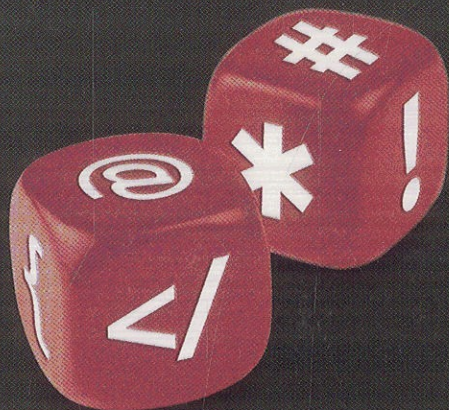


A MODERN, MODULAR APPROACH
TO STANDARDS-COMPLIANT WEB DESIGN.

THE ESSENTIAL GUIDE TO

CSS and HTML Web Design

.....



- ▶ CREATE CUTTING-EDGE, GOOD-LOOKING, EFFICIENT WEB PAGES.
- ▶ WORK WITH STANDARDS-COMPLIANT TECHNOLOGIES.
- ▶ COMBINE EXERCISES TO FASHION COUNTLESS WEB PAGE DESIGNS.

.....

CRAIG GRANNELL

FOREWORD BY JON HICKS, HICKSDESIGN

CONTENTS

About the Author	xv
About the Technical Reviewer	xvii
Acknowledgments	xix
Foreword	xxi
Introduction	xxiii
 Chapter 1: An Introduction to Web Design	 1
A brief history of the Internet	2
Why create a website?	3
Audience requirements	4
Web design overview	5
Why WYSIWYG tools aren't used in this book	6
Introducing HTML and XHTML	6
Introducing the concept of HTML tags and elements	7
Nesting tags	7
Web standards and XHTML	8
Semantic markup	9
Introducing CSS	10
Separating content from design	10
The rules of CSS	11
Types of CSS selectors	12
Class selectors	12
ID selectors	13
Grouped selectors	13
Contextual selectors	14
Adding styles to a web page	15
The cascade	16
The CSS box model explained	17
Creating boilerplates	18
<i>Creating, styling, and restyling a web page.</i>	20

Working with website content	24
Information architecture and site maps	24
Basic web page structure and layout	25
Limitations of web design	27

Chapter 2: Web Page Essentials 29

Starting with the essentials	30
Document defaults	30
DOCTYPE declarations explained	32
XHTML Strict	32
XHTML Transitional	33
XHTML Frameset	33
HTML DOCTYPEs	33
Partial DTDs	34
What about the XML declaration?	34
The head section	35
Page titles	35
meta tags and search engines	37
Keywords and descriptions	37
revisit-after, robots, and author	38
Attaching external documents	38
Attaching external CSS files: The link method	38
Attaching CSS files: The @import method	39
Attaching favicons and JavaScript	41
Checking paths	42
The body section	42
Content margins and padding in CSS	42
Zeroing margins and padding on all elements	43
Working with CSS shorthand for boxes	43
Setting a default font and font color	44
Web page backgrounds	45
Web page backgrounds in CSS	46
background-color	46
background-image	46
background-repeat	46
background-attachment	47
background-position	48
CSS shorthand for web backgrounds	48
Web page background ideas	49
Adding a background pattern	50
Drop shadows	51
A drop shadow that terminates with the content	51
Gradients	54
Watermarks	55
Closing your document	57
Naming your files	57
Commenting your work	58
Web page essentials checklist	59

Chapter 3: Working with Type 61

An introduction to typography	62
Styling text the old-fashioned way (or, why we hate font tags)	64
A new beginning: Semantic markup	65
Paragraphs and headings	66
Logical and physical styles	66
Styles for emphasis (bold and italic)	67
Deprecated and nonstandard physical styles	67
The big and small elements	67
Teletype, subscript, and superscript	67
Logical styles for programming-oriented content	68
Block quotes, quote citations, and definitions	68
Acronyms and abbreviations	68
Elements for inserted and deleted text	69
The importance of well-formed markup	70
The importance of end tags	70
Styling text using CSS	71
Defining font colors	71
Defining fonts	72
Web-safe fonts	73
Sans-serif fonts for the Web	73
Serif fonts for the Web	74
Fonts for headings and monospace type	75
Mac vs. Windows: Anti-aliasing	76
Using images for text	77
Image-replacement techniques	78
Defining font size and line height	79
Setting text in pixels	80
Setting text using keywords and percentages	80
Setting text using percentages and ems	81
Setting line height	82
Defining font-style, font-weight, and font-variant	83
CSS shorthand for font properties	84
Controlling text element margins	85
Using text-indent for print-like paragraphs	85
Setting letter-spacing and word-spacing	86
Controlling case with text-transform	87
Creating alternatives with classes and spans	87
Styling semantic markup	89
<i>Styling semantic markup: A basic example with proportional line heights</i>	90
<i>Styling semantic markup: A modern example with sans-serif fonts</i>	92
<i>Styling semantic markup: A traditional example with serif fonts and a baseline grid</i>	95
Creating drop caps and pull quotes using CSS	98
<i>Creating a drop cap using a CSS pseudo-element</i>	98
<i>Creating a drop cap with span elements and CSS</i>	100
<i>Creating pull quotes in CSS</i>	102
<i>Using classes and CSS overrides to create an alternate pull quote</i>	105
Adding reference citations	106

Working with lists	106
Unordered lists	107
Ordered lists	107
Definition lists	107
Nesting lists	108
Styling lists with CSS	108
list-style-image property	109
Dealing with font-size inheritance	109
list-style-position property	110
list-style-type property	110
List style shorthand	111
List margins and padding	111
Inline lists for navigation	112
Thinking creatively with lists	112
<i>Creating better-looking lists</i>	112
<i>Displaying blocks of code online</i>	115

Chapter 4: Working with Images 119

Introduction	120
Color theory	120
Color wheels	121
Additive and subtractive color systems	121
Creating a color scheme using a color wheel	121
Working with hex	123
Web-safe colors	124
Choosing formats for images	125
JPEG	125
GIF	126
GIF89: The transparent GIF	128
PNG	129
Other image formats	129
Common web image gaffes	130
Using graphics for body copy	130
Not working from original images	130
Overwriting original documents	130
Busy backgrounds	131
Lack of contrast	131
Using the wrong image format	131
Resizing in HTML	132
Not balancing quality and file size	132
Text overlays and splitting images	133
Stealing images and designs	133
Working with images in XHTML	134
Using alt text for accessibility benefits	134
Descriptive alt text for link-based images	134
Null alt attributes for interface images	135
Using alt and title text for tooltips	135

Using CSS when working with images	136
Applying CSS borders to images	136
Using CSS to wrap text around images	138
Displaying random images	139
<i>Creating a JavaScript-based image randomizer</i>	140
<i>Creating a PHP-based image randomizer</i>	142

Chapter 5: Using Links and Creating Navigation 147

Introduction to web navigation	148
Navigation types	148
Inline navigation	149
Site navigation	149
Search-based navigation	150
Creating and styling web page links	150
Absolute links	151
Relative links	151
Root-relative links	152
Internal page links	153
Backward compatibility with fragment identifiers	153
Top-of-page links	154
Link states	155
Defining link states with CSS	156
Correctly ordering link states	156
The difference between a and a:link	157
Editing link styles using CSS	157
The :focus pseudo-class	159
Multiple link states: The cascade	160
<i>Styling multiple link states</i>	160
Enhanced link accessibility and usability	162
The title attribute	163
Using accesskey and tabindex	163
Skip navigation links	164
<i>Creating a skip navigation link</i>	165
<i>Styling a skip navigation link</i>	166
<i>Enhancing skip navigation with a background image</i>	168
Link targeting	169
Links and images	170
Adding pop-ups to images	171
<i>Adding a pop-up to an image</i>	171
Image maps	175
Faking images maps using CSS	177
<i>Using CSS to create a fake image map with rollovers</i>	178
Enhancing links with JavaScript	183
Creating a pop-up window	183
Creating an online gallery	185
<i>Switching images using JavaScript</i>	185
<i>Adding captions to your image gallery</i>	187
Automated gallery scripts	188

Collapsible page content	190
<i>Setting up a collapsible div</i>	190
Enhancing accessibility for collapsible content	191
Modularizing the collapsible content script	192
How to find targets for collapsible content scripts	194
Creating navigation bars	195
Using lists for navigation bars	195
<i>Using HTML lists and CSS to create a button-like vertical navigation bar</i>	196
<i>Creating a vertical navigation bar with collapsible sections</i>	200
Working with inline lists	202
<i>Creating breadcrumb navigation</i>	202
<i>Creating a simple horizontal navigation bar</i>	204
<i>Creating a CSS-only tab bar that automates the active page</i>	207
Graphical navigation with rollover effects	211
<i>Using CSS backgrounds to create a navigation bar</i>	211
<i>Using a grid image for multiple link styles and colors</i>	214
<i>Creating graphical tabs that expand with resized text</i>	217
<i>Creating a two-tier navigation menu</i>	220
<i>Creating a drop-down menu</i>	224
<i>Creating a multicolumn drop-down menu</i>	226
The dos and don'ts of web navigation	230

Chapter 6: Tables: How Nature (and the W3C) Intended 233

The great table debate	234
How tables work	235
Adding a border	235
Cell spacing and cell padding	235
Spanning rows and cells	236
Setting dimensions and alignment	237
Vertical alignment of table cell content	238
Creating accessible tables	239
Captions and summaries	239
Using table headers	240
Row groups	240
Scope and headers	241
Building a table	242
<i>Building the table</i>	243
Styling a table	247
Adding borders to tables	247
<i>Styling the playlist table</i>	248
Adding separator stripes	250
<i>Applying separator stripes</i>	251
Adding separator stripes with PHP	253
Tables for layout	253

Chapter 7: Page Layouts with CSS	257
Layout for the Web	258
Grids and boxes	258
Working with columns	259
Fixed vs. liquid design	260
Layout technology: Tables vs. CSS	260
Logical element placement	261
Workflow for CSS layouts	261
Anatomy of a layout: Tables vs. CSS	262
Creating a page structure	262
Box formatting	263
CSS layouts: A single box	264
<i>Creating a fixed-width wrapper</i>	264
<i>Adding padding, margins, and backgrounds to a layout</i>	265
<i>Creating a maximum-width layout</i>	268
<i>Using absolute positioning to center a box onscreen</i>	269
Nesting boxes: Boxouts	272
The float property	273
<i>Creating a boxout</i>	274
Advanced layouts with multiple boxes and columns	278
Working with two structural divs	278
<i>Manipulating two structural divs for fixed-width layouts</i>	278
<i>Manipulating two structural divs for liquid layouts</i>	285
Placing columns within wrappers and clearing floated content	288
<i>Placing columns within a wrapper</i>	288
<i>Clearing floated content</i>	290
Working with sidebars and multiple boxouts	293
<i>Creating a sidebar with faux-column backgrounds</i>	294
<i>Boxouts revisited: Creating multiple boxouts within a sidebar</i>	296
Creating flanking sidebars	298
<i>Creating flanking sidebars</i>	299
Automating layout variations	304
<i>Using body class values and CSS to automate page layouts</i>	304
Scrollable content areas	306
Working with frames	307
Working with internal frames (iframes)	309
Scrollable content areas with CSS	310

Chapter 8: Getting User Feedback **313**

Introducing user feedback	314
Using mailto: URLs	314
Scrambling addresses	315
Working with forms	315
Creating a form	316
Adding controls	316
Improving form accessibility	318
The label, fieldset, and legend elements	318
Adding tabindex attributes	319

CSS styling and layout for forms	320
Adding styles to forms	320
Advanced form layout with CSS	323
Sending feedback	326
Configuring nms FormMail	326
Multiple recipients	328
Script server permissions	328
Sending form data using PHP	329
Using e-mail to send form data	333
A layout for contact pages	333
Using microformats to enhance contact information.	336
<i>Using microformats to enhance contact details</i>	337
Online microformat contacts resources	341
Contact details structure redux	342

Chapter 9: Dealing with Browser Quirks 347

The final test	348
Weeding out common errors	348
A browser test suite	351
Installing multiple versions of browsers	353
Dealing with Internet Explorer bugs	354
Outdated methods for hacking CSS documents	355
Conditional comments	356
Dealing with rounding errors	358
Alt text overriding title text.	359
Common fixes for Internet Explorer 5.x	359
Box model fixes (5.x)	359
Centering layouts	360
The text-transform bug	360
Font-size inheritance in tables	360
Common fixes for Internet Explorer 6 and 5	361
Fixing min-width and max-width.	361
Double-float margin bug	361
Expanding boxes	362
The 3-pixel text jog	362
Whitespace bugs in styled lists.	363
Problems with iframes	363
Ignoring the abbr element	364
PNG replacement	364
Problems with CSS hover menus (drop-downs)	365
Fixing hasLayout problems (the peekaboo bug)	365
Targeting other browsers	367

Chapter 10: Putting Everything Together	371
Putting the pieces together	372
Managing style sheets	372
Creating a portfolio layout	373
About the design and required images	374
Putting the gallery together	374
Styling the gallery	375
Hacking for Internet Explorer	378
Creating an online storefront	378
About the design and required images	379
Putting the storefront together	380
Styling the storefront	381
Fonts and fixes for the storefront layout	384
Creating a business website	387
About the design and required images	387
Putting the business site together	388
Styling the business website	389
Working with style sheets for print	392
Appendix A: XHTML Reference	399
Standard attributes	400
Core attributes	400
Keyboard attributes	400
Language attributes	401
Event attributes	401
Core events	401
Form element events	402
Window events	403
XHTML elements and attributes	403
Appendix B: Web Color Reference	447
Color values	448
Web-safe colors	448
Color names	449
Appendix C: Entities Reference	451
Characters used in XHTML	452
Punctuation characters and symbols	452
Quotation marks	452
Spacing and nonprinting characters	453
Punctuation characters	454
Symbols	454
Characters for European languages	455
Currency signs	460

Mathematical, technical, and Greek characters	460
Common mathematical characters.	460
Advanced mathematical and technical characters	461
Greek characters.	463
Arrows, lozenge, and card suits	466
Converting the nonstandard Microsoft set	466
Appendix D: CSS Reference	471
The CSS box model	472
<i>Common CSS values</i>	473
CSS properties and values.	474
Basic selectors	489
Pseudo-classes	491
Pseudo-elements.	491
CSS boilerplates and management	492
Modular style sheets.	494
Appendix E: Browser Guide	497
Firefox.	498
Internet Explorer	498
Opera	499
Safari	500
Other browsers.	500
Appendix F: Software Guide	503
Web design software.	504
Graphic design software.	505
The author's toolbox.	506
Index	509