Chapter 1

Creating the Perfect Flash Site

In This Chapter

- Planning your Flash site
- Assembling the site assets
- Building the Flash site
- Publishing your site

The first page of Chapter 1 is always an exciting place in any book. It’s where you find out what’s in store for you in the upcoming pages. Or hey, maybe you’ve already read three chapters and have just decided to restart at the beginning. (What a novel concept!) Well, you can get away with that when reading a book, but if you try to create an interface for your Flash site without first having done your homework, it’s almost like trying to fly without knowing how to operate an airplane — but not nearly as hazardous to your health.

In this chapter, I show you the steps you go through to create a Flash site. And like anything else you build, there is a process. Whether you’re creating a Flash site for your son’s baseball team or for your boss — who plopped an unopened box on your desk that says “Flash Professional 8” and said, “Build me a Flash site” — if you don’t approach the process logically, you’re destined to have more than your share of headaches. Like the self-help gurus say, “Fail to plan, and you plan to fail.”

Flash versus HTML . . . The Winner Is?

To Flash or not to Flash, that is the question. Whether ’tis nobler to create a ho-hum HTML Web site or to up the ante with a Flash design with more bells and whistles than . . . but I digress.

Flash has been around for a long time. In comparison, HTML is almost ancient. Flash has gone through a rapid growth and development spurt since Flash 4. HTML is now in version 4.0 and won’t be developed anymore. In fact, HTML 4.0 has been around since 1998, which is practically the Jurassic age in regards to computers and Internet technology. Savvy designers have come up with all
kinds of imaginative coding and workarounds to create some really cool Web sites with HTML. HTML designers use JavaScript to add interactivity to their designs. They write complex code to embed video and audio in their designs, and they use form elements to create interactive forms to gather information, to create virtual shopping carts, and so on. Or maybe they're lucky and have a good WYSIWYG (What You See Is What You Get) HTML application, like Dreamweaver, that takes care of a lot of the grunt work.

Either way, there's still a steep learning curve to create anything more complex than a hum-drum, text-only Web page sprinkled with the odd JPEG image or three. Simply put, modern-day Web designers need to know a lot. And they often have to resort to other colleagues in order to create the latest "all-singing, all-dancing" Web design that will blow the socks off their client's competitors.

However, when you want to have your cake and eat it too, nothing beats Flash. You have everything you need within the application to add all of the interactivity and WOW factor the law allows, and then some. Lots of people think of Flash as a really cool animation tool. But it's so much more than that. You can build high-powered, compelling Web sites with Flash. And the only time HTML comes into the picture is as the document within which you embed your Flash Web site. Figure 1-1 shows a cool Flash Web site.
Within Flash is a powerful scripting language known as ActionScript, which bears a similarity to JavaScript. If the design you envision includes full-motion video, that’s available from within Flash as well. In fact, Flash has its own video codec (an algorithm that compresses the movie when it is rendered, and decompresses the movie when it is viewed) called FLV (Flash Video). But that’s only the tip of the iceberg. You say you want to gather information from customers at your Flash site? Piece of cake! You can design an artistic Flash form that makes its HTML brother look positively archaic. And you can do all of this within Flash. I show you how to incorporate these elements and more in your Flash Web design in the upcoming chapters.

Setting Goals for the Design

Before you can build the site, you need some kind of road map. Trying to create a Flash movie without a plan is like trying to drive from Florida to Alaska without a map or planned route. You may get there, but you’ll end up taking a world of detours and wrong turns.

The easiest way to know where you’re going with your Flash Web design is to interview the client. In fact, this step is an absolute necessity. After all, how can you create a proposal if you don’t know what the client wants? If the Web site is for a friend or a family member, the interview process will probably be an ongoing give-and-take of ideas. After the goals for the design have been defined, put it in writing and get the client to sign off on it. Remember, no job is done until the paperwork is handled. And in the case of a Web design, no job should be started until the paperwork is handled. I discuss this issue in more depth in Chapter 2.

Planning Your Site

After you have the goals for your design on paper, it’s time to put you design paper again. Yes, you read correctly. Only this time, you’re not putting words on paper; you’re sketching the design. The sketch doesn’t have to be elaborate — just enough to give you a visual clue as to what the finished design will look like. You can create a series of sketches on a legal pad, an illustration application, or, if you’re meeting with the client in a restaurant, a napkin works well as a makeshift sketchpad. If you prefer to be a little more elaborate, you can sketch your design and actually build different iterations of the design in Macromedia Fireworks (an application used to create graphics, edit images, and create HTML for Web sites). After the sketch is done, you’ll know exactly what you need to build the site. The sketch also gives you an idea of what, if any, ActionScript you need to pull off the design. Don’t worry, I show you everything you need to know about ActionScript for a Flash Web design in Chapter 7.
Gathering Assets for Your Site

After you create preliminary sketches for your site, it’s time to get your ducks in a row, so to speak. In this phase of the project, you get or create everything that cannot be created in Flash and store it in a neat little folder. There’s nothing worse than being two-thirds of the way into your project, with the creative juices flowing like a river in flood, only to discover that you don’t have everything you need to complete the project.

The assets you gather will vary depending on what your design encompasses. If your site has a slide show, you’ll gather the images, optimize them for Web site viewing, and size them to suit your design. Granted, you can do some of this work in Flash. However, a Web-friendly image editing application like Fireworks will give you more options. Other assets you may have to gather are sound clips and full-motion video. Animation? Forget it. You can do all that in Flash. Chapter 2 has more about gathering the necessary assets.

Building the Interface

Every good Web site needs an interface. In a nutshell, an interface is a graphic device that your viewers can use to navigate from one part of the site to another. The acronym for an interface is GUI — graphical user interface. The interface generally consists of a background, a banner, and navigation buttons. You can build most of the assets for your interface in Flash. However, some designers prefer to lay out the background for the interface in an application like Fireworks and then import the graphic into their Flash design.

You’ll create many parts of the interface by using Flash drawing tools. When you create an object with Flash drawing tools, you create a vector object. Vector objects are graphic objects that can be scaled infinitely, that is, unless the object has a complex gradient (a fill that consists of two or more colors blended together in a linear or radial manner). Some Flash Web designers prefer to create their vector objects in a drawing application like Adobe Illustrator or CorelDraw.

Some Flash designers throw everything but the kitchen sink at their viewers. This is fine if you’re creating a simple site with only a little navigation. However, when you add bells and whistles like video and full-color bitmaps, you run the risk of creating a Flash movie with a file size slightly smaller than the Trump Tower. When you create a site that big, trying to download it is like trying to drain an Olympic-size swimming pool with a garden hose; it takes a long time. I show you how to create a Web-friendly interface and then load content into the interface in order to manage a Flash Web site that has a humongous amount of content. Figure 1-2 shows a cool Flash interface, complete with a hideaway control panel that enables users to change interface colors and so on.
Simplifying your workflow with symbols

So you have an idea for your Flash Web site, but you shudder at the thought of creating all the artwork. It’s a good thing you decided to create a Flash Web site, because in Flash, anything you create can be converted into a symbol. Symbols come in three flavors: graphic, button, and movie clip. The beauty of symbols is that they’re reusable. You can add a symbol wherever you need one without breaking the bandwidth bank. When you take a symbol from the Library and add it to the timeline, you create a symbol instance. When the instance is encountered, the Flash Player re-creates it from the information in the Library. Figure 1-3 shows a Library that lacks a live librarian but is chock-full of symbols.

And guess what? You can have a symbol within a symbol, which in Flash is known as nesting. This opens all manner of possibilities for the creative Flash Web designer. You can also house ActionScript in the Movie Clip symbol. This makes it possible for you to use the same ActionScript in other parts of your movie, or for that matter, in other movies. Now how cool is that? I give you a symbolic baptism by fire in Chapter 3.
A tall tale of buttons and navigation menus

An important part of any interface is the navigation menu. The navigation menu consists of buttons. But you don’t need to reinvent the wheel to create a navigation menu. Whenever you create a button, or for that matter any other symbol, it’s stored in the Flash Library. Unlike your local library, you don’t need a card to take something from the Library, you just do it. I show you how to create a navigation menu by creating one button, duplicating the button for the other links in your navigation menu, and then editing the duplicated buttons. It’s really child’s play after you get the hang of it.

If you have lots of content in your Web site, you might have to stuff the buttons into drop-down menus. Creating a drop-down menu might seem rather labor-intensive, especially if your site holds a whole lot of buttons that link to different content. Not to worry, in Chapter 5, I show you how to whip up a vertical or horizontal drop-down menu like the one in Figure 1-4 in no time. In this figure, the second row of buttons drops down when the Portfolio button is clicked.

Adding text and other delights

Sometimes you have to tell instead of show. When you’re faced with this task, you need to create text. You may also need text for buttons. Creating text in Flash is almost as easy as working with your favorite word processor. The most basic form of Flash text is static text. When you create static text, it just
sits there and gets the word out. You can make pretty static text by choosing a fancy font and rainbow colors, or you can create ho-hum text by using the basic Flash fonts dressed up in one of Halloween’s favorite colors: jet black.

Flash offers two other forms of text: input and dynamic. Input text accepts information from your Flash site’s visitors. This information can be stored in a variable. Dynamic text is just the opposite: It takes information from a variable and displays it within your Flash movie. You can use this dynamic duo to personalize a viewer’s visit to your site. You can also use it to store a visitor’s information when shopping in your Flash e-Store. I show you how to create fancy (and not-so-fancy) Flash text in Chapter 4.

Adding the WOW Factor

The indescribable WOW factor is something that can only be experienced with the senses. Sight and sound make a Flash site pop. And it’s something that’s hard to do with HTML, but relatively easy to do with Flash. You say you want to introduce your site with a bang? You can — literally. All the bells and whistles you need to create an award-winning Flash site that’ll rock your visitors’ worlds are included with Flash. All you have to do is harness the power. I show you how in Part III.
Making your site interactive with ActionScript

The thought of writing code strikes fear into the heart of any Web designer — with the exception of card-carrying geeks, also known as Web developers. Flash ActionScript, however, is a non-geek’s answer to code. All you have to know is which action to use to pull off an effect. With Script Assist in Flash 8, you select the action and then fill in the parameters. You don’t have to know how to enter code with Script Assist, which is a blessing after having to manually script everything in Flash MX 2004. You’ve probably seen plenty of Web sites with Flash intros. Virtually anyone with the slightest bit of Flashpertise can put together one of those. But what separates the men from the boys is the clever use of ActionScript.

The first place you’ll use ActionScript is creating a preloader. A preloader is either a graphic, animation, or text that displays while enough content loads for the main Flash movie to play without interruption. Are preloaders necessary? Well, sometimes. If your audience accesses the Internet via a dialup connection, a preloader ensures that enough information loads to view your design without interruption. Some Flash designers go over the top with preloaders that contain so many bells and whistles that it loads slowly and needs a pre-preloader of its own. How’s that for redundancy? In Chapter 8, I show you how to create a preloader, such as the one shown in Figure 1-5.

If you want a unique menu, you can use ActionScript to create a drag-and-drop menu. Whether you create a cool drag-and-drop menu or a conventional navigation bar, when your visitors click a button, you can literally show them where to go. And when they get there, you can up the ante with ActionScript. You can use ActionScript for games, to create animated banners, to create moving menus, to add the time of day to your Web site, and much more. Figure 1-6 shows a Flash Web site with some ActionScript bells and whistles.
Get a move on with animation

The clever use of animation gets the attention of your visitors and has them returning on a regular basis. If you create a tricked-out navigation menu, you can use animation to instruct your visitors how to use it. And if you’re really adventurous, you can use animation to create a text banner with text that dances or flies into position, such as the one shown in Figure 1-7.

Animation takes place on a timeline. The timeline is broken down into frames. The number of frames that occupy one second of the timeline is determined by the frame rate of the movie. The more frames you have, the smoother the motion. However, a higher frame rate increases the file size. You can find out all about frames and keyframes and blank keyframes, oh my, in Chapter 6.

If you’ve created animation in the past, you may have meticulously made changes on every frame to get it to work. However, with Flash, you can automate your animations. All you need to do is create a symbol, a few keyframes, and let motion tweening do the rest. Another cool way to attract attention is with an animated banner. I show you almost everything you wanted to know about animation but were afraid to ask in Chapter 6.
Flash has another form of automated animation known as *shape tweening*. Shape tweening can be used on editable shapes to change them into different shapes. Shape tweening isn’t sophisticated enough to morph your ex-significant other into a donkey, but it can create interesting animations.

**Soundtracks and other operatic delights**

Flash soundtracks can be a joyful noise or irritating enough to make your viewers hightail it without ever looking at your site. Everyone has different musical tastes; that’s why there are so many music genres. Instead of subjecting your visitors to your personal taste in music, you can give them a choice. And to go with the choice, you can put the viewer in control of the experience with a sound controller. Now how cool is that? I show you how to add sound to your site in Chapter 8.

You can also add sound to buttons. If you’re a photographer showing off your portfolio with a Flash Web site, what would be cooler than a shutter click when one of your visitors clicks a button? I show you how to make noisy buttons in Chapter 5.

**Optimizing and Publishing Your Site**

If you build it, they will come. But will they stay? The answer to that question is *no* if you create a Web site that takes a long time to load. The average Web surfer has the attention span of a sand flea, and that isn’t very long. If you want your visitors to delve deeply into your site, you have to give them something to look at almost immediately. The secret to creating a quick-loading site is to carefully plan the site, create a skinny interface, and load content into the interface, which is what I show you how to do in this book. If you get to the
eleventh hour and you have a 2MB site that takes eons to load, well, there’s not much you can do except start all over again. But if you have a svelte siren of a Flash site, you can make the site load even faster by optimizing it. See Chapter 12 to find out how.

**Testing your design**

Test, test, and then test again. That should be the motto of every Flash designer. There’s nothing more frustrating than being nearly finished, just to find a glaring error in your logic, or, for that matter, in the ActionScript, that prevents the site from doing all you wanted. It’s in your best interest to test early and test often. You can do some testing in authoring mode, and do a full-fledged test in another window, as shown in Figure 1-8. I show you how to test your site in Chapter 13.

**Getting the bugs out**

If your Web site contains ActionScript, variables, and dynamic text, you have a recipe for disaster if you don’t know how to debug your site. Murphy’s Law can and will raise its ugly head. But you can nip Murphy in the bud by using Flash’s powerful debugger. You can track every variable in your Flash movie as well as in your ActionScript. However, even at the default frame rate, a snippet of ActionScript code executes in $\frac{1}{12}$ of a second. In other words, things happen so fast that you can’t track them without a little help from a friend.

Those friends are known as breakpoints (not to be confused with the formerly popular break dance), which you place on complicated lines of ActionScript. A breakpoint stops ActionScript cold in its tracks when you debug your movie. After getting the skinny on what your code is doing, you resume the movie from within the Debugger (more on that in Chapter 12), shown in Figure 1-9.
Optimizing the beast

After you get the bugs out, you have some housecleaning to do. You need to optimize your Flash movie in order for it to load as quickly as possible. One of the first things you do is clean out the Library. Publishing a Flash movie with unused symbols in the Library is like preparing a car for the Indy 500 and leaving a whole bunch of extra parts in the engine compartment; the extra baggage makes the Web page load slower.

Other issues you’ll deal with while optimizing the site are the quality of the images and the data rate of any sounds in your movie. Optimizing your Flash movie means it will load faster, which is a good thing for your site’s viewers. I show you how to optimize your Flash Web site in Chapter 12.

Publishing and uploading your brainchild

After creating your Flash site, it’s time to share it with the world, or at least with a few close friends. To convert your Flash document into a Flash movie, you publish it. When you publish the movie, you create an SWF file and an HTML file into which your movie is embedded. Or if you create a large Flash site, you publish several SWF files that load into your interface, which is yet another SWF file. The interface SWF file is embedded in an HTML document, which you also publish.

When you publish a Flash movie, you have several decisions to make that determine who can view your Flash movie. After you publish your Flash Web site, you upload it to your server. But not to worry, publishing and uploading a Flash movie isn’t rocket science. I show you everything you need to know about publishing and uploading Flash movies, and maybe a little more, in Chapter 13.