragging its tab away from the tab bar. Then drag the title bar of the document to any of the four sides of the main document window. When a blue highlight appears, release the title bar.
- 7 A panel contains a set of related controls that you select and use to work on your document. You can have many panels open, group them, hide them, and separate them. The document window displays your design. If you close a document window, you close that file.

Lesson 2: The Pages, States, and Layers Panels: Fundamental Workflow Tools

Pages and layers will be a part of every design a student creates in Fireworks. As they start building interactive designs, or animations, states become very important as well.

Throughout this lesson, emphasize the importance of naming pages, layers, sublayers, and objects as the students work in Fireworks. It's tempting to just zoom ahead with a design, but if the habit of naming elements can be ingrained early, the students—and their associates—will save time down the road, because it will be easier to find what they are looking for in a complex document.

Goals for this lesson

In this lesson, students will learn how to do the following:

- Import new pages
- Create new layers
- Create sublayers
- Change the stacking order of layers
- Rename layers
- Protect layers and objects
- Access layer options
- Edit content on different states

About pages, layers, and states

This section introduces students to these three essential panels and defines their functionality and relationship to each other.

Importing pages

This section describes for the first time the new workflow for importing pages from a multipage Fireworks PNG file. The big change here is the Preview window, where you can navigate through each page in the document and choose the specific page you wish to import. The workflow is slightly different between Windows and Mac. Point out that you can import only one page at a time.

There is also a brief discussion on Photoshop and multipage Fireworks documents. Photoshop doesn't support this feature, but there is a free extension available that will allow users to export a multipage PNG file as separate PSD files.

Working with layers

Unlike Photoshop, Fireworks is an *object-based* application. This means that each layer can contain one or more independent objects as well as sublayers. Objects can be text, bitmaps, vectors, groups, or symbols.

Point out that layer hierarchy (layers and sublayers) can help from an organizational point of view, but the primary existence of sublayers (at this time, anyway) is to maintain integration with Photoshop and its *layer groups* capabilities.

A layer containing one or more sublayers becomes a layer group when the design is saved in Fireworks as a Photoshop file. Likewise, if a student opens a Photoshop file that contains layer groups, Fireworks will recognize and maintain this structure using layers and sublayers.

Point out how easy it is to drag and drop a selected object from one layer into another, using the radio button on the right side of each layer name.

When this button is dragged from one layer to another, only the selected objects in the original layer are moved.

Sublayers are helpful from a structural point of view and for integration with Photoshop's layer group feature, but they are also limited in many ways. The limits of sublayers are discussed in a sidebar in Lesson 11, so you might want to read ahead a little. Forewarned is forearmed.

While it is not part of this lesson, you may want to build a simple design ahead of time using both layers and sublayers, and briefly show students how the layer structure appears if the design were saved as a Photoshop file and then opened in Photoshop.

Working with states

Point out that states are an important part of Fireworks workflow. They can be used for mocking up website interaction (rollovers, Ajax emulation) or to show how an application may change based on user input. They can also be used for creating simple, frame-based GIF animations (which is covered in Lesson 9).

Students will duplicate the main state of an AIR prototype and alter the duplicate state to create the rollover effects needed for the prototype. They will also add multiple Live Filters to the second state. Point out that Live Filters are always editable, all the time. They can change their minds about the effects, edit them, or even remove them. At the end of the lesson, students are encouraged to apply what they've learned about layers and states to the other pages in the mockup.

Questions

The following questions are not in the student's Classroom in a Book.

- 1 What is the importance of sublayers?
- 2 How do you protect a layer or an object from accidental editing?
- 3 Why is it important to name your pages, layers, states, and objects?
- 4 How do you create a sublayer?
- 5 How do you rename layers, sublayers, or objects?
- 6 How do you import pages from another Fireworks file?

Answers

- 1** Sublayers help you add structure to your document, allowing you to group related objects within an existing layer. If a Photoshop design is opened within Fireworks and it contains layer groups, Fireworks maintains this relationship using layers and sublayers.
- 2** You can protect all the objects in a layer by locking the layer (click the empty square next to the layer name). You can also protect individual objects in a layer (rather than *all* the objects in the layer) by locking them independently. Locking a layer will protect all objects, regardless of the lock status of individual objects.
- 3** Naming pages, layers, objects, and states can help other members of your design team, because things are easier to locate when they are named. It can help you as well, by aiding you in logically structuring the layers and in locating a specific object on a specific layer.
- 4** You create a sublayer by first selecting the layer you want to contain the sublayer. Then choose New Sublayer from the bottom of the Layers panel or by right-clicking (Windows) or Control-clicking (Mac) the main layer and choosing New Sublayer from the context menu.
- 5** You can rename any layer, sublayer, or object by double-clicking on the default name (Layer 1, for example).
- 6** You import specific pages from another Fireworks document by choosing File > Import and browsing to a Fireworks document that contains one or more pages. Use the Preview window to browse to the page you wish to import and then click Insert (Windows) or Open (Mac). If you want the content to be imported onto a brand-new page, make sure to choose Insert After Current Page.

Lesson 3: Working with Bitmap Images

This lesson introduces students to working with and editing bitmap images. Fireworks works equally well with vectors and bitmaps, and becoming aware of this flexibility is important to realizing the full potential of Fireworks.

The basics of opening, importing, cropping, and retouching images will be covered in this lesson.

Goals for this lesson

With the solid set of bitmap tools in Fireworks, there will be many situations where the user can work entirely within Fireworks without having to switch to other applications. The overall objective of this lesson is to familiarize students with these tools and give them insight into how images can be retouched using bitmap tools

such as Dodge and Burn or the Rubber Stamp, or in a nondestructive manner using Live Filters.

In this lesson, students will learn how to do the following:

- Identify and name the key bitmap tools
- Import images into an existing design
- Nondestructively alter an image using Live Filters
- Repair images using the Rubber Stamp
- Resize images

In addition, there is an exercise that introduces the new 9-Slice Scaling tool where you can show users how to scale certain types of bitmap images in one direction with no distortion. This feature was previously available only for symbols in Fireworks CS3.

Resolution and image size

Point out the relationship between image resolution and file size, and also how a high-resolution image does not necessarily mean a high-quality image. Cheap digital cameras, poor-quality scans, or highly compressed images can produce a high-resolution, yet poor-quality, image.

Encourage the students to resample images and see what happens to file sizes.

Cropping

Fireworks can crop an entire design or specific bitmaps within a design. Show how to quickly apply the cropping marquee to an entire image by double-clicking on the tool.

Point out that cropping a design does not have to be destructive; you can set cropping preferences within the Preferences panel.

Managing images on the canvas

Complex designs tend to contain multiple images. Point out that guides, tooltips, Smart Guides, the keyboard, the Pointer tool, and the Properties panel can all be used to help position objects precisely on the canvas.

Although it is not mentioned in the book, users can also set up a grid to help align objects.

Demonstrate how to activate tooltips and how Smart Guides can help align objects to each other or to the canvas. Point out that snapping can be activated for Smart Guides, grids, and guides, and that the snapping distance can be adjusted in the Preferences panel.

Importing images

Importing images is an often overlooked but powerful feature. The exercise on importing images demonstrates how you can quickly add a file to a currently open document, and throughout the book your students will call on the Import feature regularly.

Mentioned in the book is the importance of not scaling an imported bitmap larger than its original size. Although there is no specific exercise to demonstrate this, have the students import the `watch_colors.png` file and scale it wider than the currently open document to show how bitmap images will be affected when enlarged.

Encourage students to import other files to the document and experiment with scaling.

Distortion-free bitmap scaling with the 9-Slice Scaling tool

The 9-Slice Scaling tool gives you the ability to scale rectangular vectors and certain bitmaps without having to convert them to symbols. In this lesson, the students scale a photograph to widen the image.

Of course, 9-slice scaling is only effective on bitmaps with areas that will not be affected by scaling in a single direction. The exercise provides the students with a photograph to scale, but a more common use would be for scaling screen grabs of interface elements such as dialog boxes or panels.

Supply the students with such an image and have them use the 9-Slice Scaling tool to alter the image size in a single direction.

Adjusting the tonal range

Photoshop may be the king of bitmap editors, but Fireworks has a wide range of features to help you correct bitmap images, including some nondestructive ones.

Point out that several corrective tools are available in the Live Filters > Adjust Color menu, including Auto Levels, Levels, Curves, Brightness/Contrast, and Hue/Saturation.

All Live Filters remain editable during the current session and remain so if the file is saved as a Fireworks PNG file.

Point out that Live Filters must be applied to an entire selected object. To apply corrective filters to a specific area of a bitmap, you must first make a bitmap selection and then apply the filter from the main Filters menu. Unlike Live Filters, these adjustments permanently alter the selected area.

Live Filters are also used when applying the Unsharp Mask in a later exercise in this lesson.

Using the Align panel

Point out that you can align images to each other whether they are bitmap, vector, text, or groups; or you can align them to the canvas.

Adjusting brightness with the Dodge and Burn tools

This exercise and the Rubber Stamp exercise both rely on permanently altering pixels. Demonstrate what this means in a workflow in terms of preserving original image information, from working on a duplicate bitmap image to opening a file as an untitled document.

Repairing areas with the Rubber Stamp tool

Point out that for accurate retouching, it's a good idea to zoom into the area to be fixed. In many cases, soft-edged brushes make for a more realistic effect, because the edge of the Rubber Stamp blends better with the surrounding area.

Using the Rubber Stamp requires that you sample an area first. Point out that you can resample as often as you feel is necessary to produce a satisfactory result.

Retouching on a separate bitmap object

This is the prep work for the instant facelift exercise. It discusses why retouching on a separate bitmap object is good professional practice and shows the steps needed to add the new bitmap object.

In this scenario, an empty bitmap object is used, rather than a duplicate of the original bitmap object, but either workflow is useful and preserves the original bitmap.

Another advantage of retouching in a separate bitmap object is that the opacity of the entire object can be reduced for a more subtle effect, or the retouching can even be deleted or hidden if it is no longer desired.

Repairing areas with the Rubber Stamp tool

This exercise combines the use of a separate bitmap layer, bitmap selection tools, and the Rubber Stamp to correct overexposed skin tones while retaining the original bitmap information.

Because the students will be applying the retouching to a separate bitmap object, sampling options in the Properties panel will need to be altered.

Point out that the opacity of the Rubber Stamp can be altered as well, which can create a more subtle result.

Questions

The following questions are not in the student's Classroom in a Book.

- 1 Why would you use the Unsharp Mask Live Filter?
- 2 What tool can be used to brighten a specific area in a photo?
- 3 What tool can be used to darken a specific area in a photo?
- 4 Why would you group objects together and how do you do it?

Answers

- 1 Images that have been resized smaller tend to also become softer in appearance due to the reduction in pixels, but you can gain back some of the original crispness of the photo by applying a filter called Unsharp Mask. Unsharp Mask can be applied as either a permanent filter or as a Live Filter. For the greatest flexibility, Live Filters are a better option.
- 2 The Dodge tool can be used on photos or other bitmap objects to lighten an area by painting over it. You can adjust the brush (tool) size, softness, shape, exposure (degree of effect), and the tonal range (shadows, midtones, highlights) you want to alter.
- 3 The Burn tool does the opposite of the Dodge tool, darkening areas where the tool is applied. The same tool attributes as the Dodge tool can be adjusted in the Properties panel.
- 4 Grouping related objects (a navigation bar, for example) makes it easier to reposition all the related objects in a single action. Grouping also simplifies the Layers panel, because grouped objects show only as a single object. You can group two or more objects by Shift-clicking on the objects and then choosing Modify > Group or pressing Ctrl+G (Windows) or Command+G (Mac).

Lesson 4: Working with Selections

This lesson introduces learners to working with bitmap selections. To limit bitmap effects to a specific area of an image, you must first make a bitmap selection.

Point out to students that anything outside the selection will remain unaltered.

Fireworks works equally well with vectors and bitmaps, and becoming aware of this flexibility is important to realizing the full potential of Fireworks.

The basics of opening, importing, cropping, and retouching images will be covered in this lesson.

Goals for this lesson

With the solid set of bitmap tools in Fireworks, there will be many situations where the user can work entirely within Fireworks without having to switch to other applications. The overall objective of this lesson is to familiarize users with these tools and give them insight into how images can be retouched using bitmap tools such as Dodge and Burn or the Rubber Stamp, or in a nondestructive manner using Live Filters.

In this lesson, students will learn how to do the following:

- Make specific areas of an image active using selection tools
- Create a selection with the Magic Wand
- Adjust the edge of a bitmap selection
- Apply corrective filters to a selection
- Make complex selections using the Lasso tool and Magic Wand tool
- Modify a bitmap selection
- Save a bitmap selection for future use
- Deselect a selection
- Convert a bitmap selection to a path

Understanding bitmap selections

This section gives an overview of the bitmap selection tools and discusses their various features. Point out to students that when making selections, you can switch back and forth between the tools, using whatever tool is most suitable for the work.

Combined with the sidebar, “Bitmap selection tools: a primer,” this section will help learners quickly gain a sense of the options available.

Selecting and modifying with the Magic Wand tool

Selecting an area is one of the first steps to altering part of a bitmap. This exercise walks the learner through a tried-and-true workflow for bitmap editing, including the creation of a duplicate bitmap object.

Using the Magic Wand with keyboard modifiers

While this exercise uses the Magic Wand, point out that all the bitmap selection tools allow you to modify (add to or subtract from) the current selection using the same keyboard modifiers.

Saving and restoring bitmap selections (sidebar)

Point out that when creating complex selections, it can be helpful to save those selections for later use. Multiple selections can be saved with any file, as long as it is saved as a Fireworks PNG file.

Selecting with the Lasso tools

This exercise demonstrates how selection tools can be used interchangeably. They start by using the Magic Wand to select a large area of similar color, then zoom in and use the Lasso tool and modifier keys to further refine the selection.

Converting a selection to a path

Because Fireworks can edit both vectors and bitmaps, it makes sense that bitmap selections can also be converted to vector paths. Point out that paths can be easier to edit than bitmap selections, thanks to the individual control points of a vector. Also, the students aren't as likely to delete an entire path by accident, something that is easily done with a bitmap selection by forgetting to use the Shift and Alt (Windows) or Option (Mac) modifier keys when adjusting a bitmap selection.

Questions

The following questions are not in the student's Classroom in a Book.

- 1 How do you create a soft-edged selection?
- 2 What does Live Marquee do?
- 3 How do you save a bitmap selection?
- 4 How do you convert a bitmap selection to an editable path?
- 5 Why would you use the Select Inverse command?

Answers

- 1 You can create a soft-edged selection by applying a feather to the selection. Feathering can be applied in three different ways:
 - Select the feathering option in the Properties panel before the selection has been made.
 - Apply the feather afterward using the Properties panel and Live Marquee.
 - Choose Select > Feather from the menu.
- 2 Live Marquee gives you immediate control over the edge of your bitmap selection after it has been drawn. You can choose Hard for an aliased hard-edged selection; Anti-aliased for a softer, slightly blended selection edge; or Feathered for a very soft blend.

- 3 Once a bitmap selection has been made, choose Select > Save Bitmap Selection. You can name the selection in the dialog box that appears.
- 4 You create a path from a bitmap selection by choosing Select > Convert Marquee To Path. The bitmap selection is deleted when you do this, but Fireworks also has a command to convert paths to bitmap selections, so the process is easy to reverse.
- 5 Selecting the unwanted part of the image is sometimes easier. Select Inverse is used to toggle the active selection between the original selection and the non-selected areas.

Let's say you have a photo of a city scene with a clear sky in the background. You want to do some levels or filter adjustments to the city area. It will be easier (and faster) to use the Magic Wand tool to select the evenly colored sky. Then you can choose Select > Select Inverse to reverse the selected areas, making the city scene the active selection.

Lesson 5: Working with Vector Graphics

Vectors are a key design element in Fireworks and will be needed in almost any design a user creates. This lesson shows the student how to create and edit vector graphics and how flexible this graphic format is as a design tool.

Learners will also use the 9-Slice Scaling tool again, only this time on vector objects. This is a good opportunity for them to practice with this tool and learn more about the differences between vectors and bitmaps.

If the students have no previous vector art experience, the Pen tool can prove to be a somewhat intimidating tool. Extra practice creating their own custom shapes, as well as adding more control points to existing paths, is recommended.

Looking forward, in Lesson 6 ("Masking") you will be working with both bitmap selections and vector shapes to create masks for a variety of objects.

While only mentioned briefly in the lesson, we recommend you take time to explore the Path panel. This would be more of an intermediate exercise for you to create, but the Path panel is a powerful tool.

Near the end of this lesson is an exercise using the new Compound Shape tool. It is a great way to build complex vector graphics using simple shapes, rather than trying to create the graphic using the Pen tool or permanent commands such as Joining, Punching, or Cropping.

Goals for this lesson

In this lesson, students will learn how to do the following:

- Draw simple vector shapes
- Demonstrate the differences between vector and bitmap images
- Use the 9-Slice Scaling tool to scale vector shapes
- Demonstrate how to use Auto Shapes
- Create paths with the Pen tool
- Edit paths with the Pen and Subselection tools
- Create a custom shape
- Customize the fill and stroke of a vector shape
- Complete the background skyline using the Compound Shape tool

Basic vector drawing techniques

In Lesson 1, students created their first vector shape—an ellipse. In this exercise, they will delete the ellipse and add a rectangle. Point out how easy it is to round off the corners of the rectangle, either while they are drawing it or later using the Properties panel.

About bitmap images and vector graphics

Although these are introduced a bit later in the lesson, you might want to spend some time up front comparing vectors and bitmaps onscreen, showing the differences between the two main graphic formats.

Distortion-free scaling with the 9-Slice Scaling tool

Point out that the 9-Slice Scaling tool is most useful on vectors that are mostly rectangular in shape; 9-slice scaling an ellipse, for example, won't produce a desirable result, because the tool needs straight paths in order for the scaling to work.

Adding text to your design

Text is covered in much more detail in its own lesson (Lesson 7), but now is your chance to introduce the Text tool and demonstrate how to change font families, styles, and color.

Working with Auto Shapes

We work with only one Auto Shape in this exercise, but there are many to choose from. Point out that other shapes can be found in the Shapes panel, and take time to experiment with them. You might want to consider giving the students an extra credit project to create a logo using Auto Shapes.

You may also want to expose them to the Auto Shapes panel, where they can edit the properties of an Auto Shape without having to drag the yellow control diamonds.

Understanding paths and the Pen tool

Be prepared to spend extra time in this area if your students do not have any vector drawing experience. Proficiency with the Pen tool means they are not locked in to using the standard shapes supplied by Fireworks; they can create their own. The Pen tool also is useful for creating custom mask shapes. Make sure students also take time with the Subselection tool to practice editing the points of a new or existing vector shape.

Other vector tools (sidebar)

No specific exercise was created for the other vector tools, but this can be another opportunity for you to help your students gain confidence and get even more creative with vectors. Each tool's functionality is outlined in the sidebar.

Editing paths

The real power in vectors is knowing how to edit them to get the results you want. Your main tool for editing a path is the Subselection tool. Point out that you can edit individual control points by selecting them with this tool, or you can hold down the Shift key to select multiple points and move them at the same time. Give your students time to practice altering a curve by dragging the Bezier curve control arms.

Creating a custom shape

Many things covered in Lesson 4 lead up to this final exercise. We've intentionally kept the shape simple (no curves), but feel free to encourage your students to push their newfound skills.

For those having difficulty, we've hidden and locked a copy of the custom shape, which they can use as a tracing guide, by revealing the shape in the Layers panel.

Questions

The following questions are not in the student's Classroom in a Book.

- 1 How do you create a curved path?
- 2 What tool is used to edit vector control points?
- 3 How do you fill a vector shape with a pattern?
- 4 How do you add extra control points to an existing path?
- 5 How do you remove extra control points from a path?
- 6 How do you create and edit a compound shape?

Answers

- 1 You create a curved path by first selecting the Pen tool. Then click and drag an existing control point in a vector shape to pull out the Bezier curve control arms. After a curve has been created, you can further edit it by dragging the control arms or the control point with the Subselection tool.
- 2 The Subselection tool can be used to move existing control points of a path or alter the curve of a curved path segment.
- 3 To fill a vector shape with a pattern, select the shape with the Pointer tool, and then choose Pattern from the Fill Category and select a pattern.
- 4 To add more control points to a path, select the Pen tool, and then click on the path where you want to add a new control point.
- 5 You can remove a path by hovering the Pen tool over an existing control point. When you see the (-) sign beside the Pen tool cursor, click to remove the point.
- 6 Draw a vector shape using the vector primitives (rectangle, ellipse, or polygon) or using the Pen tool. Click the Add/Union icon in the Properties panel and draw another vector shape. The two shapes are now grouped as a compound shape. You can continue to add vector shapes to the compound shape by drawing them. To edit a specific shape, choose the Subselection tool, and then click on the shape you want to edit. To move the entire compound shape on the canvas, use the Pointer tool.

Lesson 6: Masking

This is where your students really start to work! Lessons 1—6 cover the basics of working in Fireworks, but in this lesson they will be building a banner ad practically from scratch and making use of one of Fireworks' star features: masking. Depending on your group's skill/comfort level, you might consider breaking this up into two classes.

Students will be importing bitmap and vector graphics, working with both vector and bitmap masks, adding some text, and learning nifty tricks such as how to paste the attributes of one object onto another object.

Students get some practice with the Polygonal Lasso tool to create a selection, which then gets converted to a path. If you feel they need more practice with the Pen tool, this exercise can be easily adapted to working with the Pen tool instead.

Students will also have the opportunity to create a custom style that they will reuse on different text elements.

Goals for this lesson

In this lesson, students will learn how to do the following:

- Create a bitmap mask from a selection
- Edit a bitmap mask using the Brush tool
- Create a vector mask from a custom vector shape
- Edit the vector mask and change its properties using the Properties panel
- Use the Auto Vector Mask command

About masks

We've spent a fair amount of time up front discussing the two main types of masks you can create in Fireworks. You might want to have students try out some simple masking exercises of your own creation before jumping into the main lesson in the book.

Although it is not discussed in this lesson, you can also mask one bitmap object with another, which can create interesting texture and effects. Read through the Help files to learn more about masking one bitmap with another.

Designing the banner ad

Several topics are covered in this section.

Gradient fills are a popular web design element, as well as a visual design element. Extra practice with manipulating gradients is a good idea, and using gradients comes up in several lessons.

Importing assets

Point out this commonly used technique to save the user a great deal of time. No need to copy and paste, or drag and drop images into a design when you use the Import command.

Using the Auto Vector mask for quick fades

If your students have worked in earlier versions of Fireworks, point out that the Auto Vector Mask command was previously named the Fade Image Command. It can be applied to both bitmaps and other vector objects.

Importing Photoshop images

The Photoshop files used in this lesson are simple, flat bitmaps, but this does give you the opportunity to go over the Photoshop Import dialog box. At the end of the lesson, you may want to show students how to customize the Photoshop import options using the Preferences panel.

Creating and editing masks

Masking is an important creative feature in Fireworks. Getting comfortable with the various ways to mask images and objects opens up many options for students.

Creating a vector mask

The vector mask created in this exercise is a simple one, but point out that custom vector shapes can also be used as masks.

Converting a bitmap selection to a mask

The other main type of mask you can create is a bitmap mask. These are similar to Layer masks in Photoshop. Explain that you can use any of the bitmap selection tools—or combinations of those tools—to create the selection. It can be easier at times to create a mask using selections, especially if you have an image with a strongly contrasting background. The Magic Wand can quickly select the background, and then the selection can be inverted and the mask applied.

Editing a bitmap mask

For those not comfortable with the vector tools (we recommend practice, of course), editing a bitmap mask may be less intimidating because it involves the use of the Brush tool. Paint with white to reveal the image or paint with black to hide the image.

Final touches

This section covers a variety of exercises to wrap up the design. A good deal of work is done with text, as can be seen from the following list. Upon completion, students will have applied many of the core skills they have learned in previous lessons and will have built the entire design from the ground up.

- Adding text
- Adding the cast names
- Styling the text
- Creating and applying a custom style
- Styling the first names
- Tweaking the background
- Image positioning

Questions

The following questions are not in the student's Classroom in a Book.

- 1 How do you edit a bitmap mask?
- 2 How do you apply a gradient to a vector shape?
- 3 How do you edit the colors of a gradient?
- 4 How do you reposition an object within a mask?
- 5 How do you convert a bitmap selection to a path?

Answers

- 1 You edit a bitmap mask using the Brush tool. All the attributes of the Brush tool are available, such as size, stroke category, edge softness, and opacity. Choose black to add to the mask (hiding the object) or white to remove the mask (revealing the object).
- 2 Select the vector shape and then choose your gradient type from the Fill category.

- 3 Select the vector that has the gradient fill. Then click on the color swatch in the Properties panel. This launches the Gradient Editor. You can pick from several color presets, or click on the existing color swatches to open the color picker. You can add more colors to the gradient by clicking underneath the color ramp.
- 4 Make sure the object being masked is active. Using the Pointer tool, drag the blue control handle on the canvas to reposition the image within the mask.
- 5 Once the selection has been created, choose Select > Convert Marquee to Path. The bitmap selection is discarded and replaced with a vector shape.

Lesson 7: Working with Text

This lesson builds on the basic text skills students have been gaining up until now and covers more advanced typography features, as well as features such as wrapping text within a path.

Point out that Photoshop, Illustrator, and Fireworks all use the same text engine, which means text should behave and look similar in each application. This can be helpful for those who start in Illustrator or Photoshop and then move their designs to Fireworks.

Goals for this lesson

In this lesson, students will learn how to do the following:

- Create both fixed-width and auto-sizing text blocks
- Edit the text properties
- Use commands to alter text
- Use the transform tools to scale, rotate, and distort text
- Use text as a mask
- Attach text to a path
- Flow text within a vector shape (attach in path)

Text basics

This section, along with “Creating an auto-resizing text block” and “Editing text,” gives a basic but thorough introduction to adding text to a Fireworks document. Point out to students how you can easily select a text block with the Pointer tool to reposition it, or jump into text edit mode just by double-clicking on the text itself with the Pointer tool.

Flowing text within a vector shape

Text can be flowed into any closed vector path—with the exception of composite paths. Point out that this can be a useful visual design technique and can also be used to mimic how text would wrap around a floated graphic on a web page.

Typography terms (sidebar)

Fireworks has some pretty advanced text attributes to help designers make the most of text in a design. The terms in this sidebar all relate to the attributes available within the Properties panel when the text tool is active.

Anti-aliasing text

Demonstrate to students how the different anti-aliasing settings can affect the display of text onscreen and how, for example, small font sizes are more readable when anti-aliasing is turned off.

Special text effects

Attaching text to a path, skewing text, using text as a mask, and adding Live Filters to masked text are all covered in this section.

Skewing text

Text can be scaled, distorted, and even skewed while still remaining editable.

Although it is not covered in this lesson, you can also point out that text can be converted to regular vector paths if the user needs to do special work on the text, or if the file is being passed to someone who does not own the fonts used in the design.

Using text as a mask

Point out that text can mask another vector or even a bitmap image and, as always, the text remains editable. You can combine various techniques, such as attaching text to a path and then using it as a mask over a photograph, or adding Live Filters to masked text.

Also point out that at times it may be easier to use the Text menu to make alterations to text. This can be the case when you have combined multiple effects such as masking and attaching text to a path.

Questions

The following questions are not in the student's Classroom in a Book.

- 1 What is one method to apply text as a mask?
- 2 How do you skew or distort text without converting it to paths?

- 3 What is the best anti-aliasing setting for small type (10 point or below) and why?
- 4 Where do you find commands such as Lorem Ipsum or Case Uppercase?
- 5 What happens if there is too much text to fit on or in a path?

Answers

- 1 Select the text block and cut it. Select the object you want to mask and choose Edit > Paste As Mask.
- 2 Select the text block and then choose the Skew or Distort tool from the Tools panel. These tools are grouped with the Scale tool. Drag the control handles that appear around the text block to transform the text block.
- 3 For text 10 points or smaller, the No Anti-alias setting should be used. This makes small text more readable. Anti-alias blurs or blends the text edge with the background color, and this can make the text hard to read with small font sizes.
- 4 A variety of text commands can be found in the Commands > Text menu.
- 5 If there is too much text to fit on a path or within a path, a *text overflow indicator* will appear at the right edge of the path. Any text that won't fit on the path is hidden from view, but resizing the path (or the text) can bring the text back into view.

Lesson 8: Optimizing for the Web

In Lessons 3, 4, and 5, students learned the basics for working with graphics in Fireworks. In this lesson they will apply those skills to creating assets for web pages and web page creation itself.

This is a very important topic when it comes to the Web. It can be easy to forget that not everyone has a high-speed Internet connection, but as professionals, web designers should take into account that people can be viewing a website using a wide variety of technology and at different bandwidths. The first few sections of this lesson cover image optimization in detail, starting with why it's important and then moving into the various web graphic formats.

Goals for this lesson

In this lesson, students will learn how to do the following:

- Export a single image to a web-ready format
- Determine the optimal web format for a sliced graphic
- Use the Optimize panel and Preview views to optimize images for web use
- Use the Slice tool to slice up graphics in a web page mockup
- Use the Slice tool to create a rollover effect
- Use the Hotspot tool to create interactivity
- Preview a web page design in a web browser
- Export an interactive mockup of a website
- Export a single page as a standards-based CSS and HTML web page

Optimization basics

This section and the one following (“Web graphic formats”) explain why optimizing graphics is so important for websites and discuss in detail the different formats available for use on the Web.

We recommend that you again reinforce the difference between Fireworks PNG files and standard, flat PNG files. It’s crucial that students understand that Fireworks PNG files should not be part of a final web page design. A discussion of the differences between saving files in Fireworks and exporting them is also a good idea.

About the Optimize panel

Point out that like many aspects of Fireworks, the Optimize panel works in conjunction with several other elements of the interface: the preview buttons, the Properties panel, and slices.

Although it is not covered in the lesson, take the time to demonstrate other methods of optimizing and exporting files, such as the Image Preview command, Export Area command, and exporting selected slices.

Optimizing a single file

There are several sections dedicated to this exercise—working with previews, choosing optimization settings and exporting the file, building a foundation, and explaining a workflow—that students can follow when optimizing single images or a series of image slices. If the student is working with only a single image—a photograph, for example—there is no need to slice the image first, and students should be made aware of this.

About the web tools

This is the first real introduction to the web objects in Fireworks. Begin by explaining what slices and hotspots are and how they are different from each other.

Getting comfortable with slicing a design is an integral part of using Fireworks as a web design tool. We recommend you keep things simple and work only with rectangular slices. Polygonal slices add an extra level of complexity to a web page, because a single polygonal slice becomes several smaller rectangular images, linked together with hotspots in the HTML code. Not a lot of fun for the novice, if they have to edit code.

Creating and optimizing slices

This section demonstrates two ways of creating slices—by hand and automatically. Not as much focus is placed on optimization, but we recommend you walk your students through the same previewing process as outlined earlier. We can't emphasize enough the importance of becoming proficient with image optimization or its importance to a website, especially with the proliferation of mobile devices and the cost of data plans for these devices. Smaller file sizes mean less cost to the end user and faster downloads.

Optimizing illustrations

This section tackles the process of choosing the right file format for nonphotographic images. You may be tempted to fall back on the GIF format for this type of image, but in many cases (not all), PNG 8 produces a smaller file.

Creating hotspots

Hotspots are the other web object available in Fireworks. Unlike slices, hotspots are only suitable for interactivity; they cannot be used to cut up a design into smaller images. But they are powerful nonetheless. Take some time to discuss the strengths of hot spots. You may want to read ahead to lessons 10, 11, and 13, where both web objects get a real workout, so you can present some examples of advanced interactivity, such as mocking up an Ajax data table or pop-up window.

Adding interactivity

This exercise introduces students to the concept of rollover images and how to create them; it's a bit of foreshadowing of what's to come in Lesson 11. While the exercise only walks students through the process of creating a single rollover, feel free to expand on this and have them create rollover effects for the other two sub-heading images in the page design. This will also give them a chance to experiment more with Live Filters.

Caution students on using filters, which increase the dimensions of an image; this could become problematic in the final web layout due to size differences. If they want to add an outer glow or drop shadow in the second state, this is a good time to explain that the slice needs to be sized based on the effect used on the rollover image, not the original image in the first state.

Exporting HTML and images

Fireworks has two main workflows for converting designs into web pages: Export as HTML and Images, or Export CSS and Images. The first of these two export workflows has been around since Fireworks began and produces a rigid table-based layout, where everything in the web page (including text) is turned into graphics. Although it's not a good practice to use this option for a real website, it definitely has its advantages when creating interactive prototypes because it is quick and easy.

It's important to stress that students should never use the HTML and Images export for a final website. There are many reasons for this: accessibility, search engine indexing, text-based browsers, and site maintenance, to name a few.

Exporting states

The export process does have a few kinks in the workflow; a design with multiple states (one with rollover effects, for example) is one of them. As soon as you add extra states to a design, Fireworks will export images for the entire design on all states, even when there is no image information. This section describes a work-around that will eliminate the creation of multiple unnecessary image files.

Also, while not mentioned in detail, there have been some enhancements to the HTML setup. You can now customize the filenames for states. You can set this up by choosing File > HTML Setup and clicking the Document Specific button. A file must be open in Fireworks in order to access this menu item. You can also click the Options button when you are exporting a file, and click the Document Specific button.

When you export all states of a multistate file, Fireworks—by default—appends the filenames with `_s1`, `_s2`, etc., including the main state. This ensures that the graphics on other states are not overwritten.

Exporting CSS and images

The goal behind CSS and Images export is to produce a web page right from Fireworks that meets standards compliancy for HTML and CSS. The resulting HTML and CSS documents can be edited within Dreamweaver or any other web editing software.

The CSS and Images export workflow has been updated in numerous ways. Many of these features are not discussed in any detail in the book, but we felt it best to make sure you have a list of the improvements:

- Exporting multiple pages at once (current page, selected pages, all pages) to HTML and CSS
- Tagging text objects by tag name to output the text with a particular tag for improved semantics
- Adding the Text Area symbol for improved form prototyping
- Adding the List Item symbol to allow for the creation of unordered lists/unordered lists of links
- Outputting intelligent hex codes for all colors using shorthand notation (#fff) where appropriate and lowercasing
- Creating multiple paragraph elements from a single text object where appropriate, as opposed to using breaks
- Alphabetizing as many CSS rules as possible
- Recalculating all font sizes to use percentages (%) to allow for text resizing in all devices
- Using `<div>`s with heights that have min-height equivalents to allow for text resizing and any amount of content
- Using `<div>`s with all border placements and sizes output at the correct size and positioned correctly
- Using visited, hover, and focus link styles that inherit standard link formatting
- Removing heights on form elements to allow for the browser to define their height
- Using improved background slices that take advantage of the original background color to allow for text resizing/larger content
- Outputting selection lists with the options specified in the symbol's properties
- Taking advantage of properly grouped radio buttons
- Adding `display: inline` on all floated elements to prevent the Internet Explorer 6 double-margin float bug
- Replacing `
` with `<div>` tags to clear floats so unstyled users don't have unnecessary line breaks
- Using lines that are output at their correct position

Point out that states and behaviors are ignored during the export. These features would have to be added back in when you are editing the web page itself.

It's a good idea to read this article ahead of time (www.adobe.com/devnet/fireworks/articles/standards_compliant_design.html) and make it available to your students. Although the article is written for CS4, the updates to the CSS and Images export are all based on the work of Matt Stow, the author of the article.

It's also important to note that this export option in no way absolves users from having a good comprehension of HTML and CSS standards.

Questions

The following questions are not in the student's Classroom in a Book.

- 1 Why are images sliced?
- 2 What does the Optimize panel do and how do you access it?
- 3 What options do you have for previewing your optimize settings within Fireworks?
- 4 What is the best format for optimizing photographs?
- 5 What are the differences between PNG 8 and GIF?

Answers

- 1 Generally, images are sliced in order to break up a larger design into smaller, more manageable graphics. Traditionally, these graphics were added to a table-based layout to “rebuild” the design in an HTML page. The common practice now is to slice a design so that only the necessary graphics are exported, and those images are used as either foreground or background images within a CSS-based layout.
- 2 The Optimize panel gives you complete control over the export format and for a selected slice, or over global formatting options for any areas in the design that are not sliced. To access the Optimize panel, select Window > Optimize or press the F6 key.
- 3 You have three preview options built into the Fireworks interface: Preview (single view), 2-Up (two customizable views), and 4-Up (four customizable views for comparing optimization settings).
- 4 The best export format for a photograph is JPEG, because it supports photo-realistic (24-bit) color. You can balance the amount of quality loss against the file size when using JPEG as the export format by dragging the quality slider.
- 5 You can create animated graphics with GIF and set one color (usually the background color) as transparent. PNG-8 does not offer animation, but it does offer a wider range of transparency options and often compresses simple images better than GIF.

Lesson 9: Using Symbols

Symbols are one of the great time-saving features in Fireworks. They've been around since the first release of the application. Point out that symbols can contain multiple objects within a single asset and still give you quick access to editing those objects. Symbols can contain text, vectors, and bitmaps, each with its own Live Filter attributes.

In addition to being an option for reusing common graphical elements in a design—like a logo or a button—symbols can be exported and shared with others.

Goals for this lesson

In this lesson, students will learn how to do the following:

- Create a graphic symbol
- Create an animation symbol
- Create a button symbol
- Edit a graphic symbol
- Edit an animation symbol
- Edit a button symbol
- Save a symbol to the Common Library

What are symbols?

It's important for students to know that a symbol is made up of two parts: the symbol itself and the *instance* on the canvas. If you want to make global changes to all the instances in a design (the color of a button, for example), you need to do this by editing the symbol itself.

Point out that students also have some editing control over individual instances: size, opacity, blending modes, and Live Filters can be added directly to individual instances without affecting the original symbol.

There are three main types of symbols, plus an enhanced graphic symbol called a Component symbol. Component symbols have JavaScript functionality built into them and are usually edited in the Symbol Properties panel. As this is a fairly advanced type of symbol, it is not covered in this book. Students will learn how to create each of the three main symbol types.

Finally, you're switching visual gears in this lesson, taking a break from the Double Identity assets and working with something completely unrelated.

Graphic symbols

The lesson starts with converting an existing graphic to a graphic symbol. This is the simplest of all the symbols to work with, but it can be very useful. As an example, point out the Common Library to your students. There are several folders (web and applications folder is a favorite of ours) full of graphic symbols, and although your students may be starting off simple, it's easy to see that graphic symbols can become quite robust.

We recommend pointing out the shortcut key (F8) for creating symbols.

The Common Library

Point out that the Common Library lets users share symbols across multiple documents in Fireworks. You can add a symbol to the Common Library at the time it is created, but this also removes the artwork from the canvas. You can add a symbol to the Common Library at any time by selecting it in the Document Library and choosing Save To Common Library from the panel options.

Editing symbols

New in Fireworks CS5 is the ability to edit symbols *in-place*, as you would in Adobe Flash. Double-clicking on an instance will fade all other elements on the canvas, making the symbol the only editable element onscreen. A breadcrumb trail appears at the top of the document window, making it easy to navigate back to the main design.

Demonstrate that you can also edit symbols in *Isolation mode* by right-clicking (Windows) or Control-clicking (Mac) the instance and choosing Symbol > Edit Symbol. This editing mode hides all other objects on the canvas and may be helpful if you have a complicated design.

Button symbols

Button symbols take a little more planning than a simple graphic symbol. This can be a good place to talk a bit about site planning and best practices, because button symbols are most useful if they have text labels. It's important to know what the site architecture will be so that you can plan your button dimensions based on the longest string of text.

The button symbol is designed to export up to four different graphics for each button (up, over, down, over while down). Unlike with graphic or animation symbols, Fireworks automatically slices button symbols, because it's assumed the user will want to create a rollover effect.

While Fireworks can't directly create CSS-based button rollover effects, you may want to make your students aware of the growing popularity of this technique, and demonstrate how Fireworks can fit into this workflow by creating the background image for the CSS button.

Editing a button symbol

Button symbols have special properties that can be accessed after double-clicking on the button instance. While in symbol editing mode, you can also add up to three more states and determine whether you want Fireworks to handle slicing automatically or leave the slicing up to you. Point out that in order to add more states, you need to make sure nothing is selected on the canvas. Then you will be able to add more button states from the Properties panel.

Testing the button symbol

Point out that the Preview options in Fireworks are not just for checking optimization settings; you can test out state-based interactivity as well. Mousing over button symbols will show rollover effects, and if there are any on-click events applied, they too will work, as long as it's just a state change. Preview mode will not let you move to a different page in the design.

If students want to test hyperlinks, they can choose File > Preview In Browser > Preview All Pages In (*default browser*).

Students will get a more realistic experience if they hide slices and hotspots while in preview.

Animation symbols

This exercise exposes the user to the States panel and the basic concept of frame-based animation, including onion skinning and state delay. Point out that Fireworks animation capabilities are limited to what GIF animation can achieve. Complex animation should be done in a program such as Adobe Flash.

Also mention that because animations require several frames, it may be best to create the animation on a separate page, so that Fireworks does not export out multiple files for the rest of the design.

Altering animation settings

Although it is not covered in the exercise, point out that several elements of the animation symbol can be added or altered in the Properties panel. You can change the number of states in the animation or alter opacity, size, or even rotation after the symbol has been created.

Adding prebuilt symbols from the Common Library

To wrap up the design, students will create a mockup of a search field. While there are HTML components in the Common Library for adding text fields, we went with just a simple white rectangle and focused on dropping in a prebuilt symbol for the magnifying glass. If you feel your students are up to the challenge and you want them to get a better handle on component symbols, feel free to have them drag in a text field from the HTML folder of the Common Library.

Questions

The following questions are not in the student's Classroom in a Book.

- 1 What is a symbol?
- 2 How do you edit a graphic symbol?
- 3 How do you add a symbol to the Common Library?
- 4 What is onion skinning?
- 5 How do you change the state delay of an animation state?

Answers

- 1 Symbols are reusable graphic elements. Fireworks has three types of symbols: graphic, animation, and button. When you edit the original *symbol object*, the copied *instances* automatically change to reflect the edited symbol (unless you break the link between the two).

Symbols are also helpful for creating buttons and animating objects across multiple states.

- 2 You edit a graphic symbol by double-clicking on the instance on the canvas, or by selecting the instance and then choosing Modify > Symbol > Edit Symbol (Isolation mode) or Modify > Symbol > Edit In Place.
- 3 To add a symbol to the Common Library, select the symbol in the Document Library and choose Save To Common Library from the panel options.
- 4 Onion skinning is a technique for viewing the contents of states before and after the selected state. When you turn on onion skinning, objects in the preceding and subsequent states are dimmed so that you can distinguish them from objects in the current state. By default, Multi-State Editing is enabled so that you can select and edit dimmed objects in other states without leaving the current state. Use the Select Behind tool to select objects in states in sequential order.

You can adjust the number of states visible before and after the current one by clicking the Onion Skinning marker to set a range or by clicking the Onion Skinning button and selecting a display option.

- 5 You change the state delay of a frame by double-clicking the current delay value in the state delay column. You can change the delay of multiple frames by Shift-clicking to select a continuous range or Ctrl/Command-clicking to select discontinuous states, and then double-clicking on any of the delay values.

Lesson 10: Prototyping Basics

Fireworks is not just a graphic design tool for screen images. It has workflows to expedite a variety of professional production needs, from web page design to application interfaces, from rough concepts to fully detailed and interactive design comps. This is an important distinction for Fireworks.

It's time to demonstrate and emphasize to students this feature set. In this lesson, students will be working with a wireframe of a planned project. The concept of wireframing is an important one, because it focuses on flow and function, rather than the design aesthetics. Wireframing a project first can identify user issues or breaks in the logic of an application. Emphasis is placed on working with the pages panel, shared graphic layers, and shared interactive layers. The end result is an interactive PDF file that can be e-mailed to a client for review and feedback.

Goals for this lesson

In this lesson, students will learn how to do the following:

- Edit a multipage wireframe
- Share layers to multiple pages
- Add a button symbol
- Preview a wireframe design in a web browser
- Export a secure, interactive PDF file

The prototyping workflow

Take some time to introduce this concept, showing how the pieces fit together: concept, wireframe, storyboard design, prototype. For prototyping, the Pages panel is extremely important, allowing you to keep an entire design concept within a single file. This makes linking to separate pages very easy, which expedites the process of creating an interactive prototype. The Pages panel is where you create new or duplicate pages and designate a Master page.

Exploring the Pages panel

Take some time to refresh students on the importance and functionality of the Pages panel. Creating, duplicating, and navigating pages in the Pages panel is key to building functional and interactive wireframes and prototypes. Show students how to separate the Pages panel from the default grouping of Pages, Layers, and States panels and why this can improve their workflow.

Master page

The generic term *pages* has been used throughout the book, but students may also hear the terms *child pages* when discussing pages that are linked to a Master page. Pages linked to a Master page take on the same dimensions and canvas, color, and optimization settings as the Master page, as well as share (by default) the graphic elements from the Master page.

Linking to a Master page and sharing the Master page layer on child pages are mutually exclusive options as well, although that may not be immediately obvious.

Take some time to go over the uses of the Master page and its limitations. Although it is not covered in the lesson, you can also demonstrate how to unlink a page from the Master page. Each Fireworks file can contain only one Master page.

By default, if you have a Master page, new pages will always have the Master page layer added to them on creation.

However, pages do not have to share the Master page layer—indeed, individual pages do not have to have anything in common with a Master page. This can be quite useful when creating multiple design concepts in one file. Show how to remove the Master page layer by choosing Remove Master Page Layer from the Layers panel options menu. You can also use the options menu to add the Master page layer back into a page.

Comparing wireframe pages

Encourage students to explore the supplied wireframe and point out to them features such as shared layers and how shared layers differ from a Master page. Point out that the goal of a wireframe is that it can be created quickly and then discarded when no longer needed. It's unlikely that any graphics used in a wireframe will end up in the prototype or final product because of the simplicity of the graphics.

Sharing layers to pages

This workflow can save the user a lot of time when working on a design, and it is not as limiting as a Master page can be. Point out that sharing a layer to pages means you can be selective about which pages display the content from the shared layer. This is unlike a Master page, where all the layers on a Master page are either applied to the page or removed.

For example, if the user wants to include contextual navigation on certain pages but not on all, sharing layers to pages is the answer. It can also be helpful if you are working with different page dimensions. You could have a footer layer that displays footer information at approximately 400 pixels from the top of the page for shorter pages, and another footer layer; that displays the footer info at 900 pixels from the top. Short pages share one layer; long pages share the other. Sharing layers to pages is also used in Lesson 11, where students are working on a realistic prototype of a website.

Adding pages to the wireframe

Up until this point in the book, students have been working with relatively complete files. Here they will build two new wireframe pages from scratch. Talk to them about the importance of repurposing assets by creating and using symbols. The supplied file has several symbols already made, but this might be a good time to refresh students' memory on symbols and have them create at least one new one for use in the wireframe.

Adding interactivity

Point out that adding interactivity using a design tool can be a real time-saver. No coding is required, so building the wireframe and editing it based on client feedback is quick and easy.

As you build your interactive objects (hotspots and button symbols, in this lesson), point out that the links in the URL bar of the Properties panel are divided between session history (above the divider) and true links (below the divider). Only the links below the divider will generate functional links, even if there is a matching page name in the history section.

Point out also that PDFs only support rectangular web objects (slice or hotspot). It's worth noting that if you scale hotspots, Fireworks might convert them to polygon shapes, so double-check that the hotspots are still listed as rectangles in the Properties panel, if they are resized manually.

Testing the links

Emphasize the importance of testing interactive elements. Rollovers and state changes can be previewed in the Preview mode, but page linking must be tested by previewing all the pages in a web browser.

Depending on the previous export settings, students may find that their temporary web pages are graphically incomplete. If this occurs, the only workaround is to first export the design as HTML and Images, making sure that Include Areas Without Slices is selected and that Current Page is deselected.

The next time they attempt a preview, things should work properly.

While not covered specifically in the lesson, it may be a good idea for students to set their base page optimization settings to GIF or PNG 8 for the wireframe—before previewing the work. Because the wireframe is all solid colors, lines, and text, this will result in a better graphical display.

Creating a secure, interactive PDF

The steps for exporting an interactive PDF are outlined here. It would be good to have Acrobat Professional installed on the systems your students use so that they can enable commenting for Adobe Reader (this is something that Fireworks is not capable of doing) and test out the password protection for certain tasks.

Questions

The following questions are not in the student's Classroom in a Book.

- 1 When you link a page to the Master page, what is the result?
- 2 What elements might be best left out of a Master page?
- 3 What security options are available when creating a secure PDF from Fireworks?
- 4 Why would you share a layer to other pages in a design?
- 5 What web objects can be used when creating interactivity for a PDF file?
- 6 Why is it important to use simple graphics and neutral colors in a wireframe?

Answers

- 1 The linked page takes on the canvas color and dimensions of the Master Page. The Master page's base optimization setting is also applied.
- 2 Because pages can change in dimension, it is best to include only objects on the Master page that can remain in the same physical location on every page. This usually means that elements such as the footer are excluded from the Master page.
- 3 You can set PDF security for file opening and for performing tasks. One password is used to open the file, and another is used to enable the following tasks: printing, editing, copying, and commenting. If no passwords are set, all tasks listed are available.
- 4 If you have content that needs to be on some but not all pages in your mockup, you can use Share Layer to Pages to specify to which pages the content should be shared. Updates to the shared layer can be made on any page sharing the layer, and these updates will propagate across those pages.
- 5 The only web objects supported by PDF are rectangular slices or hotspots. Because PDFs do not support rollovers or state changes, it's safe to use just the

rectangular hotspot tool. The exception to this would be if the design is also intended to become a web page mockup, where slicing would be needed for optimization and visual interactivity.

- 6 The goal of wireframes is to demonstrate flow and function and usability. Keeping the graphics simple and colors neutral means the team and the client focus on elements, rather than the aesthetics of the wireframe. By keeping graphics simple, you can build the wireframe quickly.

Lesson 11: Advanced Prototyping

This lesson uses new assets and builds on the concepts learned so far about slices, hotspots, states, and sharing layers to pages. In this chapter, students will take a closer look at creating effects such as rollovers and emulating pop-up windows (including two ways to create the pop-up window effect).

While much can be done, it is important to remind students that Fireworks is an excellent graphics editor; however, it is not designed to be, nor should you expect it to be, an HTML web page editor or website creation tool.

Goals for this lesson

In this lesson, students will learn how to do the following:

- Create a multipage website mockup
- Use the Slice tool to slice up graphics in a web page mockup
- Use the Slice tool to create a rollover effect
- Use the Hotspot tool to trigger a disjointed rollover (pop-up window)
- Simulate a Spry data table (disjointed rollovers)
- Preview an interactive web page design in a web browser
- Export an interactive mockup of a website

Prototype orientation

A little repetition never hurt anyone, especially when they are learning something new. The opening exercises in Lesson 11 follow a similar format to Lesson 10. In this case, however, the student gets to explore a completed version of a website prototype. This orientation also shows them what their goals are and how the various elements should work when their version is completed.

Fleshing out the prototype

Having students build the entire prototype from scratch would be a pretty hefty endeavor for a single lesson, so the students will start with a working file that has many assets already added. In this second series of exercises, they will be creating the Master page, adding pages, slicing the banner area, and adding hotspots for navigation.

Creating the Master page and adding more pages

Before the rollovers are added, the Master page and a couple of new content pages must be created. The artwork for the Master page is in place already on a separate page, but here the student will get the chance to convert the page to a Master page and see how this change to the document affects existing and new pages.

Creating rollovers

After the basic structure has been completed, students move on to creating rollover effects and using slices, states, and shared layers. Emphasize the importance of naming slices and recommend options for some standard naming conventions. There are several exercises in this section, including creating button symbols for the main navigation and adding rollover effects and hyperlinks.

Button symbols are created for the main navigation, primarily to demonstrate the desired effect on what would eventually become HTML text hyperlinks. Take some time to point out that for the final website (rather than the prototype), the navigation would be kept as text and then styled using CSS.

Students will work with sublayers in this prototype, so make sure they know how to tell when objects are truly placed in a sublayer rather than the parent layer.

Customizing page dimensions

Students will customize the height of the index page, and to do so, they will have to detach a shared layer. This demonstrates more of the flexibility of Fireworks to handle editing at any time and to easily adjust to changes in design.

Image rollover effects

In these exercises, students will create a new state for multiple pages; add Live Filters, slices, and behaviors; and work with shared layers. Point out that the various creative features of Fireworks can come into play at any time during prototype development; they aren't limited to just the design phase.

In a real production atmosphere, it's likely that the rollovers would be added earlier in the process, before so many pages were created, but this exercise gives the students more practice with states, shared layers, and Live Filters.

Although it is not mentioned in the exercise on creating a new state, take some time to remind students that they can rename states just as easily as they can name objects or layers. And if a great deal of interactivity is required, naming the states that represent that different activity is a good idea. For example, instead of State 1 and State 2, these states could be named Up and Over to represent the different rollover states that are being created.

Adding rollover behaviors

This will be the students' first exposure to Fireworks behaviors, which are prebuilt JavaScript actions, so take some time to introduce the concept, explain what behaviors are, and show how to take advantage of them. The great thing about behaviors is that no coding or knowledge of JavaScript is required.

Emulating pop-up windows

These two exercises are excellent real-world examples of how a Fireworks prototype can aid the web designer and the client in visualizing the final website.

With the advent of Ajax and Adobe's Spry framework, dynamic interactivity on a web page is becoming more popular and easier to achieve than ever before. Take some time to discuss Ajax and display some examples of the technology. This will help students see the relevance when they simulate this type of dynamic behavior within Fireworks.

Simulating a Spry data table

This exercise is more complex than the pop-up window exercise and not only requires the use of additional states and behaviors, but also introduces learners to the Behaviors panel, where they can easily edit various attributes of preset behavior. For example, by default the Swap Image behavior is triggered when the user's mouse rolls over the hot area. In this exercise, the goal is to swap the image only when the user clicks the hot area. This change is easily made using the Behaviors panel.

Take some time to explain the various JavaScript events and explore the Behaviors panel in more depth. Point out to students that with a bit of practice, their mockups can become quite interactive, mimicking (short of animation) features such as Spry accordion panels, tab panels, and even photo galleries. Utilizing this type of interactivity definitely takes a mockup beyond the basic stage into a more robust and functional prototype. A client can truly get a "feel" for how the final website will look and behave.

Sharing interactive objects

Point out that sharing web layers to pages has the same advantages as sharing graphic layers, but there is an extra step the user has to perform in order to share a web layer. The creation of a web sublayer is required, because the main web layer itself cannot be shared to other pages. Once a web layer is shared, changes to the position, size, or URL of a hotspot or slice will be reflected on pages sharing the web sublayer.

Completing the prototype

This final section walks students through two more exercises: importing a couple of prebuilt designs to complete the empty video and fashion pages created much earlier in the design, and exporting the prototype. Although they are placed at the end of the lesson, there is no reason for you not to introduce page imports earlier, if you desire. Point out that, in this case, students aren't just importing a single graphic; they are importing an entire layered PNG file. Once it is imported, have students expand the Layers panel to see that the layers from the original PNG file have been maintained.

Exporting the prototype

The export workflow used for the prototype is HTML and Images. As mentioned in the book, this produces a series of rigid, table-based HTML pages. While this end result is fine for prototyping purposes, be sure to stress that this export option is not recommended for a final production website. There are several reasons for this:

- Table-based layouts are no longer considered best practices.
- Multiple unnecessary images are exported in order to allow the table to display the design. Many images are exact copies of each other, created from the other pages in the design.
- All elements in the design are converted to graphics, including text.
- Editing the resulting HTML can be problematic; for example, deleting a graphic slice to replace it with true HTML text can break the entire layout.
- We recommend you run through this workflow yourself before presenting it to the class, to help you anticipate any potential questions.

Questions

The following questions are not in the student's Classroom in a Book.

- 1 What are the benefits and limitations of using a Master page?
- 2 How do you change a Swap Image behavior event from being triggered by a mouseover to a mouse click?
- 3 Should the HTML and Images export be used for a final production website? Why or why not?
- 4 How are sublayers helpful?
- 5 What are the current limitations of sublayers?
- 6 What steps are required to create a simple rollover effect?

Answers

- 1 Graphic elements common to the entire design can be kept on a Master page. So if you need to update those graphics, the editing can be done on the Master page, and the changes will appear on all pages.

The main limitations of Master pages are that you can have only a single Master page per file and that the elements on the Master page will appear in the same physical location on all pages, regardless of an individual page's dimensions.
- 2 Select the slice where the behavior has been applied, and open the Behaviors panel. Choose the appropriate onMouseOver event (there may be more than one, depending on the interactivity applied to the slice) and click the drop-down menu beside the event name. Select onClick to change the event.
- 3 The HTML and Images export should not be used for a final production website for several reasons:
 - Table-based layouts are no longer considered best practices.
 - Multiple unnecessary images are exported in order to allow the table to display the design. Many images are exact copies of each other, created from the other pages in the design.
 - All elements in the design are converted to graphics, including text.
 - Editing the resulting HTML can be problematic—for example, deleting a graphic slice to replace it with true HTML text can break the entire layout.

- 4 Sublayers can be a useful tool for structuring a web page design within Fireworks. The Layer and Sublayer relationship is also maintained as layer groups if the file is saved as a Photoshop file. Likewise, if a Photoshop file is opened within Fireworks, any layer groups are maintained as a layer/sublayer hierarchy.
- 5 Sublayers do have limitations. When you copy a layer that contains sublayers, only the parent layer elements are copied to the clipboard; sublayers are ignored. If you copy a sublayer, only the objects within the sublayer are copied. So if you were to paste the clipboard contents into a new design, only the objects—and not the actual sublayer that contained them—would be pasted. If you share a layer to other pages, all sublayers are automatically shared with that page as well. You cannot selectively share certain sublayers with different pages.
- 6 To create a simple rollover effect, you must have two states. Each state must have a graphic of the same size and in the same location. A slice needs to be drawn over the graphic on the first state. The behavior, Add Simple Rollover, must be applied using the behavior handle of the slice.

Lesson 12: Improving Your Workflow

This chapter is located on the companion disc as a PDF, along with accompanying lesson files.

Point out that finding ways to speed up common tasks without sacrificing quality is important to any business. The exercises in this lesson will expose students to a few ways in which they can use Fireworks to expedite their workflow.

Goals for this lesson

In this lesson, students will learn how to do the following:

- Use document templates
- Batch process tasks
- Locate and process files in Adobe Bridge
- Add project information to a file
- Add Photoshop Live effects

Using document templates

This new feature in CS5 will likely be a popular one with new and experienced users. As a new user, you can see how certain projects can be assembled, such as mobile applications and website designs, and even build on those templates. There are also some excellent *jumpstart* samples in the Document presets category. If you are teaching your students about the 960-grid design framework for CSS layouts, the Grid category has several prebuilt grid samples that can help students build wireframes and prototypes that fit into this workflow.

Take some time and study these templates. The exercises focus on using the Web Banner template, but you may find other samples more suitable to your curriculum.

Point out that students can even save their own templates to use at a later time or to share with others.

There is one caveat about saving templates, however, specifically on Windows Vista and Windows 7 operating systems. Fireworks wants to save templates within the program folder, which is not easily done in Vista or Windows 7. Students will have to create their own user folder to save any templates they create. Unfortunately, there is no way to configure Fireworks to automatically open or save to a user-created folder outside of the main templates folder.

Working with Adobe Bridge

Point out that Bridge can be a real nerve center for almost all work done with the Creative Suite. You can view files, sort files, stack them into groups, apply keywords, and—as seen in the next exercise—launch other CS5 applications to run automated commands such as batch processing. It's an application that the team used very often during the creation of this book.

However, Bridge does not come as part of the installation if Fireworks is purchased as a standalone product; Device Central is now part of the standalone product instead and is covered in Lesson 13. This is mentioned in the book, but we chose to keep these Bridge exercises, assuming that most people will purchase the Creative Suite or at least Adobe Photoshop. In both of these situations, Bridge is part of the installation.

For more information on Adobe Bridge, be sure to check out www.adobe.com.

Batch processing and customizing using Bridge and Fireworks

Batch processing is a powerful tool in Fireworks. Bridge makes it even more powerful, because the user can view files first before selecting them for batch processing.

Point out the other automated Fireworks features that can be accessed through Bridge, such as Convert To Grayscale and Convert To Sepia Tone, both of which are applied using Fireworks Live Filters, so they remain completely editable.

Although it is not discussed in the book, point out that running the Batch Process Wizard gives you access to *any* command available from the Fireworks command menu, including custom commands created by the user. As long as the command does not rely on selecting a specific object in a file, most commands will run successfully from the Batch Process Wizard.

Cropping individual bitmaps in a design

The ability to further crop a bitmap once it has been imported or pasted into an existing design is very useful, and this is demonstrated when the student imports a series of images for a photo gallery, only to find that two of the images are a different dimension from the rest.

Exporting a specific area

Rather than the current design, the Export Area tool lets you drop a crop. And when you commit to the crop, you're brought to the image preview window, where you can save the cropped area as a flattened image that can be e-mailed to a client. As demonstrated in the lesson, this workflow can be helpful if you want a client to focus on a specific area of a design.

Although it is not mentioned in this lesson, point out that users also have options to send an open design directly to e-mail, either as a Fireworks PNG file or a flattened JPEG file.

Future-proofing your projects

The exercises in this part of the lesson focus on making your files as useful as possible to others (in terms of project information) and particularly those who prefer to work in Photoshop rather than Fireworks.

Lesson 13 takes this concept even further, with exercises for working with Flash, Flex Flash Catalyst, Dreamweaver, and AIR.

● **Note:** We walk the students through customizing the commands used during the Batch Process. In the final screen for the Batch Process Wizard, the user has an option, Save Script, that would add the customized batch process to the Fireworks Commands menu as a custom command. In many cases, custom commands are created by selecting a series of steps in the History panel and choosing Save Steps As A Command.

Adding metadata

Explain that metadata can be added either through Bridge or by choosing File > File Info in Fireworks. At the very least, adding some keywords to each file worked on can greatly speed up searching for files at a later time.

Using Photoshop Live Effects

Photoshop Live Effects were first introduced in Fireworks CS3. Nothing has changed in this area, but it's worth pointing out that support for Photoshop Layer Styles (Live Effects in Fireworks) makes it easy to maintain certain effects when a PSD file is opened in Fireworks. Likewise, if it is known that an original Fireworks design is destined to be edited in Photoshop, using Photoshop Live Effects guarantees that those effects will remain editable within Photoshop.

The Live Effect used in the exercise—Stroke—is unique in that Fireworks has no native counterpart to it. Regular or masked bitmaps can have a stroke applied to them easily.

Saving as a Photoshop file and customizing Photoshop export options

Just as you can customize how a Photoshop file is imported or opened within Fireworks, you can also control the options for saving any design within Fireworks as a Photoshop file.

This is an important feature because Photoshop does not recognize the enhanced PNG format used by Fireworks. If a Fireworks PNG file is opened in Photoshop, the entire design is flattened into a single bitmap image.

There have been several integration improvements in CS5. Be sure to check the sidebar “Enhanced integration in CS5.”

Common blending modes and Live Filters

The charts in this section also highlight the integration between Photoshop and Fireworks. There is a fair amount of common ground between the two applications, and knowing what elements are supported in both can help a user maximize this compatibility.

Questions

The following questions are not in the student's Classroom in a Book.

- 1 How do you set the base optimization setting for multiple pages?
- 2 Where are Photoshop Live Effects located?
- 3 What is the equivalent to Photoshop Live Effects within Photoshop?
- 4 How do you convert a Fireworks design into a Photoshop file?
- 5 What are the five default categories of templates available in Fireworks?
- 6 In which template folder can you find templates to help with creating web banner ads?

Answers

- 1 You can set a common or base optimization by first selecting the pages in the Pages panel. Hold down Shift to select a continuous series of pages or hold down the Ctrl (Windows) or Command (Mac) key to select specific pages not in sequence. Then choose the Export format from either the Properties panel or the Optimize panel.
- 2 Photoshop Live Effects are located in the Live Filters menu in the Properties panel.
- 3 Photoshop Live Effects are called layer styles in Photoshop. While these effects are maintained and can be activated from within Fireworks, the Layer Styles panel in Photoshop is much more robust, providing many more creative options.
- 4 Select File > Save As and choose Photoshop PSD (*.psd) from the Save Copy As drop-down list.
- 5 The five default template categories are Document Presets, Grid Systems, Mobile, Wireframes, and Web.
- 6 Banner ad templates for both web and flash can be found in the Document Presets folder.

Lesson 13: Going Further

This chapter is located on the companion disc as a PDF, along with accompanying lesson files.

As the heading indicates, this supplemental lesson will take the student beyond the basics. They will get a more rounded picture of how Fireworks fits into a variety of workflows: Fireworks to Dreamweaver, and Fireworks to Flash Professional and Flash Catalyst, AIR, and Flex.

Goals for this lesson

In this lesson, students will learn how to do the following:

- Start and preview mobile designs in Device Central
- Apply AIR event commands to slices and hotspots
- Create an AIR prototype for client review
- Create skins for Flex components
- Export a Fireworks design to Flash Catalyst
- Use Roundtrip editing between Dreamweaver and Fireworks
- Create graphics for fixed and fluid web page containers
- Work with native Fireworks PNG files in Flash

Mobile projects

In this section students will once again make use of document templates (for testing purposes), but the main focus is to demonstrate the integration between Fireworks and Device Central. Before getting into the lesson, take some time to talk about Device Central.

Device Central lets you preview and test the appearance, performance, and behavior of mobile content right on the desktop. You can simulate various display scenarios, such as indoor and outdoor reflections, using specific mobile devices or even custom device profiles.

To learn more about Device Central, be sure to visit www.adobe.com/products/creativesuite/devicecentral/features/.

Students will begin by starting Device Central right from the Fireworks File menu and then selecting device profiles in Device Central and generating a new empty document in Fireworks from one of the chosen devices. Then they will open a mobile document template and take advantage of the integration between Fireworks and Device Central to preview the template.

Working with Adobe AIR

Before proceeding with the lesson, take some time to explain what Adobe AIR is and show some functioning examples. We've given you a brief description in the book.

AIR (Adobe Integrated Runtime) is a cross-platform runtime environment for building rich Internet applications using Adobe Flash, Adobe Flex, HTML, or Ajax. Unlike traditional web applications, the AIR application runs on your desktop without a web browser, often as a floating panel. Some examples of AIR applications are Adobe's Kuler panel (www.adobe.com/products/kuler/faq/) and TweetDeck (www.tweetdeck.com/desktop/), for Twitter.

Interaction review

As in the previous two lessons, we encourage you to review the completed project so that students gain a sense of what they are aiming for, prior to building on the AIR prototype. After the review, students will build on a working version of the prototype.

Fireworks is not just for prototyping websites. This set of detailed exercises on building an AIR prototype discusses in brief what AIR is and shows how Fireworks can save the development team a lot of time, just as it can with website development.

Point out that the same type of interactivity available to a website prototype is also available when building AIR prototypes, but with the added features of being able to drag, close, minimize, and maximize the application prototype on the desktop, using graphic elements within the application itself.

Emphasize that Fireworks only creates a prototype; Fireworks cannot connect to databases or update anything within the prototype dynamically. All states of the prototype must be planned out and built graphically.

Students will add virtually all the interactivity to make the prototype function.

Creating an AIR prototype

For a simple command, a lot happens when this menu option is chosen. Students will walk through all the settings for the Create AIR file dialog box. Emphasize that a great deal of the information in this dialog box is required.

To minimize any errors when creating the digital signature, please make sure all computers have the latest version of AIR installed.

Point out that while not indicated in the dialog box, *all* fields must be filled out when users create their digital signature.

Installing the prototype

Installing an AIR prototype is a breeze if the package was created correctly. To add a sense of completion, though, we recommend you allow students to install their prototype, if possible.

You should test this process beforehand, logged onto a computer as a student; lab computers may not have the necessary rights to allow for the installation and you may have to talk with your tech support staff to see if any arrangements can be made.

During installation, the user can choose where the prototype should be installed. We recommend the Lesson13 folder, so that the files can easily be deleted afterward.

Extra credit

The following exercises take students back into the AIR prototype to add some professional touches.

Creative and corrective techniques

Techniques for image correction and for working with vector strokes are demonstrated in this section.

Blending modes for image correction

Working with a combination of blending modes and Live Filters can improve the quality of an image in a simple and nondestructive manner. Take some time to define blending modes and show examples other than the one demonstrated in this book.

Creating a Flex skin

Before proceeding with this exercise, you should take a few minutes to explain to students what Flex is. The basic description from Adobe is as follows:

Adobe® Flex® is a cross-platform, open source framework for creating rich Internet applications that run identically in all major browsers and operating systems, and now on the desktop with Adobe AIR™.

We recommend visiting the Flex Developer Center ahead of time (www.adobe.com/devnet/flex/) to locate a couple of examples to show the class. As this exercise indicates, the Nature console prototype could be coded into a true application using Flex.

Point out that from the designer's perspective, students do not need to understand how to create applications in Flex, but in such a case, discussions with the Flex programmer are strongly recommended. A good rapport between designer and programmer creates a much smoother project flow.

For the purposes of this section in the lesson, students will see how the designer (and Fireworks) fit in with the development team, by bringing his or her visual skills to bear on the creation of assets for a Flex application.

In this section, students will learn how to customize the skin (the graphics) for a specific component (a button), how to add additional states to the button, and how to export the graphics so the programmer can incorporate them into the application.

Fireworks and Flash Catalyst

Before proceeding with the lesson, take some time to explain what Adobe AIR is and show some functioning examples. We've given you a brief description in the book.

Adobe® Flash® Catalyst™ is a new professional interaction design tool for rapidly creating interactive content without writing code. You can create interactive portfolios, product guides, site navigation, interfaces for rich Internet applications (RIAs), and more.

Take some time to introduce the FXG format as well. There is a sidebar in the text defining FXG, but a simple description would be that the FXG format is the graphics file format for the Flash platform and Flash Player.

This software is quite promising; it creates a bridge between designers and developers, in that designers can now take their interfaces and make an interactive project to demonstrate functionality, or perhaps even complete the project without the involvement of a developer. For projects that require a developer's skills, the designer can at least create a proof-of-concept, functional prototype to show the developer the intended interactions, transitions, and events.

The goal in this exercise is not to use Flash Catalyst to create anything, though; that goal is beyond the scope of this book. The goal here is to show the students how accurately a Fireworks design can be ported over to Flash Catalyst using the FXG and Images Export workflow.

At this time, the Fireworks and Flash Catalyst Workflow is really a one-way street. Fireworks cannot open or edit the FXG format yet, so any editing of the exported file would have to occur in either Illustrator or Photoshop, where round-trip capabilities have been set up.

Exporting pages

The students will be working with a completed prototype, based on the wireframe from Lesson 10. It would be a good idea to review the connection between the two files, as it helps to reinforce the importance of a best practices workflow. These two files are also excellent examples of the differences between a wireframe and a prototype.

Fireworks and Dreamweaver

Fireworks and Dreamweaver have shared a long history. This series of exercises demonstrates to the students how this integration can improve their workflow.

Copying and pasting to Dreamweaver is pretty self-explanatory. You may want to point out that this functionality is also available for Photoshop and Dreamweaver, and that the same Image Preview window (a Fireworks feature) is used to allow the conversion and pasting of Photoshop files or layers into Dreamweaver.

Round-trip editing with Dreamweaver is a feature that has been with Fireworks since the beginning and as such is useful only for Fireworks prototypes that have been exported as HTML and Images. The workflow relies on the table structure of the HTML document matching the layout of the Fireworks PNG file. As a result, this workflow cannot be used reliably if the user exports their design as CSS and Images.

The three-slice technique is a method for creating an expandable container for web page content. It's a common design element in a web page, and typically the box has rounded corners.

This exercise has the students go through the process of creating the slices necessary for the container, but it does not go into detail regarding how the slices are applied to a web page using CSS. You may want to prepare some assets ahead of time so that the students can go from Fireworks to Dreamweaver. Although the technique is a staple skill for a web designer, it is not considered a basic or introductory-level exercise.

Fireworks and Flash Professional

With its robust bitmap and vector toolset, Fireworks can be a great starting point for designing graphics for a Flash animation or interface. Point out that a layered Fireworks PNG file can be imported into Flash, as well as flat files such as JPEG or GIF.

Flash will maintain the layer hierarchy of a native Fireworks PNG file as well as a variety of effects, but some Fireworks features are not supported in Flash. The common effects and blending modes are listed in two separate tables in this lesson.

If the student needs to make edits to a native Fireworks PNG file that has been imported into Flash, they will have to return to Fireworks, edit and save the file, and then reimport the PNG file into Flash. There is no round-trip workflow for a native Fireworks PNG file. While this may seem limiting, remind students that they have access to all the layers and objects directly within Flash. Fireworks vector objects, for example, remain completely editable with Flash.

However, round-trip editing is available when a flattened image file is imported into Fireworks. If that flattened file was created from a Fireworks PNG file, the user can edit the PNG directly in Fireworks and click Done, and both the PNG file and the flattened asset in Flash are updated.

Questions

The following questions are not in the student's Classroom in a Book.

- 1 How does importing a multilayered Fireworks PNG into Flash differ from importing a flattened image?
- 2 How do you round-trip edit a bitmap image from Flash to Fireworks?
- 3 When should you not use round-trip editing between Dreamweaver and Fireworks?
- 4 When round-trip editing from Flash or Dreamweaver, what is the best format to pick if available?
- 5 How do you ensure that the background of an AIR prototype does not display when running the prototype as an AIR application?
- 6 What is the integration between Fireworks and Flash Catalyst?

Answers

- 1 Importing a native Fireworks PNG file into Flash gives you the most control over the file. All layers and objects are retained as separate elements, vectors and text remain editable, and some Fireworks effects can also be altered while in Flash. Importing a flattened bitmap gives you the ability to round-trip edit the bitmap using Fireworks. If the bitmap was created from a native PNG file, you can choose to open the PNG file in Fireworks for nondestructive editing of the file.
- 2 To launch round-trip editing in Flash, right-click (Windows) or Control-click (Mac) the image in the Library panel and then choose Edit With Fireworks. The Find Source dialog box will appear, and you will be asked if you want to edit this image directly, or locate a PNG file to make the edits. When you are finished editing in Fireworks, click the Done button to save the file and update it within Flash.
- 3 If your web page design is laid out using CSS rather than tables, round-trip editing from Dreamweaver to Fireworks will produce undesirable results in the updated web page.
- 4 If available, choose the original native PNG file for round-trip editing. This gives you the most nondestructive flexibility in editing the design.

- 5 To ensure a transparent background in your final functioning AIR prototype, make sure that the entire file is optimized as PNG 32. In the Create AIR package dialog box, make sure the Window option is set to transparent, and add 5 pixels to the height and width of the window to eliminate scroll bars.
- 6 As a pixel-precise design application, Fireworks is an excellent place to create rich visuals for use in a Flash Catalyst project. Once the artwork or prototype has been created in Fireworks, the Fireworks file can then be exported as FXG and Images for use in Flash Catalyst. At this time, the integration between the two applications is a one-way street; Fireworks cannot open or edit FXG files. Editing the FXG file will require round-trip editing using Illustrator or Photoshop.