



Adobe® Flash® CS6

The Professional Portfolio

AGAINST THE CLOCK
mastering graphic technology

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Acknowledgements

ABOUT AGAINST THE CLOCK

Against The Clock, long recognized as one of the nation's leaders in courseware development, has been publishing high-quality educational materials for the graphic and computer arts industries since 1990. The company has developed a solid and widely-respected approach to teaching people how to effectively utilize graphics applications, while maintaining a disciplined approach to real-world problems.

Having developed the *Against The Clock* and the *Essentials for Design* series with Prentice Hall/Pearson Education, ATC drew from years of professional experience and instructor feedback to develop *The Professional Portfolio Series*, focusing on the Adobe Creative Suite. These books feature step-by-step explanations, detailed foundational information, and advice and tips from industry professionals that offer practical solutions to technical issues.

Against The Clock works closely with all major software developers to create learning solutions that fulfill both the requirements of instructors and the needs of students. Thousands of graphic arts professionals — designers, illustrators, imaging specialists, prepress experts, and production managers — began their educations with Against The Clock training books. These professionals studied at Baker College, Nossi College of Art, Virginia Tech, Appalachian State University, Keiser College, University of South Carolina, Gress Graphic Arts Institute, Hagerstown Community College, Kean University, Southern Polytechnic State University, Brenau University, and many other educational institutions.

ABOUT THE AUTHOR

Erika Kendra holds a BA in History and a BA in English Literature from the University of Pittsburgh. She began her career in the graphic communications industry as an editor at Graphic Arts Technical Foundation before moving to Los Angeles in 2000. Erika is the author or co-author of more than twenty books about Adobe graphic design software. She has also written several books about graphic design concepts such as color reproduction and preflighting, and dozens of articles for online and print journals in the graphics industry. Working with Against The Clock for more than ten years, Erika was a key partner in developing The Professional Portfolio Series of software training books.

CONTRIBUTING ARTISTS AND EDITORS

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- **Steve Bird**, Adobe Certified Expert
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- **Richard Schrand**, International Academy of Design & Technology, Nashville, TN
- **Pam Harris**, University of North Texas at Dallas
- **Debbie Davidson**, Against The Clock, Inc.

Finally, thanks to **Angelina Kendra**, editor, for making sure that we all said what we meant to say.

Walk-Through

Project 3

Animated Internet Ads

Your client wants to create a series of ads to place on Web sites that are used by existing and potential customers. They have asked you to create a short animation rather than just a static image, in hopes of attracting more attention when the ad appears in a browser with other content.

This project incorporates the following skills:

- Creating shape tweens to animate changes in shape and color
- Creating classic tweens to **animate changes in position and opacity**
- Adding text to a Flash movie
- Adapting file content to match different file dimensions
- Using a Flash project to manage assets for multiple files
- Publishing a file to SWF for distribution

Project Goals

Each project begins with a clear description of the overall concepts that are explained in the project; these goals closely match the different "stages" of the project workflow.

Project Meeting

client comments

We've provided you with our logo and an image that we want to use in the ads. Since these are going to be placed into a variety of Web sites, we want some kind of animation that might help catch a user's eye.

Most of the sites where we're planning on advertising use standard ad sizes. I'm not sure exactly which sites we're going to purchase, but we do like the rectangle and square shapes better than the narrow banners.

We might decide on some of the other options later, but we'd like to get started with three common sizes:

- 300 × 250 pixels
- 136 × 280 pixels
- 250 × 250 pixels

art director comments

Flash includes predefined templates for most of the common ad sizes, so that's the easiest way to start the first file.

I want you to animate different aspects of the client's logo over the course of the animation. The **keyframe** is ideally suited to move across the stage. He should paddle across the stage while the sun rises. Halfway through, he should pause and wait until the tagline appears, then move the size of the way across while the image gradually appears in place of the sunrise.

After you create the initial ad, you can use several built-in techniques to repurpose the content for other sites. You should also take advantage of the Project panel to manage assets that will be used in more than one file, so it will be easier to make universal changes in any of the shared assets.

project objectives

To complete this project, you will:

- ✓ Create a file based on a template
- ✓ Create a shape tween
- ✓ Tween an object's color
- ✓ Create a classic tween
- ✓ Tween an object's opacity
- ✓ Stop the animation timeline
- ✓ Create and control a text object
- ✓ Define font embedding
- ✓ Control object stacking order
- ✓ Create a Flash project
- ✓ Scale content to document properties
- ✓ Edit a shared symbol
- ✓ Publish files to SWF

The Project Meeting

Each project includes the client's initial comments, which provide valuable information about the job. The Project Art Director, a vital part of any design workflow, also provides fundamental advice and production requirements.

Project Objectives

Each Project Meeting includes a summary of the specific skills required to complete the project.

Stage 3 Creating Frame Animations

The basic underlying premise of animation is that objects change over time — from complex transitions in color, shape, and opacity to moving a character to a new position. The most basic type of animation is to simply replace one object with another **as the time goes on** will create this type of animation in this stage of the kind project to make it seem like the girl is talking, repositioning or replacing objects on successive frames results in the appearance of movement when you watch an animation. In reality, your brain is being fooled — you're simply seeing a series of images flash before your eyes (hence the applications of the name). Your brain thinks it's seeing movement, when in fact it's simply processing a series of still images displayed in rapid succession.

To make an animation appear to run continuously, you can **loop** it so it starts over at Frame 1 after reaching the last frame. (In fact, as you will see, looping is the default state of an animation; you have to use code to prevent the timeline from automatically looping in the exported file.)

To create an animation, you need to understand several terms and concepts:

- The Flash Timeline panel shows a visual depiction of the passage of time. Each fraction of a second is represented by a frame (the rectangles to the right of the layer names). The **playhead** indicates the current point in time, or the frame that is visible on the Stage.
- The number of frames in one second (called **frames per second, FPS**, or **frame rate**) determines the length and quality of the overall animation. New Flash files default to 24 fps, which is the standard frame rate of most film movies in the United States (although HD formats range as high as 120 fps). Animations only for the Web are commonly developed at 15 fps.
- A **keyframe** indicates the point in time at which something changes. If you want to change something, you need to insert a keyframe at the appropriate moment on the timeline.
- Regular frames between keyframes have the same content as the preceding keyframe.

ADD STREAMING SOUND

Unlike the event sounds that you used in the previous exercises, **stream sounds** play as soon as enough data is downloaded (called **progressive downloading**) to the user's computer. Stream sounds cannot be used on a user's computer; the sound file must be re-downloaded every time it is played. Stream sounds are linked to the timeline, which means they stop playing if the timeline stops (i.e., they are "timeline dependent").

- With **atrium_kiosk.fla** open, add a new layer named **Talking** immediately above the **Mouths** layer.
- Select the **Frame 1** keyframe of the **Talking** layer.

Real-World Workflow

Projects are broken into logical lessons or "stages" of the workflow. Brief introductions at the beginning of each stage provide vital foundational material required to complete the task.

ORGANIZE YOUR LIBRARY WITH FOLDERS

Library folders work the same as layer folders; they help you organize and structure complex files. Movies often contain dozens or even hundreds of assets — and the more complex a movie becomes, the more useful it is to clearly organize those assets. Although this step isn't strictly necessary, it is always a good idea to organize your work so you can more easily organize your thoughts and process going forward.

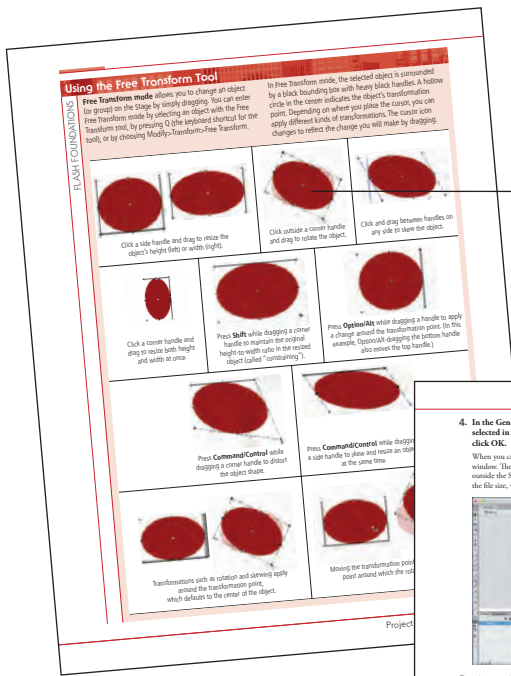
- With **atrium_kiosk.fla** open, expand the **interface1** folder in the **Library panel**.
- Click the **Illustrator Symbols** folder (inside the **interface1** folder) and drag down to the empty area at the bottom of the panel. This moves the Illustrator Symbols folder to the first level of the library. The symbols which are placed on the Stage, are not affected by the move.
- Double-click the **Illustrator Symbols** folder name to highlight the name. Type **buttons** to change the folder name.
- Click the **start_over** button symbol icon and drag it into the **Buttons** folder.
- Double-click the **interface1** folder name to highlight the name. Type **component artwork** to change the folder name.

Step-By-Step Exercises

Every stage of the workflow is broken into multiple hands-on, step-by-step exercises.

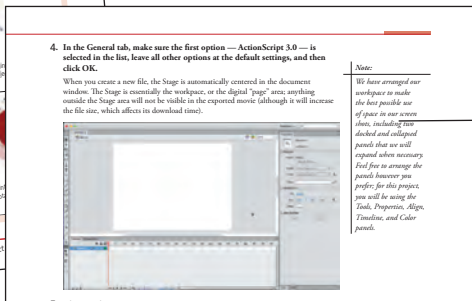
Visual Explanations

Wherever possible, screen shots are annotated so you can quickly identify important information.



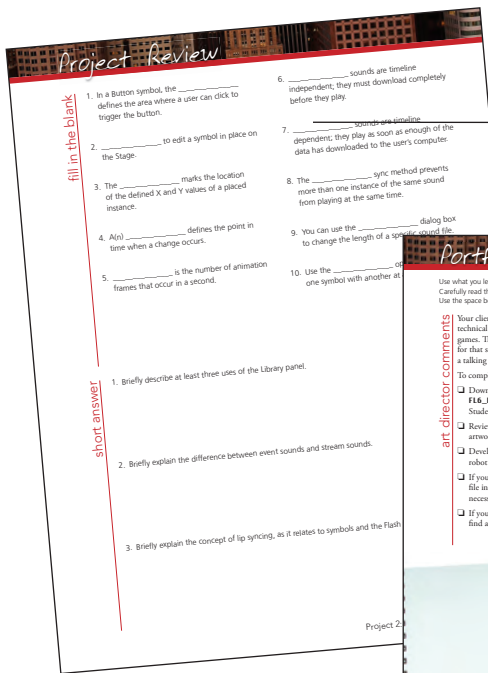
Flash Foundations

Additional functionality, related tools, and underlying graphic design concepts are included throughout the book.



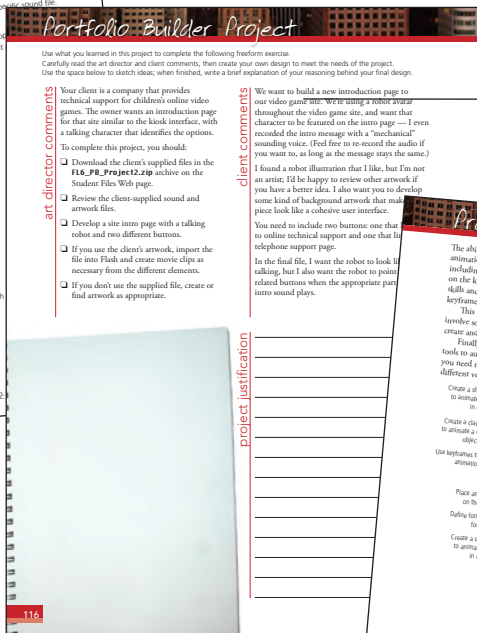
Advice and Warnings

Where appropriate, sidebars provide shortcuts, warnings, or tips about the topic at hand.



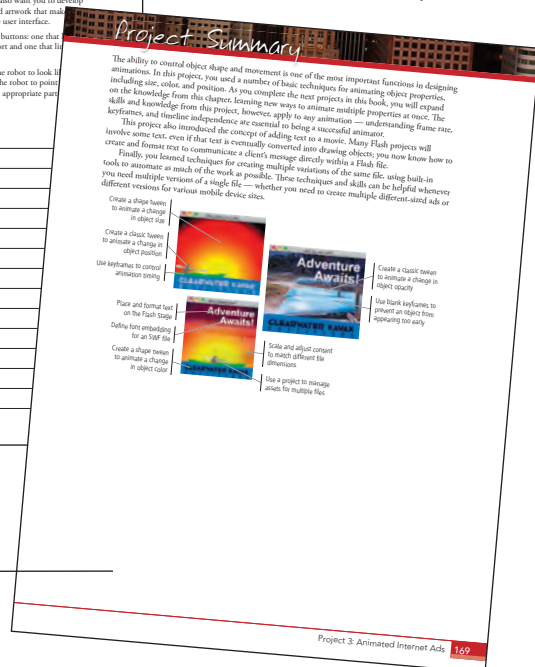
Project Review

After completing each project, you can complete these fill-in-the-blank and short-answer questions to test your understanding of the concepts in the project.



Portfolio Builder Projects

Each step-by-step project is accompanied by a freeform project, allowing you to practice skills and creativity, resulting in an extensive and diverse portfolio of work.



Visual Summary

Using an annotated version of the finished project, you can quickly identify the skills used to complete different aspects of the job.

Projects at a Glance

The *Against The Clock Portfolio Series* teaches graphic design software tools and techniques entirely within the framework of real-world projects; we introduce and explain skills where they would naturally fall into a real project workflow.

The project-based approach in *The Professional Portfolio Series* allows you to get in depth with the software beginning in Project 1 — you don't have to read several chapters of introductory material before you can start creating finished artwork.

Our approach also prevents “topic tedium” — in other words, we don't require you to read pages and pages of information about text (for example); instead, we explain text tools and options as part of a larger project (in this case, as static text in a series of Internet ads and as dynamic text in an interactive game).

Clear, easy-to-read, step-by-step instructions walk you through every phase of each job, from creating a new file to saving the finished piece. Wherever logical, we also offer practical advice and tips about underlying concepts and graphic design practices that will benefit students as they enter the job market.

The projects in this book reflect a range of different types of Flash jobs, from animating creatures in the ocean to programming an interactive Web site interface. When you finish the eight projects in this book (and the accompanying Portfolio Builder exercises), you will have a substantial body of work that should impress any potential employer.

The eight Flash CS6 projects are described briefly here; more detail is provided in the full table of contents (beginning on Page viii).

project 1

Corvette Artwork

- Setting up the Workspace
- Drawing in Flash
- Painting and Coloring Objects



project 2

Talking Kiosk Interface

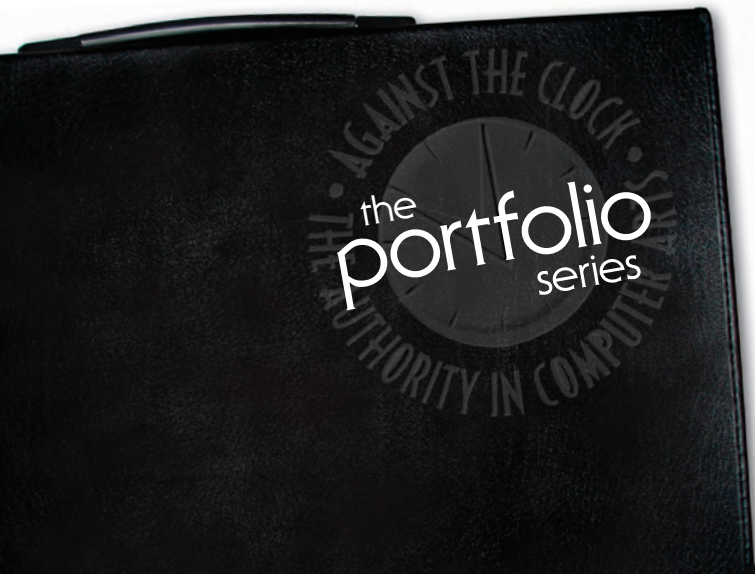
- Working with Symbols
- Working with Sound
- Creating Frame Animations



project 3

Animated Internet Ads

- Animating Symbols
- Working with Text
- Working with a Flash Project



project 4

Ocean Animation

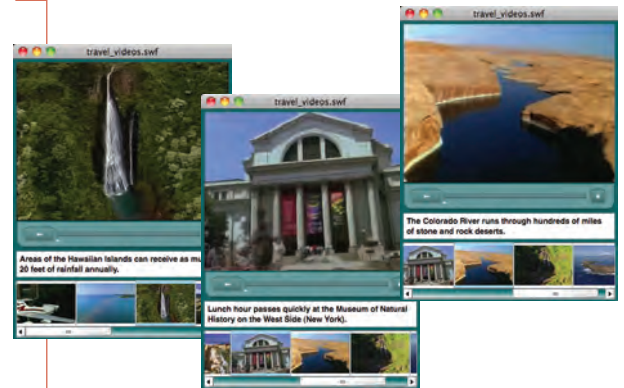
- ❑ Importing Bitmaps and Symbols
- ❑ Animating Symbols
- ❑ Programming Basic Timeline Control



project 7

Travel Video Module

- ❑ Encoding Video for Flash
- ❑ Working with Components



project 5

Gator Race Game

- ❑ Preparing for ActionScript
- ❑ Working with ActionScript 3
- ❑ Creating Custom Functions
- ❑ Working with Variables and Arrays
- ❑ Scripting Loops
- ❑ Adding Sound with ActionScript



project 8

Photo Portfolio Interface

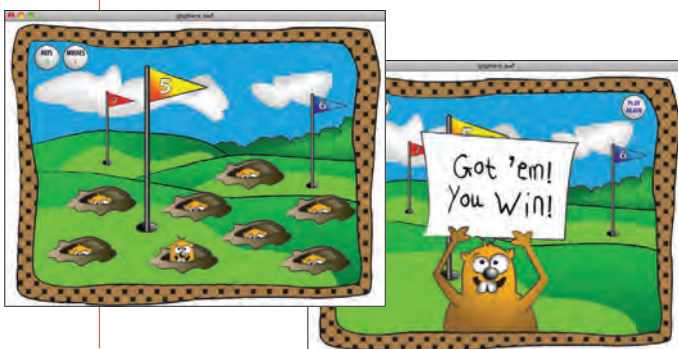
- ❑ Building Site Navigation
- ❑ Loading External Content



project 6

Gopher Golf Game

- ❑ Preparing Game Artwork
- ❑ Programming Interactivity
- ❑ Creating a Mobile App



Our goal in this book is to familiarize you with the Flash tool set so you can be more productive and more marketable in your career as a graphic designer.

It is important to keep in mind that Flash is an extremely versatile and powerful application. The sheer volume of available tools, panels, and features can seem intimidating when you first look at the software interface. Most of these tools, however, are fairly simple to use with a bit of background information and a little practice.

Wherever necessary, we explain the underlying concepts and terms that are required for understanding the software. We are confident that these projects provide the practice you need to be able to create sophisticated artwork by the end of the very first project.

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Getting Started

PREREQUISITES

The entire Portfolio Series is based on the assumption that you have a basic understanding of how to use your computer. You should know how to use your mouse to point, click, and drag items around the screen. You should be able to resize and arrange windows on your desktop to maximize your available space. You should know how to access drop-down menus, and understand how check boxes and radio buttons work. It also doesn't hurt to have a good understanding of how your operating system organizes files and folders, and how to navigate your way around them. If you're familiar with these fundamental skills, then you know all that's necessary to use the Portfolio Series.

RESOURCE FILES

All of the files you need to complete the projects in this book — except, of course, the Flash application files — are on the Student Files Web page at www.againsttheclock.com. See the inside back cover of this book for access information.

Each archive (ZIP) file is named according to the related project (e.g., **FL6_RF_Project1.zip**). At the beginning of each project, you must download the archive file for that project and expand that archive to access the resource files that you need to complete the exercises. Detailed instructions for this process are included in the Interface chapter.

Files required for the related Portfolio Builder exercises at the end of each project are also available on the Student Files Web page; these archives are also named by project (e.g., **FL6_PB_Project1.zip**).

SYSTEM REQUIREMENTS

As software technology continues to mature, the differences in functionality from one platform to another continue to diminish. The Portfolio Series was designed to work on both Macintosh or Windows computers; where differences exist from one platform to another, we include specific instructions relative to each platform.

One issue that remains different from Macintosh to Windows is the use of different modifier keys (Control, Shift, etc.) to accomplish the same task. When we present key commands or other system-specific instructions, we always follow the same Macintosh/Windows format — Macintosh commands are listed first, then a slash, followed by the Windows command.

Minimum System Requirements for Adobe Flash CS6:

Windows

- Intel® Pentium® 4 or AMD Athlon® 64 processor
- Microsoft® Windows® XP with Service Pack 3 or Windows 7
- 2GB of RAM (3GB recommended)
- 3.5GB of available hard-disk space for installation; additional free space required during installation (cannot install on removable flash storage devices)
- 1024×768 display (1280×800 recommended)
- Java™ Runtime Environment 1.6 (included)
- DVD-ROM drive
- QuickTime 7.6.6 software required for multimedia features
- Some features in Adobe Bridge rely on a DirectX 9–capable graphics card with at least 64MB of VRAM

Mac OS

- Multicore Intel processor
- Mac OS X v10.6 or v10.7
- 2GB of RAM (3GB recommended)
- 4GB of available hard-disk space for installation; additional free space required during installation (cannot install on a volume that uses a case-sensitive file system or on removable flash storage devices)
- 1024×768 display (1280×800 recommended)
- Java Runtime Environment 1.6
- DVD-ROM drive
- QuickTime 7.6.6 software required for multimedia features