CSS Mastery

Advanced Web Standards Solutions

Second Edition

Andy Budd, Simon Collison, and Cameron Moll

CSS Mastery: Advanced Web Standards Solutions, Second Edition

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To Alison, for all the help and support over the last 6 months.

— Andy Budd

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Foreword

In our wonderful world of web design, there are 3,647 ways to accomplish the same goal—approximately. And that absurdly fictitious number is increasing every day. Instead of one, correct way of solving a particular problem, we're both blessed and cursed by the abundant choices we have as web designers. It's these choices that make designing for the Web fun and interesting, while at the same time overwhelming. *CSS Mastery* will help cure that overwhelmingitis (a word that I've just invented).

Andy Budd has been writing, designing, and speaking about standards-based web design for years, and we're now lucky to see his clear, easy-to-follow way of teaching essential CSS techniques compiled in this very book. The result is a card catalog of indispensable solutions, tricks, and tips that a web professional such as yourself should not be without.

I've always frowned on publications that suggest a *single*, correct way of accomplishing a goal, and Andy does the complete opposite, offering multiple methods for tasks such as styling links, creating tabbed navigation, utilizing time-saving CSS3 solutions, or creating fixed, fluid, or elastic layouts, as well as giving tips on how to troubleshoot those pesky browser bugs that go along with designing with CSS (to name but a few). Armed with these popular and stylish approaches to common design elements, you'll be better prepared to make your own *informed* decisions.

And as if that wasn't enough, Andy's gone ahead and enlisted the help of two imitable designers to help pull all the pieces together, showing how these essential techniques can work *together*. I've long been a fan of Cameron's and Simon's work, and to see two great case studies covering fluid, bulletproof designs as well as flexible style solutions, respectively, well, that's just a gigantic bonus.

So dig in and start chipping away at those 3,647 ways to master your CSS.

Dan Cederholm

Author, Web Standards Solutions

About the Authors

Andy Budd is one of the founding partners at User Experience Design Consultancy, Clearleft (clearleft.com). As an interaction design and usability specialist, Andy is a regular speaker at international conferences like Web Directions, An Event Apart, and SXSW. Andy curates dConstruct (dconstruct.org), one of the UK's most popular design conferences. He's also responsible for UX London (uxlondon.com), the UK's first dedicated usability, information architecture, and user experience design event.

Andy was an early champion of web standards in the UK and has developed an intimate understanding of the CSS specification and cross-browser support. As an active member of the community, Andy has helped judge several international design awards and currently sits on the advisory board for *.Net* magazine. Andy is also the driving force behind Silverbackapp (silverbackapp.com), a low-cost usability testing tool for the Mac. Andy is an avid Twitter user ([@andybudd](https://twitter.com/andybudd)) and occasionally blogs at andybudd.com.

Never happier than when he's diving in some remote tropical atoll, Andy is a qualified PADI dive instructor and retired shark wrangler.

Cameron Moll has been designing meaningful web interfaces that harmonize utility and presentation since the late 1990s. His work or advice has been featured by *HOW*, *Print*, and *Communication Arts* magazines, Forrester Research, National Public Radio (NPR), and many others. He speaks on user interface design at conferences nationally and internationally, and he is also the author of *Mobile Web Design* (mobilewebbook.com).

Cameron is the founder and president of Authentic Jobs Inc. (authenticjobs.com), a targeted destination for web and creative professionals and the companies seeking to hire them. He is also the proprietor of Cameron Moll LLC, whose products include letterpress typography posters available for purchase at cameronmoll.bigcartel.com. And amid all this craziness, he still finds time to play ball with each of his four boys.

You can also find Cameron online at cameronmoll.com, twitter.com/cameronmoll, [flickr.com/photos/authentic/](https://www.flickr.com/photos/authentic/), and vimeo.com/cameronmoll.

Simon Collison is cofounder and creative director at Erskine Design (erskinedesign.com), part of a talented team of designers and developers doing exceptional things. Over the last ten years, he's worked on numerous web projects for record labels and bands, visual artists, businesses, government—pretty much the full gamut. He's now working with a broad client list ranging from established magazines to polar explorers.

Colly writes a long-running blog (colly.com), writes about the web at ErskineLabs (erskinelabs.com) and he has written the bestselling *Beginning CSS Web Development* (ISBN: 978-1-59059-689-0) for Apress and coauthored *Web Standards Creativity* (ISBN: 978-1-59059-803-0). He's never happier than when he's experimenting with CSS and HTML, or when talking about it in front of an audience.

In the real world, Colly loves climbing mountains and getting lost in the wildernesses of the UK or Iceland. He drives a 32-year-old car and has a stupid cat called Bearface.

About the Technical Reviewers

Natalie Downe is a perfectionist by nature and works for Brighton's Clearleft as a client-side web developer. An experienced usability consultant and project manager, her first loves remain front-end development and usability engineering. She enjoys Doing Things Right and occasionally dabbling in the dark arts of Python and poking the odd API.

Tony White is a front-end developer and designer living in Memphis, Tennessee. During the day he is the user interface manager for Hilton Hotels, where he nurtures usability, advocates web standards, and lassos HTML with jQuery. He also runs the one-man show Ask the CSS Guy (askthecssguy.com), an after-hours site devoted to peaking under the hood of CSS and JavaScript web design techniques.

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To all my colleagues who continue to share their wealth of knowledge in order to make the Web a better place: This book would not have been possible without the previous work of the following people, to name but a few: Cameron Adams, John Allsopp, Rachel Andrew, Nathan Barley, Holly Bergevin, Mark Boulton, Douglas Bowman, The BritPack, Dan Cederholm, Tantek Çelik, Joe Clark, Andy Clarke, Simon Collison, Mike Davidson, Garrett Dimon, Derek Featherstone, Nick Fink, Patrick Griffiths, Jon Hicks, Molly E. Holzschlag, Shaun Inman, Roger Johansson, Jeremy Keith, Ian Lloyd, Ethan Marcotte, Drew McLellan, Eric Meyer, Cameron Moll, Dunstan Orchard, Veerle Pieters, D. Keith Robinson, Richard Rutter, Jason Santa Maria, Dave Shea, Jeffrey Veen, Russ Weakley, Simon Willison, and Jeffrey Zeldman.

To all the readers of my blog and everybody I've met at conferences, workshops, and training events over the last couple of years: Your discussions and ideas helped fuel the content of this book.

And finally, thanks to you for reading. I hope this book helps you take your CSS skills to the next level.

Andy Budd

First, thanks to you for choosing this book. I hope it improves the caliber of work you do, day in and day out. I'm endlessly inspired by the potential of those in our industry, and that includes you.

I echo Andy's words in giving thanks to the many notable individuals that have shaped and refined the Web, making it a better place today than it's ever been. Years from now, these individuals will be just as revered as those men and women who first sent men to the Moon.

A special thanks to Aaron Barker (aaronbarker.net) who assisted with several of the jQuery and AJAX examples in my case study.

Most importantly, I give my utmost gratitude to my beautiful wife, Suzanne, and four sons, Everest, Edison, Isaac, and Hudson. Without their love, support and patience, the work I've produced to date would not have been realized.

Cameron Moll

Acknowledgments

I must thank my friend and colleague Gregory Wood for his ideas and assistance with the “Climb the Mountains” concept. Everything he produces inspires me, and he’s the designer I want to be when I grow up. I’d also like to thank all of my colleagues at Erskine Design for their support and for turning a blind eye to my feverish work on projects such as this. Big thanks to Simon Campbell, Jamie Pittock, Glen Swinfield, Phil Swan, Vicky Twycross, and Angela Campbell.

Above all, I should take this opportunity to thank my mum, and those that I have lost since the first edition of this book, my two grandfathers, and especially my dad. I still do this stuff to make you proud, even though you’ve gone.

Simon Collison

Introduction

There are an increasing number of CSS resources around, yet you only have to look at a CSS mailing list to see the same questions popping up time and again: How do I center a design? What is the best rounded-corner box technique? How do I create a three-column layout?

If you follow the CSS design community, finding the solution is usually a case of remembering which website a particular article or technique is featured on. However, if you are relatively new to CSS, or don't have the time to read all the blogs, this information can be hard to track down.

Even people who are skilled at CSS run into problems with some of the more obscure aspects of CSS such as the positioning model or specificity. This is because most CSS developers are self-taught, picking up tricks from articles and other people's code without fully understanding the specifications. And is it any wonder, as the CSS specification is complex, often contradictory, and written for browser manufacturers rather than web developers?

Then there are the browsers to contend with. Browser bugs and inconsistencies are one of the biggest problems for the modern CSS developer. Unfortunately, many of these bugs are poorly documented, and their fixes verge on the side of folk law. You know that you have to do something a certain way, or it will break in one browser or another. You just can't remember for which browser or how it breaks.

So the idea for a book formed. A book that brings together the most useful CSS techniques in one place, that focuses on real-world browser issues and that helps plug common gaps in people's CSS knowledge. A book that will help you jump the learning curve and have you coding like a CSS expert in no time flat.

Who is this book for?

CSS Mastery is aimed at anybody with a basic knowledge of HTML and CSS. If you have just recently dipped your toes into the world of CSS design, or if you've been developing pure CSS sites for years, there will be something in this book for you. However, you will get the most out of this book if you have been using CSS for a while but don't consider yourself an expert just yet. This book is packed full of practical, real-world advice and examples to help you master modern CSS design.

How is this book structured?

This book eases you in gently, with three chapters on basic CSS concepts and best practices. You will learn how to structure and comment your code, the ins-and-outs of the CSS positioning model, and how floating and clearing really works. You may know a lot of this already, but you will probably find bits you've missed or not understood fully. As such, the first three chapters act as a great CSS primer as well as a recap on what you already know.

With the basics out of the way, the next five chapters cover core CSS techniques such as image, link, and list manipulation; form and data-table design; and pure CSS layout. Each chapter starts

simply and then works up to progressively more complicated examples. In these chapters, you will learn how to create rounded-corner boxes, images with transparent drop shadows, tabbed navigation bars, and interactive buttons. With many of these techniques, you will first learn the traditional way of doing them before seeing how you can achieve the same affect using CSS 3. If you want to follow along with the examples in this book, all the code examples can be downloaded from www.cssmastery.com or www.friendsofed.com.

Browser bugs are the bane of many a CSS developer, so all the examples in this book focus on creating techniques that work across browsers. What's more, this book contains a whole chapter devoted to bugs and bug fixing. In this chapter, you will learn all about bug-hunting techniques and how to spot and fix common bugs before they start causing problems. You will even learn what really causes many of Microsoft Internet Explorer's seemingly random CSS bugs.

The last two chapters are the *pièce de résistance*. Simon Collison and Cameron Moll, two of the best CSS designers around, have combined all of these techniques into two fantastic case studies. So you learn not only how these techniques work but also how to put them into practice on a real-life web project.

This book can be read from cover to cover or kept by your computer as a reference of modern tips, tricks, and techniques. The choice is up to you.

Conventions used in this book

This book uses a couple of conventions that are worth noting. The following terms are used throughout this book:

- *HTML* refers to both the HTML and XHTML languages.
- Unless otherwise stated, *CSS* relates to the CSS 2.1 specification.
- *Internet Explorer 6 (IE 6) and below on Windows* refers to Internet Explorer 5.0 to 6.0 on Windows.
- *Modern browsers* are considered to be the latest versions of Firefox, Safari, and Opera along with IE 7 and above.
- It is assumed that all the HTML examples in this book are nested in the `<body>` of a valid document, while the CSS is contained within an external style sheet. Occasionally, HTML and CSS have been placed in the same code example for brevity. However, in a real document, these items need to go in their respective places to function correctly.

Finally, for HTML examples that contain repeating data, rather than writing out every line, the ellipsis character (. . .) is used to denote code continuation:

With the formalities out of the way, let's get started.