

# AdvancED Flash Interface Design

Michael Kemper  
Guido Rosso  
Brian Monnone



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*I am encouraged to take on endeavors like this book in great part due to my family's pride in me; for that I am forever grateful.*

*—Michael Kemper*

*Family and friends are all we really have. To my wife, Julie, and two daughters, Madison and Lauren, and to my parents, Joe, Gabrielle, David, Cheryl, and Robert: I am honored to call you all my family and dedicate this book to you all.*

*—Brian Monnone*

## CONTENTS AT A GLANCE

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|   |             |
|---|-------------|
| <b>About the Authors</b> . . . . .  | <b>xiii</b> |
| <b>About the Technical Reviewer</b> . . . . .                                     | <b>xiv</b>  |
| <b>About the Cover Image Designer</b> . . . . .                                   | <b>xv</b>   |
| <b>Acknowledgments</b> . . . . .  | <b>xvi</b>  |
| <b>Introduction</b> . . . . .   | <b>xvii</b> |
| <br>  |             |
| Chapter 1 <b>Flash Overview</b> . . . . .   | <b>3</b>    |
| Chapter 2 <b>Creating Usable and Innovative Experiences</b> . . . . .             | <b>15</b>   |
| Chapter 3 <b>Interface Designers' Guide to Color</b> . . . . .                    | <b>33</b>   |
| Chapter 4 <b>Planning Your Interface Design</b> . . . . .                         | <b>61</b>   |
| Chapter 5 <b>Vector Drawing and Effects in Flash and Illustrator</b> . . . . .    | <b>71</b>   |
| Chapter 6 <b>Understanding the Timeline and Layers</b> . . . . .                  | <b>95</b>   |
| Chapter 7 <b>Working with 3D Vectors</b> . . . . .                                | <b>113</b>  |
| Chapter 8 <b>Using Video in Flash</b> . . . . .                                   | <b>135</b>  |
| Chapter 9 <b>Photoshop Techniques</b> . . . . .                                   | <b>175</b>  |
| Chapter 10 <b>Moving from Photoshop to Flash and<br/>Effective PNGs</b> . . . . . | <b>235</b>  |
| Chapter 11 <b>Creating Animated Effects</b> . . . . .                             | <b>255</b>  |
| Chapter 12 <b>Flash Textures</b> . . . . .  | <b>291</b>  |
| Chapter 13 <b>Photo Editing in Photoshop and Flash</b> . . . . .                  | <b>305</b>  |
| Chapter 14 <b>Finishing Off Your Site</b> . . . . .                               | <b>337</b>  |
| <br>  |             |
| <b>Index</b> . . . . .  | <b>345</b>  |

# CONTENTS

---

|   |             |
|---|-------------|
| <b>About the Authors</b> . . . . .                                    | <b>xiii</b> |
| <b>About the Technical Reviewer</b> . . . . .                         | <b>xiv</b>  |
| <b>About the Cover Image Designer</b> . . . . .                       | <b>xv</b>   |
| <b>Acknowledgments</b> . . . . .                                      | <b>xvi</b>  |
| <b>Introduction</b> . . . . .   | <b>xvii</b> |
| <br>  |             |
| <b>Chapter 1 Flash Overview</b> . . . . .                             | <b>3</b>    |
| Why Flash? . . . . .  | 4           |
| From the user perspective . . . . .                                   | 4           |
| From the creator perspective . . . . .                                | 4           |
| Ease of use . . . . .   | 5           |
| Animation . . . . .   | 6           |
| Video integration . . . . .   | 8           |
| Browser autonomy . . . . .  | 8           |
| Browser embedding . . . . .   | 9           |
| Benefits of vector graphics over raster graphics . . . . .            | 10          |
| Summary . . . . .   | 11          |
| <br>  |             |
| <b>Chapter 2 Creating Usable and Innovative Experiences</b> . . . . . | <b>15</b>   |
| Creative direction . . . . .  | 15          |
| Design layers . . . . .   | 16          |
| Purpose . . . . .   | 16          |
| Style . . . . .   | 17          |
| Structure . . . . .   | 17          |
| Craftsmanship . . . . .   | 18          |
| Surface . . . . .   | 19          |
| Critiques . . . . .   | 19          |
| The experience . . . . .  | 20          |
| Metaphors . . . . .   | 20          |
| Tangible metaphors . . . . .  | 21          |
| Conceptual metaphors . . . . .  | 22          |
| Physical metaphors . . . . .  | 23          |
| Narrative in Flash . . . . .  | 24          |

|  |           |
|--|-----------|
| Interactive animation . . . . .                                | 26        |
| Benefits of animation. . . . .                                 | 26        |
| Components for interaction. . . . .                            | 26        |
| Emerging interactions. . . . .                                 | 27        |
| Summary . . . . .  | 31        |
| <b>Chapter 3 Interface Designers' Guide to Color . . . . .</b> | <b>33</b> |
| Basic color theory . . . . .                                   | 34        |
| Selecting color . . . . .                                      | 35        |
| Monochromatic . . . . .  | 37        |
| Analogous . . . . .  | 37        |
| Complementary . . . . .  | 38        |
| Split complement . . . . .                                     | 38        |
| Triadic . . . . .  | 38        |
| Tetrad . . . . .   | 39        |
| Color on the computer . . . . .                                | 39        |
| Color modes . . . . .  | 40        |
| Gamma . . . . .  | 41        |
| Nuts and bolts. . . . .  | 41        |
| Color systems . . . . .  | 43        |
| Hexadecimal color . . . . .                                    | 43        |
| Other web palettes . . . . .                                   | 44        |
| HSL color . . . . .  | 44        |
| HSB color . . . . .  | 45        |
| LAB color . . . . .  | 45        |
| Communicating with color . . . . .                             | 46        |
| Color symbolism . . . . .                                      | 47        |
| Color psychology . . . . .                                     | 48        |
| Color strategy . . . . .                                       | 49        |
| Design tools and techniques . . . . .                          | 50        |
| Using Flash color palettes . . . . .                           | 50        |
| Applying color using ActionScript. . . . .                     | 56        |
| Summary . . . . .  | 57        |
| <b>Chapter 4 Planning Your Interface Design . . . . .</b>      | <b>61</b> |
| Initial information . . . . .                                  | 61        |
| Structure planning. . . . .                                    | 63        |
| Wireframing and prototyping . . . . .                          | 64        |
| What is prototyping? . . . . .                                 | 66        |
| Using your space efficiently . . . . .                         | 67        |
| Text spacing . . . . .   | 67        |
| Interface padding. . . . .                                     | 68        |
| Uniformity. . . . .  | 69        |
| Summary . . . . .  | 69        |

|  |            |
|--|------------|
| <b>Chapter 5 Vector Drawing and Effects in Flash and Illustrator . . . .</b> | <b>71</b>  |
| Pros and cons: Illustrator and Flash . . . . .                               | 72         |
| Making it pop . . . . .  | 73         |
| Creating button graphics using Illustrator . . . . .                         | 73         |
| Creating inlays using Illustrator . . . . .                                  | 78         |
| Creating indents using Illustrator . . . . .                                 | 80         |
| Technical drawing in Illustrator . . . . .                                   | 82         |
| Photo illustration using Illustrator. . . . .                                | 82         |
| Interface layout design in Illustrator . . . . .                             | 87         |
| Moving from Illustrator to Flash . . . . .                                   | 88         |
| Exporting SWF graphics from Illustrator . . . . .                            | 88         |
| Importing SWF graphics created in Illustrator . . . . .                      | 90         |
| Summary . . . . .  | 93         |
| <br>   |            |
| <b>Chapter 6 Understanding the Timeline and Layers . . . . .</b>             | <b>95</b>  |
| Anatomy of the timeline . . . . .  | 96         |
| A layering example: the gel pill . . . . .                                   | 100        |
| Creating the layers . . . . .  | 100        |
| Drawing the pill body . . . . .  | 101        |
| Adding the bottom highlight . . . . .  | 101        |
| Adding the top highlight . . . . .   | 103        |
| Creating a translucent shadow . . . . .                                      | 104        |
| Adding text . . . . .  | 104        |
| Blending modes . . . . .   | 106        |
| Masks . . . . .  | 108        |
| Motion guides . . . . .  | 109        |
| Summary . . . . .  | 110        |
| <br>   |            |
| <b>Chapter 7 Working with 3D Vectors . . . . .</b>                           | <b>113</b> |
| Working with real 3D assets . . . . .  | 114        |
| Working with semirealistic 3D assets . . . . .                               | 114        |
| User icon . . . . .  | 115        |
| The base shape . . . . .   | 115        |
| The bottom highlight . . . . .   | 116        |
| Depth with inner glow . . . . .  | 117        |
| Adding gloss . . . . .   | 118        |
| Domain icon . . . . .  | 119        |
| Creating the shadow . . . . .  | 119        |
| Creating the orb . . . . .   | 119        |
| Outer glow . . . . .   | 120        |
| Inner glow . . . . .   | 121        |
| Stars . . . . .  | 121        |
| Adding gloss . . . . .   | 122        |
| Statistics icon . . . . .  | 122        |
| The base shape . . . . .   | 122        |
| The graph . . . . .  | 124        |
| The reflection . . . . .   | 124        |

|   |            |
|---|------------|
| 3D graphics using Illustrator and Flash . . . . .           | 124        |
| Creating a 3D vector graphic. . . . .                       | 124        |
| Summary. . . . .  | 133        |
| <b>Chapter 8 Using Video in Flash . . . . .</b>             | <b>135</b> |
| Video content for Flash . . . . .                           | 136        |
| Shooting video content for the Web: A basic guide . . . . . | 136        |
| Equipment basics . . . . .                                  | 137        |
| Shooting and editing basics. . . . .                        | 140        |
| Final Cut Pro basics . . . . .                              | 142        |
| Batch-capturing video. . . . .                              | 142        |
| Editing basics. . . . .                                     | 145        |
| Exporting your sequence. . . . .                            | 148        |
| Bringing video content into Flash . . . . .                 | 150        |
| Formats and compression. . . . .                            | 150        |
| Encoding the video . . . . .                                | 151        |
| Using video in Flash . . . . .                              | 157        |
| Bitstreaming video. . . . .                                 | 159        |
| Embedding video . . . . .                                   | 163        |
| Summary. . . . .  | 168        |
| Glossary . . . . .  | 169        |
| <b>Chapter 9 Photoshop Techniques . . . . .</b>             | <b>175</b> |
| Photoshop overview . . . . .                                | 176        |
| Setting up your file. . . . .                               | 178        |
| Creating the background . . . . .                           | 181        |
| Light source. . . . .                                       | 181        |
| Background depth. . . . .                                   | 185        |
| Foundation shapes. . . . .                                  | 185        |
| Foundation base . . . . .                                   | 185        |
| Foundation borders . . . . .                                | 187        |
| Background shadows . . . . .                                | 188        |
| Experimenting with colors. . . . .                          | 192        |
| Adding the logo . . . . .                                   | 192        |
| Creating the interface layers . . . . .                     | 194        |
| Visor shape . . . . .                                       | 195        |
| Body highlights . . . . .                                   | 198        |
| The visor top group . . . . .                               | 203        |
| Visor shading . . . . .                                     | 204        |
| Seam . . . . .  | 206        |
| Adding gloss. . . . .                                       | 208        |
| The visor inset shape . . . . .                             | 211        |
| Creating the secondary navigation area . . . . .            | 212        |
| Adding details to the visor. . . . .                        | 215        |
| Creating the primary navigation . . . . .                   | 217        |
| Visor Top group and Primary Nav . . . . .                   | 218        |
| Adding a highlight. . . . .                                 | 221        |
| Navigation bar shadow . . . . .                             | 222        |



|   |            |
|---|------------|
| Adding details to the logo . . . . .  | 224        |
| Cloud pictures . . . . .  | 224        |
| Light rays . . . . .  | 225        |
| Creating the content containers . . . . .                                     | 225        |
| Main content area . . . . .   | 225        |
| Content background . . . . .  | 225        |
| Content top . . . . .   | 227        |
| Content borders . . . . .   | 229        |
| Left column content area . . . . .  | 230        |
| Content and buttons . . . . .   | 231        |
| Mouseover states . . . . .  | 231        |
| Moving from Photoshop to Flash . . . . .                                      | 232        |
| Summary . . . . .   | 232        |
| <br>  |            |
| <b>Chapter 10 Moving from Photoshop to Flash and Effective PNGs . . . . .</b> | <b>235</b> |
| Preparing the files . . . . .   | 236        |
| The background . . . . .  | 237        |
| The logo . . . . .  | 238        |
| The logo rays . . . . .   | 240        |
| The Flash file . . . . .  | 240        |
| Navigation bar tutorial . . . . .   | 242        |
| Re-creating in vector . . . . .   | 242        |
| Masking the navigation bar . . . . .  | 246        |
| Adding details . . . . .  | 248        |
| Animating the navigation bar . . . . .  | 249        |
| Logo tutorial . . . . .   | 249        |
| Animating the logo . . . . .  | 249        |
| Animating the rays . . . . .  | 250        |
| Exporting vector objects to create raster assets . . . . .                    | 251        |
| Summary . . . . .   | 253        |
| <br>  |            |
| <b>Chapter 11 Creating Animated Effects . . . . .</b>                         | <b>255</b> |
| Cause, effect, and timing . . . . .   | 256        |
| Realistic car . . . . .   | 256        |
| Cartoon car . . . . .   | 257        |
| Depth . . . . .   | 257        |
| Implying speed . . . . .  | 258        |
| Motion blur . . . . .   | 258        |
| Faking motion blur . . . . .  | 258        |
| Animation style . . . . .   | 259        |
| Frame rate . . . . .  | 259        |
| Animation effects . . . . .   | 260        |
| Elasticity . . . . .  | 260        |
| Bounce . . . . .  | 263        |
| Overflow . . . . .  | 265        |

---

|   |            |
|---|------------|
| ActionScript animation techniques . . . . .                     | 267        |
| Setting up the movie . . . . .                                  | 267        |
| Scripting animation . . . . .                                   | 267        |
| Deconstructing interactive animation . . . . .                  | 269        |
| Setting up the animation . . . . .                              | 269        |
| Animating the menu . . . . .                                    | 274        |
| Setting up the icon. . . . .                                    | 284        |
| Animating the icon. . . . .                                     | 285        |
| Scripting the interaction. . . . .                              | 287        |
| Summary. . . . .  | 288        |
| <br>  |            |
| <b>Chapter 12 Flash Textures . . . . .</b>                      | <b>291</b> |
| Creating texture with displacement maps . . . . .               | 291        |
| Still images . . . . .  | 292        |
| Animated images . . . . .                                       | 297        |
| Summary . . . . .   | 303        |
| <br>  |            |
| <b>Chapter 13 Photo Editing in Photoshop and Flash. . . . .</b> | <b>305</b> |
| Working with bitmapped images. . . . .                          | 306        |
| Scaling down our image size . . . . .                           | 307        |
| Straightening up our lighthouse . . . . .                       | 307        |
| Removing our image background . . . . .                         | 310        |
| Color-correcting our image . . . . .                            | 317        |
| Images in Flash . . . . .                                       | 324        |
| Exploring blend modes . . . . .                                 | 329        |
| Filters . . . . .   | 331        |
| Summary . . . . .   | 335        |
| <br>  |            |
| <b>Chapter 14 Finishing Off Your Site . . . . .</b>             | <b>337</b> |
| Optimization. . . . .   | 337        |
| The Bandwidth Profiler . . . . .                                | 338        |
| Compressing assets . . . . .                                    | 338        |
| Publishing . . . . .  | 339        |
| Embedding in HTML. . . . .                                      | 339        |
| Detecting Flash. . . . .  | 340        |
| QA testing . . . . .  | 340        |
| Launching and post launch . . . . .                             | 341        |
| Maintenance . . . . .   | 341        |
| Source files . . . . .  | 342        |
| Continue analyzing . . . . .                                    | 342        |
| Usability testing. . . . .                                      | 342        |
| Summary. . . . .  | 343        |
| <br>  |            |
| <b>Index . . . . .</b>  | <b>345</b> |

## ABOUT THE AUTHORS

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**Michael Kemper** has managed and deployed interactive, video, and animation projects in every industry vertical for some of the world's largest companies. He has been recognized by *eDesign* magazine and has received numerous Addy Awards and Art Directors Club awards for interactive design and animation. Michael owns a creative consultancy ([www.feedyourimage.com](http://www.feedyourimage.com)) in San Francisco, California, where he focuses on motion graphics and experience design for digital media. When he isn't working on client engagements, he spends much of his free time reading graphic novels and practicing digital photography.



A computer enthusiast his whole life, **Guido Rosso** started designing professionally at the height of the dot-com boom. Surviving the crash unscathed, he and his twin brother (Luigi Rosso) opened RealitySlip Srl ([www.realityslip.com](http://www.realityslip.com)), a design and development company based in Rome, Italy. They have since broadened their portfolio to include award-winning web design, application development, and video game projects for companies around the world. Guido's work has been featured in *PC Gamer*, American Design Awards, The FWA: Favourite Website Awards, and numerous other publications, and awarded finalist for Macromedia MAX.



**Brian Monnone** is more than simply a Flash artist. He is a technologist with a love for great design, motion graphics, and music. Currently, he is a Senior Interactive Designer at nFusion Group in Austin, Texas. His role with nFusion includes creating dynamic Flash demos, videos, and sound design.

His future plans include filmmaking. Becoming a filmmaker has been a lifelong passion for Brian, and until that day comes he'll continue to create unique multimedia. Visit his website: [www.monnone.com](http://www.monnone.com).

## ABOUT THE TECHNICAL REVIEWER

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**Sean McSharry** is a Flash developer of seven years who firmly believes that Flash developers should be as comfortable with design as they are with coding, and he practices what he preaches. “Flash is about bringing everything together into one platform and using the best coding practices, the best design practices, the best video production techniques, etc., to do it.” He has worked on projects for some of the world’s most influential companies. Sean has a passion for digital video and has been combining this with his Flash skills over the last couple of years to create much Flash video work, recently doing work in the emerging Flash/IPTV broadcasting market. When he’s not Flashing, he can be found pursuing his other passions: golf; snowboarding; Pilates; herpetology; and, of course, his wife, Mary, and their two sons, Aston and Jack.

## ABOUT THE COVER IMAGE DESIGNER

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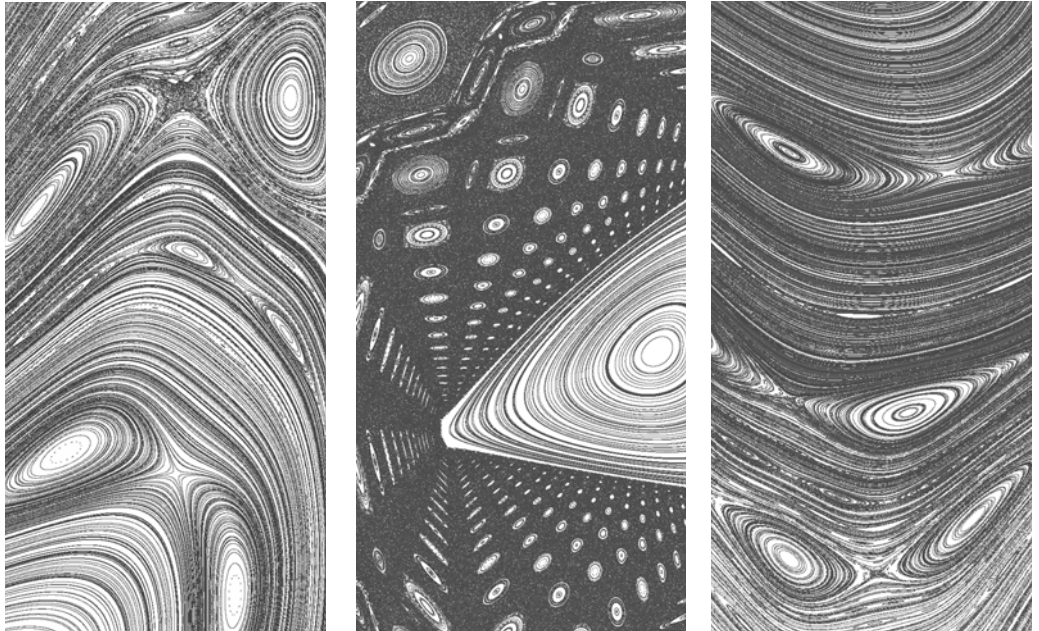
**Bruce Tang** is a freelance web designer, visual programmer, and author from Hong Kong. His main creative interest is generating stunning visual effects using Flash or Processing.

Bruce has been an avid Flash user since Flash 4, when he began using Flash to create games, websites, and other multimedia content. After several years of ActionScripting, he found himself increasingly drawn toward visual programming and computational art. He likes to integrate math and physics into his work, simulating 3D and other real-life experiences onscreen. His first Flash book was published in October 2005. Bruce's folio, featuring Flash and Processing pieces, can be found at [www.betaruce.com](http://www.betaruce.com), and his blog at [www.betaruce.com/blog](http://www.betaruce.com/blog).

The cover image uses a high-resolution Henon phase diagram generated by Bruce with Processing, which he feels is an ideal tool for such experiments. Henon is a strange attractor created by iterating through some equations to calculate the coordinates of millions of points. The points are then plotted with an assigned color.

$$x_{n+1} = x_n \cos(a) - (y_n - x_n^p) \sin(a)$$

$$y_{n+1} = x_n \sin(a) + (y_n - x_n^p) \cos(a)$$



# ACKNOWLEDGMENTS

---

*Coming together is a beginning. Keeping together is progress. Working together is success.*  
—Henry Ford

I have accomplished and learned so much from teams staffed with extremely creative, talented, and smart people. This book is a tribute to their lasting impressions on me. Many years ago I joined a team of profoundly creative free-thinkers: Tim Roessler and Anne Alden gave me that opportunity, and thanks to Hugh Graham, Daniel Weinshenker, Jeff Berting, Jeff Ingram, Todd Straka, Jen Thomas, Tara Kelley, Brad Johnson, Amy Morawa, and several others, I got a taste of what my days would be filled with for many years to come. On another team, Michael Stevens gave me the freedom to express myself as a lead designer and Creative Director; Kam Rope, “The Doctor” Andrew Jones, Suzanne Keen, Julie Jagger, Shum Pratts, Nick Hill, and Tom Flanagan are still some of my most enduring friends from that experience and also among the most talented and creative people I know. Currently I have the honor of working with the Metaliq, San Francisco, team comprised of Beau Ambur, Danny Riddell, Mike Lucaccini, Eric Anderson, the Rosso brothers, as well as the Grant Skinner group. Every day with this team is an adventure, and I am honored to be involved in their groundbreaking interactive endeavors. Although we weren’t on any team to speak of, Ali Mills and Amanda Thomason offered advice and recommendations during my writing process that was encouraging and valuable.

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—Michael Kemper

Thank you, Luigi, for writing the “ActionScript animation techniques” section in Chapter 11! Thank you, Michael, for stepping into this project. It’s largely thanks to your efforts and dedication that we managed to finish this book.

—Guido Rosso

The most important things to me are my wife, Julie, and my two daughters, Madison and Lauren: to you, I want to give very special thanks for always being by my side. I must be the luckiest person alive to have the most beautiful and caring family. I’m especially thankful to Julie for all the countless hours she has had to put up with me sitting in front of the computer working. She has been nothing less than extremely supportive of my endeavors, and I thank her for that. She is the best wife a guy can have.

I would also like to thank my parents, Joe, Gabrielle, David, Cheryl, and Robert, for really believing in me and being proud to call me Son. It means the world to me.

Beyond that, my work is second most important. New media is fun, exciting, and different. I’m in this business because of that. Do I have a mission statement? Sure I do: “To create more smiles and laugh way too often.” Secondly, “I’m just a guy that wants to make some cool stuff.”

—Brian Monnone

# INTRODUCTION

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Flash began primarily as an animation tool for designers. Most marketing people shunned the technology because of low plug-in adoption rates. Clients disapproved because of their narrow perspective on usability. Flash wasn't even an afterthought to most developers. And everyone else considered Flash to be the next-level GIF animation—if they had heard of it at all. Things have certainly changed in the industry and with Flash itself. Designers can achieve advanced motion graphics and interface design treatments akin to what is seen in movies and on television. Flash has a 98% install base. More clients recognize the potential success of doing something innovative and different using Flash. Developers can use Flash to create robust on-demand applications that rival any other application platform. And everyone else utilizes Flash to enjoy everything from websites, chat, music, and video across a wide range of connection speeds and platforms.

For a while, emphasis has been placed on getting application developers to migrate over to the Flash platform and use it to create their applications. During that transition, the perception of Flash has morphed, and we designers have been turning into “creative developers” as we picked up these new programming skills. This latest version of Flash has reactivated its base: designers. Those designers who stuck in there and believed in the Flash platform have earned front-row seats for the next evolution of the Internet—and this time it is very much influenced by Flash-based design and technologies. Newer users who have the skills and talent for creating unique digital experiences will multiply and fuel the flames of innovation in this field. Adobe's purchase of Macromedia is but one indication as to how integrated Flash will become not only to the general Internet audience, but also to the products and workflow of professional designers and developers everywhere. Now Flash is becoming the all-in-one creation tool designers and developers alike have wanted for years.

This book is for design educators, students, and industry professionals who have experience with Flash and want to elevate their work to be more meaningful and memorable. It is for designers who want to jumpstart their knowledge of the program and get inspired for their own Flash projects. And it's for developers who are searching for reference material on creating attractive interfaces for their applications. Within the following pages you will be exposed to fresh ideas for interactivity and interface design, learn tried-and-true workflow techniques for maximum efficiency, and gain insight into the new and powerful design features of the latest release. For the more advanced users, it will be a primer for important new features of the application, as well as offer professional insight on how to best implement them. And for every level of designer, it will break down sought-after visual effects for multimedia interface design into comprehensive, easy-to-follow steps.

—Michael Kemper

## Layout conventions

To keep this book as clear and easy to follow as possible, the following text conventions are used throughout:

Code and URLs are presented in fixed-width font.

User interface elements (menu names, dialog box options, palette names, etc.) appear in this screen text font.

Menu commands are written in the form Menu ► Submenu ► Submenu.

Where we want to draw your attention to something, we've highlighted it like this:

*Ahem, don't say we didn't warn you.*

Sometimes code won't fit on a single line in a book. Where this happens, we use an arrow like this: ➤.

This is a very, very long section of code that should be written all on the same ➤  
line without a break.