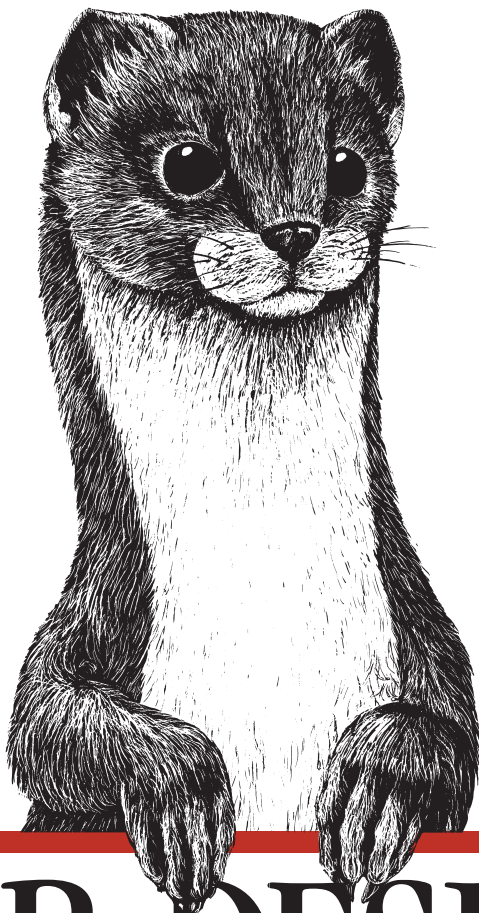


*Completely revised for standards
compliance, including CSS 2.1
and XHTML 1.0*

3rd Edition
Over 200,000 copies in print



WEB DESIGN IN A NUTSHELL

A Desktop Quick Reference

O'REILLY®

Jennifer Niederst Robbins

Index

Symbols

- & (ampersand) (see ampersand)
- ' (apostrophe), 167
- * (asterisk) (see asterisk)
- \ (backslash), 80
- <> (brackets), 97
- : (colon) (see colon)
- > (greater-than sign)
 - character entity, 167
 - child selectors and, 299
 - escaping the character, 79
- (hyphen) (see hyphen)
- < (less-than sign)
 - character entity, 167
 - escaping the character, 79
- # (octothorpe)
 - character entity, 722
 - ID selectors, 300
- % (percent sign)
 - parameter entities, 102
 - percentage values, 293
- . (period)
 - in CSS selectors, 299
 - XML names, 99
- + (plus sign), 299
- " (quotation marks) (see quotation marks)

- ; (semicolon)
 - escaping the character, 79
 - as separator, 277
- (') single quote
 - escaping the character, 79
 - @import directive, 459
- / (slash) (see slash)
- _ (underscore) (see underscore)
- | (vertical bar)
 - attribute selector, 302
 - as separator, 101
- £ (pound symbol), 167

Numbers

- 8-bit color, 521
- 15-bit color, 520
- 16-bit color, 520
- 24-bit color, 519, 520
- 32-bit color, 519
- 565 model, 520

A

- a element
 - frames and, 242
 - generated content, 414
 - list-based navigation, 444
 - mailto protocol, 174

- a element (*continued*)
 - name attribute, 171
 - overview, 169, 170, 642–644
 - selectors and, 302, 305
 - target attribute, 173, 242
 - text rollovers, 440
- A List Apart
 - “ALA’s New Print Styles”, 631
 - column background trick, 432
 - “Creating Liquid Layouts with Negative Margins”, 424
 - “Cross-Browser Variable Opacity with PNG: A Real Solution,”, 556
 - “CSS Design: Creating Custom Corners & Borders”, 436
 - “CSS Design: Going to Print”, 631
 - “CSS Design: Taming Lists”, 446
 - “From Table Hacks to CSS Layout: A Web Designer’s Journey”, 424
 - “High-Resolution Image Printing”, 632
 - “How to Read W3C Specs”, 98
 - “Improving Link Display for Print”, 634
 - “Mountaintop Corners”, 436
 - “Sliding Doors of CSS (Parts I and II)”, 446
 - web site, 11, 295, 447
- AAC (Advanced Audio Coding)
 - format, 589
- abbr attribute (th), 222
- abbr element
 - hCalendar microformat, 744
 - hCard microformat and, 744
 - overview, 150, 151, 644
- abbreviations, 151
- “above the fold” design, 37
- abs() method, 482
- absolute pathnames, 46, 49
- absolute positioning
 - browser bugs, 455, 456, 458
 - elements in preferred order, 231
 - overview, 376, 385–389
 - three-column layouts, 426–431
 - two-column layouts, 423–424
 - vertical margins, 346
- absolute sizes, fonts, 313–314
- absolute URLs, 170, 410
- accessibility
 - assistive technology, 57–59
 - following guidelines, 23
 - forms and, 66, 263–267
 - frames and, 245, 246
 - image replacement, 438, 439, 440
 - new windows and, 242
 - responsibility for, 59, 60
 - Section 508 standard, 64, 65
 - table layout and, 226
 - techniques for, 65–68
 - testing for, 68–71
 - types of disabilities, 56, 57
 - Web Content Accessibility Guidelines, 60–64
 - web standards and, 6
- Accessibility panel (Flash), 614
- Accessibility Toolbar (Internet Explorer), 69
- accesskey attribute, 266
- Acid2 test, 457
- Acrobat Reader, 634, 636
- acronym element, 150, 151, 644
- acronyms, 151
- action attribute (form), 248
- Actions panel (Flash), 614
- ActionScript
 - Flash authoring environment, 609, 611
 - Flash printing, 637
 - JavaScript and, 468
 - overview, 615, 616
- :active selector
 - functionality, 302, 305
 - LVHA acronym, 303, 442
 - text rollovers, 440
- Active Server Pages (ASP), 43, 45
- active stream redirector files, 593
- ActiveX controls
 - adding parameters, 195
 - embedding video, 605–608
 - Flash and, 616
 - object element and, 195, 197
 - streaming audio, 581
- Adam7 method, 557
- Adaptive color palette, 532, 543
- address element, 149, 645
- adjacent sibling selectors, 299
- Adobe Acrobat, 635
- Adobe GoLive
 - authoring tools, 23, 33, 36
 - description, 127
 - FTP functions, 50
 - image map tools, 188

- SVG support, 110
 - URL pathnames, 49
- Adobe ImageReady
 - animated GIFs, 565, 570
 - color palettes, 532
 - GIF format, 531, 536, 538, 542
 - JPEG format, 548–550, 551
 - overview, 559–560
 - web graphics, 524, 526
- Adobe Photoshop
 - color palettes, 532
 - GIF format, 531, 536, 538–540, 542
 - JPEG format, 548–550, 551
 - PNG format, 559–560
 - web graphics, 520, 524, 526
- Advanced Audio Coding (AAC)
 - format, 589
- :after selector, 304, 306, 412, 633
- aggregators, 107
- .aif file extension, 583, 584
- AIFF (Audio Interchange File Format), 583, 585
- .aiff file extension, 583, 584
- Ajax (Asynchronous JavaScript and XML), 507–512
- alert() method, 474, 486, 494
- Alexander, Levin, 439, 440
- aliases, comparison operators and, 473
- aliasing, 527, 535, 536
- align attribute
 - applet element, 202
 - caption element, 213
 - cell content alignment, 219
 - col/colgroup elements, 215, 216
 - embed element, 621
 - float property and, 369
 - hr element, 166
 - img element, 183, 184
 - purpose, 219
- alignment
 - design considerations, 33
 - floating and, 369
 - form elements, 268–270
 - styling tables, 396
 - text, 327–332
 - (see also horizontal alignment; vertical alignment)
- alink attribute (body), 143
- all media type, 282, 629
- allowScriptAccess attribute
 - embed element, 621
 - object element, 618
- Almost Standards mode, 134, 135
- alpha channels
 - transparency and, 555, 558
 - weighted dithering, 540
 - weighted lossiness, 540
 - weighted optimization, 539
- alpha transparency, 556
- alt attribute
 - applet element, 202
 - img element, 181, 258
- America Online browser
 - background, 14
 - description, 16, 18
 - JPEG format and, 547
- American National Standards Institute (ANSI), 4
- American Standard Code for Information Interchange (ASCII), 4, 51, 53
- & character entity, 80, 96, 174
- ampersand (&)
 - as separator, 249
 - character entities, 167
 - escaping characters, 79, 174, 250
- amplitude, 576
- ancestors
 - containing blocks, 377, 386
 - defined, 284
 - root element and, 490
- and logical operator, 475
- Andressen, Marc, 13
- Andrew, Rachel, 23
- animated GIFs
 - creating, 566–570
 - Flash and, 612
 - functionality, 516, 564, 565
 - optimizing, 567, 570–571
 - tools for, 565–566
- Animated Portable Network Graphic (APNG), 558
- animation, 544, 558, 614
- Animation compressor, 598
- anonymous functions, 479
- ANSI (American National Standards Institute), 4

- anti-aliasing
 - Flash and, 611, 619
 - preventing halos, 535
 - text, 527
 - turning off, 536
 - web palette and, 543
- AOL (see America Online browser)
- Apache servers, 43, 46, 76
- Apache Software Foundation, 45
- API (Application Programming Interface), 488
- APNG (Animated Portable Network Graphic), 558
- ' character entity, 80, 96, 167
- apostrophe (’), 167
- appendChild() method, 498
- applet element, 193, 201, 645
- applets
 - alternative content and, 196
 - defined, 45
 - object element and, 195
 - overview, 201–203
- Application Programming Interface (API), 488
- application/pdf type, 636
- application/xhtml+xml media type, 139
- application/xml media type, 139
- archive attribute (object), 196
- area element, 190, 646
- arithmetic operators, 469, 472
- Array object (JavaScript), 480, 482
- arrays, 470, 471
- arrows, 730
- ASCII (American Standard Code for Information Interchange), 4, 51, 53
- ASCII character set
 - character entities, 722–723
 - character references and, 78
 - FTP link and, 175
 - markup and, 115
 - quotation marks, 415
 - Unicode encoding, 75
- .asf file extension, 588, 589, 599
- Asleson, Ryan, 512
- ASP (Active Server Pages), 43, 45
- assistive technology, 57–59
- associative arrays, 471
- asterisk (*)
 - blogroll usage, 745
 - frames and, 238
 - as universal selector, 298, 454
- .asx file extension, 593
- asynchronous communication, 507
- Asynchronous JavaScript and XML (Ajax), 507–512
- ATAG (Authoring Tool Accessibility Guidelines), 60
- Atom publishing protocol, 109
- attaching images, 364–365
- attlist (attribute) declarations, 97, 99, 101, 102
- attribute minimization, 124
- attribute nodes, 490, 492, 493
- attribute selectors, 301, 302
- attributes
 - authoring practices, 128
 - case sensitivity, 123
 - common, 641, 642
 - DTDs and, 97
 - elements and, 90
 - HTML DOM and, 496
 - namespaces and, 103, 136
 - overview, 117
 - quotation marks, 123
 - well-formed documents, 97
- Audacity audio tool, 579
- audience, knowing your, 25
- audio
 - adding to web pages, 590–594
 - basic concepts, 575–577
 - choosing formats, 590
 - copyright restrictions, 577
 - editing and format
 - conversion, 578–580
 - file formats, 583–589
 - Flash integration, 611, 623
 - overview, 575
 - recording, 578
 - royalty-free resources, 577
 - streaming, 581–583, 593
- Audio Interchange File Format (AIFF), 583, 585
- Audio/Video Interleaved (AVI), 601
- Audition audio tool, 579
- auditory impairment, 57
- aural browsers, 59
- aural impairment, 60
- aural media type, 282, 629
- author meta name, 142
- Authoring Tool Accessibility Guidelines (ATAG), 60

- authoring tools
 - browser variety and, 23
 - “design-to-size”, 36
 - fixed-width designs, 33
 - Flash and, 612, 613
 - HTML/XHTML, 126–129
 - standards recommendations, 23
 - URL pathnames, 49
 - web graphics, 522, 524
 - WYSIWYG, 127–128
 - authors, style sheets and, 285
 - auto keyword, 344
 - autoplay attribute (embed), 200, 606
 - AVI (Audio/Video Interleaved), 601
 - .avi file extension, 601
 - azimuth property (CSS), 715
- B**
- b element, 161, 646
 - background attribute (body), 143, 359
 - background color
 - animated GIFs, 570
 - borders and, 347
 - columns, 432
 - element boxes, 338
 - halos and, 535
 - margins and, 346
 - overview, 357–358
 - padding and, 354
 - printing text, 632
 - stacking order, 395
 - tables and, 396
 - transparency, 567
 - background images
 - accessibility and, 68
 - borders and, 347
 - columns and, 432, 433, 434
 - element boxes, 338
 - expanding box style, 435, 436
 - future of, 434
 - margins and, 346
 - matching colors, 527
 - overview, 358–367
 - padding and, 354
 - rollovers, 441–443
 - tables and, 396
 - background property (CSS)
 - col/colgroup elements, 215
 - overview, 366, 684
 - recommendations, 220
 - tables and, 396, 397
 - background sounds, 591
 - background-attachment property (CSS), 364–365, 684
 - background-color property (CSS), 357–359, 685
 - background-image property (CSS)
 - browser bugs, 454, 456
 - overview, 358–359, 685
 - background-position property (CSS), 361–364, 367, 443, 685
 - background-repeat property (CSS), 360–361, 364, 686
 - backslash (\), 80
 - backward compatibility, 126
 - Band Pass Filter, 453
 - bandwidth negotiation, 583
 - base attribute (embed), 621
 - base element
 - content and, 116
 - defined, 137
 - frames and, 242
 - overview, 171, 646
 - basefont element, 162, 299, 647
 - baseline, 325, 330
 - Basic Multilingual Plane (BMP), 75, 79
 - bdo element, 83, 84, 647
 - :before selector, 304, 306, 412, 633
 - behavioral layer, 6, 8, 114
 - Benkmann, Matthias, 188
 - Berners-Lee, Tim
 - HTML language, 92
 - W3C founded, 113
 - World Wide Web and, 13, 276
 - bgcolor attribute
 - body element, 143, 357
 - deprecation of, 220
 - embed element, 621
 - object element, 619
 - big element, 161, 647
 - binary files, 51, 53
 - bit depth, 538, 576, 580, 596
 - bit rates, 577, 583, 596
 - bitmapped images, 517
 - bits per pixel (bpp), 519
 - Bitstream, 310
 - _blank target name, 242
 - blink element, 324
 - blinking effect, 323
 - block-level elements
 - browser bugs, 456
 - clear property, 375

- block-level elements (*continued*)
 - content edge, 377
 - inline tables, 393
 - listed, 144
 - normal flow, 368
 - overview, 146–149, 288–290
- blockquote element, 147, 148, 151, 648
- blogrolls, 745
- blogs, 107
- BMP (Basic Multilingual Plane), 75, 79
- body, document, 130
- body element
 - background-image property, 359
 - centering pages, 420
 - color property and, 357
 - description, 130
 - initial containing block, 377, 387
 - noframes element and, 236
 - overview, 142, 143, 648
- Boolean values, 470, 473
- border attribute
 - frameset element, 241
 - img element, 170, 185
 - table element, 219
- border property (CSS)
 - browser bugs, 450, 454
 - col/colgroup elements, 215
 - overview, 352, 686
 - tables and, 396, 397
- border-bottom property (CSS), 352, 686
- border-bottom-color property (CSS), 350, 687
- border-bottom-style property (CSS), 348, 349, 687
- border-bottom-width property (CSS), 349, 687
- border-collapse property (CSS), 397, 398, 688
- border-color property (CSS), 351, 352, 357, 688
- border-left property (CSS), 352, 688
- border-left-color property (CSS), 350, 688
- border-left-style property (CSS), 348, 349, 689
- border-left-width property (CSS), 349, 450, 689
- border-right property (CSS), 352, 689
- border-right-color property (CSS), 350, 690
- border-right-style property (CSS), 348, 349, 690
- border-right-width property (CSS), 349, 450, 690
- borders
 - box model and, 338, 347–352
 - element boxes and, 290, 291
 - floated elements, 371
 - frame, 240–241
 - images and, 185
 - internal elements and, 393
 - margins and, 344
 - padding and, 352
 - tables and, 218, 396, 398–401
 - three-column layouts, 429–431
 - two-column layouts, 422
- border-spacing property (CSS)
 - cellspacing attribute and, 218, 397
 - overview, 398, 399, 690
- border-style property (CSS)
 - border conflicts and, 401
 - combining properties, 352
 - overview, 348–349, 691
- border-top property (CSS), 352, 691
- border-top-color property (CSS), 350, 691
- border-top-style property (CSS), 348, 349, 692
- border-top-width property (CSS), 349, 692
- border-width property (CSS), 349–350, 352, 458, 692
- Bos, Bert, 276
- Bosak, Jon, 92
- bottom keyword, 362
- bottom property (CSS)
 - absolute positioning, 385
 - fixed positioning, 389
 - overview, 377, 693
 - relative positioning, 391
 - table captions, 395
- Boutell, Thomas, 188, 553
- Bowman, Doug, 30, 295, 437, 446, 453
- box model
 - borders, 338, 347–352
 - Box Model Hack, 451
 - browser bugs and, 450
 - margins, 338, 344–347
 - overview, 290–291
 - padding and, 338, 352–354
 - tables, 393

- three-column layouts, 431
 - width and height, 338, 341–343
 - boxes, rounded corners for, 432–436
 - bpp (bits per pixel), 519
 - br element
 - empty element, 116
 - line breaks and, 119, 145, 164
 - no br element and, 165
 - overview, 648, 649
 - brackets <>, 97
 - Braille display, 59, 220
 - braille media type, 282, 629
 - Bray, Tim, 92
 - Briggs, Owen, 318
 - Brill, Ryan, 424
 - Browser Cam screen capture service, 25
 - Browser Object Model, 486, 487
 - Browser Wars
 - background, 5, 13
 - DHTML and, 488
 - embedded fonts and, 310
 - Mozilla and, 20
 - tags and, 5
 - browsers
 - alternate style sheets, 281
 - alternative text, 181
 - attribute support, 117, 126
 - aural, 59
 - block-level elements and, 147
 - border-spacing property, 218
 - box model and, 337, 338, 342
 - Browser Object Model, 486, 487
 - canvas, 29
 - CDATA section, 126
 - chrome, 29
 - color property support, 357
 - CSS and, 23, 293
 - DHTML and, 488
 - differences among, 22–24
 - DOCTYPE switching, 134, 135
 - embedded fonts, 310
 - embedding Windows Media, 607
 - empty elements and, 124
 - favicons, 187
 - Flash format support, 611, 621
 - Flash printing, 637
 - floating support, 372
 - form controls, 267
 - frame borders, 241
 - frames and, 232, 233, 235
 - hacks/workarounds, 459–461
 - history of, 12–14
 - ignoring markup, 118, 119
 - image loading, 186
 - image resolution and, 518
 - Java applets, 201
 - JavaScript and, 466
 - JPEG format and, 547
 - listed, 14–18
 - mobile, 38
 - namespaces and, 103
 - object element support, 195, 197, 198
 - PDF files and, 634, 637
 - PNG format and, 558, 559
 - pop-up windows, 173
 - positioning and, 389, 390
 - printing and, 626
 - QuickTime plug-in support, 604
 - row spans and, 211
 - selector support, 299, 301, 303
 - table headers and, 222
 - table layout calculations, 402
 - testing sites, 25
 - text formatting and, 308–310
 - three-column layouts, 431
 - transparency and, 556
 - universal selector and, 298
 - usage statistics, 19–22
 - word wrapping, 165
 - XML support, 105
(see also specific browsers)
 - buffering, 582
 - bullets, 252, 409
(see also markers)
 - Bulterman, Dick C.A., 111
 - button element, 262, 263, 649
 - buttons
 - color property and, 357
 - custom, 256, 257
 - overview, 262, 263
 - radio, 255
 - reset, 255, 256
 - submit, 255, 256, 257
 - submit and reset, 255, 256
- ## C
- C programming language, 465
 - caches, 525
 - camel case, 501
 - Campesato, Oswald, 110

- capitalization
 - camel case, 501
 - common methods, 483
 - filenames and, 50
 - nodeName property, 493
 - overview, 322, 323
- caption element
 - caption-side property, 394
 - overview, 211, 213, 649
 - summary attribute, 221
- caption keyword, 322
- caption-side property (CSS), 213, 394, 693
- Carver, Ryan, 443
- cascade, 284
- Cascading Style Sheets (CSS)
 - adding to documents, 278–283
 - aligning form elements, 268
 - benefits, 274, 275
 - block and inline elements, 288–290
 - browsers and, 23, 293
 - DHTML and, 488
 - div element, 154
 - document tree, 490
 - DOM and, 501
 - escaping characters, 80
 - extended color names, 737–741
 - form controls, 267
 - further reading, 294–296
 - guiding concepts, 283–291
 - lists, 406–411
 - mobile devices, 40
 - normal flow of documents, 368
 - overview, 275
 - PDF and, 634
 - presentation and, 114, 161, 228
 - presentation layer and, 6–7
 - printing and, 627–634
 - RGB colors in, 736
 - rollovers, 440–443
 - rule syntax, 275–278
 - standards support, 5, 21
 - tables and, 10, 218, 219, 392–395
 - technique resources, 446
 - text formatting, 307
 - XML and, 93, 105
- case sensitivity
 - authoring practices, 129
 - elements and, 90, 123
 - HTML, 116
 - JavaScript, 469
 - XHTML, 123
 - XML, 90
- CBR (constant bit rate), 585
- CDATA attribute type, 102
- CDATA section, 96, 125, 467
- Cederholm, Dan
 - column background trick, 432
 - expanding rounded boxes, 436
 - informative personal sites, 296, 447
 - web standards, 11, 294, 447
- ceil() method, 482
- Çelik, Tantek
 - Band Pass Filter, 453
 - Box Model Hack, 342, 451
 - extending XHTML, 742–746
 - informative personal sites, 296
 - surgical correction, 461
 - Tasman layout engine, 452
- cellpadding attribute (table), 217, 397
- cells (table)
 - basic structure, 207–210
 - collapsing border model, 400, 401
 - content alignment, 219, 396
 - padding, 217, 228
 - rows and, 393
 - separated borders model, 398–399
 - spacing, 217, 397
 - td element and, 209
 - th element and, 221
- cellspacing attribute (table), 217, 397
- center element, 649
- center keyword, 362, 363
- center tag, 419
- centering
 - three-column layouts, 429–431
 - web pages, 419–421
- CGI (Common Gateway Interface), 44
- CGI scripts, 44, 52, 192
- cgi-bin directory, 45
- channels, audio files, 577
- char attribute (table), 219
- character encoding
 - character sets and, 73–78
 - defined, 73
 - directionality and, 83
 - meta element, 136, 139, 140
 - XML declaration and, 94
- character entities
 - arrows, 730
 - ASCII character set, 722–723
 - cursive joining behavior, 84

- entity references and, 96
- general punctuation, 729, 730
- generated content and, 413
- geometric shapes, 732
- Greek, 727–729
- Latin Extended-A, 727
- Latin Extended-B, 727
- Latin-1 (ISO-8859-1), 724–727
- letter-like symbols, 730
- mathematical operators, 730–732
- miscellaneous symbols, 732
- nonstandard, 723
- overview, 79
- predefined in XML, 96
- spacing modifier letters, 727
- technical symbols, 732
- text elements and, 167, 168
- XHTML and, 125
- character references
 - internationalization and, 78–80
 - Numeric Character Reference, 79, 96, 167
 - text elements and, 167, 168
- character sets, 73–78
 - (see also specific character sets)
- charoff attribute (table), 219
- checkboxes, 254
- checked attribute(input), 255
- Chemical Markup Language (CML), 112
- child elements
 - defined, 284
 - descendants and, 284
 - DTDs and, 100, 101
 - inheritance and, 284
 - text line height and, 325
 - text-decoration property and, 324
- child nodes, 490, 491, 492
- child selectors, 298, 299
- child subdirectory, 46
- childNodes property (DOM), 492
- child/parent relationships (see parent/child relationships)
- chrome, browser, 29
- Cinepak codec, 598
- cite attribute
 - blockquote element, 148
 - del/ins elements, 153
 - quotations and, 152
- cite element, 150, 151, 650
- Clark, Chris, 281
- Clark, James, 92
- Clark, Joe, 66, 438
- Clarke, Andy, 502
- class attribute
 - browser bugs, 456
 - class selectors and, 299, 300
 - col/colgroup elements, 216
 - div/span elements, 153
 - extending, 742
 - hCard microformat, 744
 - HTML DOM and, 496
 - overview, 155, 641
- class names, extending
 - HTML, 743–744
- class selectors, 299–300
- .class suffix, 201
- classid attribute (object)
 - adding applets, 203
 - embedded audio, 593
 - embedding video, 605, 607
 - Flash and, 618
 - specifying implementation, 195, 196
- “class-itis” syndrome, 300
- className property (DOM), 496
- Cleaner tool (Autodesk), 580
- cleanWhitespace() method, 493
- clear attribute
 - br element, 164
 - img element, 185
- clear property (CSS)
 - browser bugs, 454
 - form elements, 270
 - overview, 374–375, 693, 694
 - text wrapping, 185
 - three-column layouts, 426
- client-pull, 140
- clients, 42
- client-side image maps, 188, 190–192
- client-side processing, 42, 466
- clip property (CSS), 381, 694
- clipping areas, 381
- cloneNode() method, 500, 501
- close() method, 486
- closing tags, 116
- clsid naming scheme, 195
- cm unit of measurement, 316
- CML (Chemical Markup Language), 112
- CMYK color model, 526, 548
- code attribute (applet), 202, 203
- code element, 150, 650

- “code forking”, 488
- code points, 73, 74, 75, 79
- code position, 73
- codebase attribute
 - adding video, 605
 - applet element, 202
 - object element, 196, 203, 618
- codecs
 - audio, 588
 - video, 597, 598, 600
- coded character sets, 73
- codetype attribute (object), 195
- cognitive impairment, 57
- col element
 - boxes and, 393
 - cell content alignment, 219
 - internal elements and, 393
 - overview, 215–216, 650
- colgroup element
 - boxes and, 393
 - cell content alignment, 219
 - internal elements and, 393
 - overview, 215–216, 650
- collapsing border model, 400, 401
- colon (:)
 - automatic counters, 417
 - namespaces, 104
 - pseudoselectors and, 302
 - style rules, 277
- color
 - accessibility and, 68
 - assistive technology and, 60
 - borders and, 347, 350–352
 - GIF format and, 530
 - graphics and, 519–524
 - JPEG format and, 516, 544
 - matching, 527, 528
 - optimization tools, 538
 - PNG format, 554
 - specifying by name, 736–741
 - specifying by RGB values, 733–736
 - specifying in style sheets, 292, 293
 - web-safe, 542
 - (see also background color; color depth; foreground color)
- color attribute (font), 163
- color depth
 - animated GIFs, 569
 - overview, 519–521
 - video files, 596
- color maps, 521, 531
- color property (CSS), 355–357, 694
- cols attribute
 - frameset element, 237–238
 - textarea element, 259
- colspan attribute (td), 210, 211
- column groups, 214–216
- columns
 - data tables, 206
 - framesets and, 234
 - hiding, 383
 - overview, 214–216
 - spanning, 210, 211
 - stacking order, 395
 - tables and, 393, 397
 - three-column layouts, 424–431
 - two-column layouts, 421–424
- combinator character, 298
- Commented Backslash Hack, 453
- comments
 - authoring practices, 129
 - browsers ignoring, 119
 - hack management, 460
 - HTML, 119
 - JavaScript and, 467, 468
 - metadata and, 743
 - protecting scripts, 125
 - well-formed documents, 97
 - XML documents, 95
- Common Gateway Interface (CGI), 44
- comparison operators, 472, 473
- Components panel (Flash), 614
- compression
 - animated GIFs, 570
 - audio file formats and, 575, 580
 - file sizes and, 525
 - Flash movies, 614, 615
 - GIF format and, 529
 - J&G, 547
 - JPEG format and, 544–551
 - LZW, 553
 - matching colors and, 528
 - MPEG, 584
 - PNG format, 559, 563
 - video, 596–598
 - video and, 602
 - (see also lossless compression scheme; lossy compression scheme; LZW compression)
- concat() method, 482, 483
- conditional statements, 474–476
- confirm() method, 486

- constant bit rate (CBR), 585
- contact information, 743, 744
- containing blocks
 - browser bugs, 456, 458
 - defined, 371
 - floated elements and, 373, 374
 - overview, 377
 - positioning and, 386, 391
- content
 - accessibility of, 265
 - building blocks of, 146–149
 - document body, 130
 - DOM and, 494, 495
 - DTDs and, 101
 - element boxes and, 290, 291
 - elements and, 116
 - frameset element and, 234
 - generated, 412–418, 437, 633
 - internal elements and, 393
 - normal flow and, 369
 - object element and, 196
 - styling tables, 396
 - table cell alignment, 219
 - tagging, 745
 - WCAG, 64
 - XML documents and, 91
- content area
 - borders and, 347
 - box model, 338, 340, 341
 - calculating positioning, 388
 - floated elements, 371
 - padding and, 352
- content attribute (meta), 140
- content edge, 377
- content property (CSS), 412, 414, 417, 694
- content types (see MIME types)
- contextual selectors, 298, 299
- control structures, JavaScript, 473–480
- controller attribute (embed), 606
- controls
 - buttons, 262, 263
 - form, 248, 250–263, 298, 496
 - input, 251–258
 - menus and select element, 259–262
 - multiline text areas, 259
 - nesting, 264
- copyright meta name, 142
- copyrights
 - audio files and, 577
 - MP3 format and, 585
 - pseudostreaming and, 583
 - streaming audio and, 581, 583
 - symbol for, 168
- Core Web Fonts collection (Microsoft), 312
- Corel Paint Shop Pro, 524
- The Counter, 19, 20, 35
- counter() function, 417
- counter-increment property (CSS), 417–418, 695
- counter-reset property (CSS), 158, 416, 695
- counters
 - automatic, 416–418
 - content property and, 413
 - generated content and, 412
- counters() function, 417
- country name codes, 81–83
- createElement() method, 496, 497, 498
- createNamedElement() method, 497, 498
- createTextNode() method, 498
- The Creative Commons, 745
- CSS (see Cascading Style Sheets)
- CSS Zen Garden site, 446
- Cubase audio tool, 579
- cue property (CSS), 716
- cue-after property (CSS), 716
- cue-before property (CSS), 716
- curly braces { }, 277
- cursive fonts, 311
- cursor property (CSS), 695
- Custom color palette, 532

D

- data
 - accessible tables and, 220–225
 - associating headers with, 223–225
 - as text, 91
- data attribute
 - object element, 194, 196
 - object/param elements, 195
 - param element, 194
- data cells (see cells)
- data rate, 596
- data tables, 206
- data types, JavaScript, 470–472
- Date() method, 482
- Date object (JavaScript), 480, 482
- datetime attribute (del/ins), 153
- Davidson, Mike, 309

- dd element, 159, 651
- decimal system, converting
 - from, 734–735
- declaration block, 277, 451
- declarations
 - components, 277
 - defined, 130, 275
 - element, 97, 99, 100, 101
 - XML, 77, 94, 95, 131
- decompression, JPEG format, 547
- definition lists, 159–160
- del element
 - generated content, 413
 - overview, 152, 153, 651
- deprecated attributes, 182–186
- deprecated elements
 - authoring practices, 128
 - HTML, 9, 10, 145, 161
- descendant selectors, 298
- descendants, 284
- description meta name, 141
- developer tools (see authoring tools)
- Device Independence Working
 - Group, 38
- devicefont attribute
 - embed element, 621
 - object element, 620
- dfn element, 150, 652
- DHTML (Dynamic HTML), 488, 489
- Diaz, Dustin, 343
- Digital Performer audio tool, 580
- digital rights management (DRM), 599
- dir attribute, 83, 84, 642
- dir element, 161, 652
- direction property (CSS), 84, 335, 696
- directionality
 - language, 80, 83, 335, 336
 - style sheet language features, 84
- directories, 46
- disabilities, types of, 56, 57
- disabled attribute, 267
- display property (CSS)
 - browser bugs, 456, 458
 - common values, 289
 - FIR and, 438
 - floated elements and, 370
 - inline list items, 444
 - inline tables, 393
 - list-item value, 411
 - overview, 403–405, 696
 - printing, 629
 - visibility property and, 382
- display resolution (see monitor
 - resolution)
- display roles, 289
- displays (see presentation)
- disposal method, 567, 568
- distance learning, 623
- dithering
 - animated GIFs, 570
 - defined, 521, 538
 - GIF format and, 539, 540, 541, 543
 - JPEG format and, 545
 - preventing, 543
- div element
 - Box Model Hack, 451
 - browser bugs, 456, 457
 - expanding box style, 435, 436
 - hCard microformat and, 744
 - overview, 153, 154, 652
 - three-column layouts, 425, 426, 427
 - two-column layouts, 421–424
- dl element, 159, 455, 652
- do...while statement, 477
- DocBook, 112
- DOCTYPE declaration
 - box model and, 342
 - description, 131
 - DOCTYPE switching, 134, 135
 - document prolog and, 95
 - document structure and, 132–135
 - frameset documents, 235
 - overview, 98
 - page rendering, 10
 - purpose, 95
 - Quirks mode and, 95
 - specifying DTDs, 122
 - XHTML and, 103
 - XML declaration before, 77
- DOCTYPE switching, 134, 135
- document character sets, 74
- document flow
 - overview, 368, 369
 - positioning and, 376, 385–386, 389–391
- document object, 492, 497
- Document Object Model (see DOM)
- document prolog, 95
- document structure
 - body element, 142, 143
 - creating, 496–501
 - DOCTYPE declaration
 - and, 132–135
 - elements and, 91

- HTML and, 114
- inheritance and, 283, 284
- metadata and, 109
- minimal, 130–132
- presentation and, 115
- reading and manipulating, 494–495
- root element and, 135, 136
- document tree, 91, 284, 489, 490
- document type declaration (see DOCTYPE declaration)
- Document Type Definitions (see DTDs)
- documents
 - adding styles to, 278–283
 - DOM and, 488, 491–501
 - link element, 175–177
 - links within, 171–172
 - malformed, 96, 118
 - sharing, 634
 - valid, 92, 94, 99
 - well-formed, 93, 94, 96–97, 118
- DOM (Document Object Model)
 - Ajax and, 507–512
 - behavioral layer, 8
 - browser differences, 24
 - CSS and, 501
 - overview, 488–491
 - standards support, 21
- DOM Scripting
 - DHTML and, 489
 - examples, 502–507
 - manipulating documents, 491–501
- Dowd, Snow, 625
- downloading
 - audio files, 581, 583, 590
 - reference movies, 600
 - streaming video, 599
- DRM (digital rights management), 599
- dt element, 159, 653
- .dtd suffix, 97
- DTDs (Document Type Definitions)
 - character entities and, 79
 - document structure and, 132–135
 - flavors of, 121, 122
 - overview, 97–103
 - WML and, 39
 - XHTML and, 120
- Dynamic HTML (DHTML), 488, 489

E

- ECMA (European Computer Manufacturers Association), 4, 465, 468
- ECMAScript
 - ActionScript and, 615
 - JavaScript and, 4, 8, 24
 - standards support, 21
- Edwards, Dean, 486
- Edwards, James, 502
- Eich, Brendan, 465
- Eisenberg, David, 98, 110
- element boxes
 - borders, 347–352
 - defined, 290, 338
 - floats and, 374
 - independence of values, 291
 - margins, 338, 344–347
 - padding and, 352–354
 - positioning and, 386
 - width and height, 341–343
 - zero values in, 291
- element declarations, 97, 99, 100, 101
- element nodes
 - depicted, 490
 - DOM and, 490
 - nodeName property, 493
 - nodeType property, 492
 - selectors and, 490
- Element object (JavaScript), 480
- elements
 - attributes and, 90
 - authoring practices, 128
 - borders, 347–352
 - browsers ignoring, 119
 - case sensitivity, 123
 - counters and, 416
 - defined, 116
 - DOM and, 497
 - DTDs and, 97
 - element declarations, 100
 - floating, 369–375
 - generic, 144, 153–156
 - internal, 393
 - margins, 338, 344–347
 - as markers, 491
 - namespaces and, 103, 136
 - nested, 118, 124, 288, 289
 - non-replaced, 330, 340, 371

- elements (*continued*)
 - normal flow, 369
 - overview, 116
 - padding, 352–354
 - positioning, 226, 368, 375–391
 - pseudoelement selectors, 304, 412
 - selectors and, 297–306
 - stacking order, 383–385, 395
 - table, 211–213
 - terminating, 116, 124
 - well-formed documents, 97
 - width and height, 341–343
 - (see also specific types of elements)
 - elevation property (CSS), 716, 717
 - em box, 314, 339
 - em element, 150, 151, 653
 - em unit of measurement
 - overview, 31, 314
 - problems with, 317
 - relative length and, 316
 - email, 53, 174
 - embed element
 - browser compatibility, 197
 - embedded media, 193, 199–200
 - Flash movies and, 616, 617, 620–621
 - object element and, 637
 - overview, 653–654
 - PDF files and, 637
 - QuickTime and, 605, 606
 - RealPlayer and, 592, 593
 - Embedded Open Type (Microsoft), 310
 - embedding
 - fonts, 310
 - JavaScript, 467
 - media, 192–200
 - metadata, 743
 - object element and, 592
 - PDF files, 636
 - QuickTime movies, 604–606
 - RealPlayer, 592
 - style sheets, 278–279, 630
 - text, 558
 - embossed media type, 282, 629
 - emphasis, indicating, 151
 - empty elements
 - browsers ignoring, 119
 - col element, 216
 - defined, 90, 116
 - DTDs and, 101
 - terminating, 124
 - well-formed documents, 97
 - empty-cells property (CSS), 399, 696
 - em-square measurement, 314
 - encoding, 250, 575
 - (see also character encoding)
 - encoding attribute, 94
 - encryption, post method and, 250
 - entype attribute (form), 250
 - end tags, 116
 - entity declarations
 - defined, 97
 - DTD syntax, 99
 - overview, 102
 - entity references, 96
 - equality, comparison operators for, 473
 - escaping the character
 - ampersand, 250
 - CDATA section and, 96
 - character references, 167
 - defined, 78
 - style sheets, 80
 - European Computer Manufacturers Association (ECMA), 4, 465, 468
 - event handling
 - anonymous functions, 479
 - common events, 484
 - core events, 642
 - JavaScript, 484–486
 - this keyword and, 481
 - event property (Browser Object), 486
 - ex unit of measurement, 316
 - Exact color palette, 532
 - expanding box style, 434, 436
 - expert review, 69
 - exporting PNG files, 561
 - Extensible Hypertext Markup Language (see XHTML)
 - Extensible Markup Language (see XML)
 - Extensible Stylesheet Language for Transformations (XSLT), 93
 - Extensible Stylesheet Language (XSL), 93
 - external style sheets, 79, 280
- ## F
- face attribute (font), 163
 - Fahrner Image Replacement (FIR), 437
 - Fahrner, Todd, 437
 - false keyword, 470
 - fantasy fonts, 311
 - Fast Web view (PDF), 635

- favicons, 187
- Featherstone, Derek, 56–71
- feed readers, 107
- Ferg, Steve, 221
- Fetch program, 50, 51, 52
- fieldset element
 - accessibility, 267
 - browser bugs, 458
 - overview, 265, 655
- file formats
 - audio, 583–589
 - Flash support, 613
 - graphics, 515–517
 - video, 598–602
- file:// protocol, 175
- file sizes
 - Flash and, 610
 - GIF format and, 536–540
 - JPEG format and, 548–551
 - K-limit, 525
- File Transfer Protocol (FTP), 50–52, 585
- file types (see MIME types)
- filters, 451, 455, 555
- FIR (Fahrner Image Replacement), 437
- Firefox browser (Mozilla)
 - canvas dimensions, 29
 - description, 15, 17
 - history, 14
 - managing bugs, 456
 - PNG format and, 559
 - usage trends, 22
 - Web Developer Extension, 17, 36, 69
 - XML support, 105
- firstChild property (DOM), 492, 493
- :first-child selector, 303, 306
- :first-letter selector, 304, 306
- :first-line selector, 304, 306
- 565 model, 520
- fixed positioning, 232, 377, 389
- fixed width web pages, 30–36
- .fla file extension, 613
- Flanagan, David, 487
- Flash (Macromedia)
 - ActionScript, 615, 616
 - alternate content for, 198
 - background, 589, 609
 - creating movies, 612–615
 - Dreamweaver and, 622
 - Flash Player, 609, 611, 623–625
 - Macromedia Director and, 622
 - printing and, 637
 - QuickTime and, 622
 - resources, 625
 - sIFR text and, 309
 - streaming audio, 582, 583
 - web pages and, 610–612, 616–621
 - Windows Media and, 589
- flash of unstyled content (FOUC), 449
- Flash Player, 609, 611, 623–625
- flashvars attribute (object), 620
- flickering effect, 443
- float property (CSS)
 - form elements, 270
 - list-based navigation, 445, 446
 - overview, 369, 697
 - tables and, 395, 397
- floated elements
 - browser bugs, 455, 457
 - overview, 369–375
 - three-column layouts, 426
 - two-column layout, 421, 422
 - vertical margins, 346
- floating frames, 203–204
- floating the image, 183
- floor() method, 482
- focus, 265, 266, 442
- focus() method, 486
- :focus selector, 303, 306, 442
- focus state, 67
- font element, 162–163, 655
- font property (CSS), 321, 322, 697
- font-family property (CSS), 310, 697
- fonts
 - browsers and, 308–310, 458
 - commonly available, 312
 - Flash and, 611
 - font size, 312–318
 - font style, 319
 - font variant, 320, 321
 - generic families, 311
 - issues with, 308
 - printing and, 632
 - system, 322
 - type size issues, 308
- font-size property (CSS), 312–318, 339, 342, 698
- font-size-adjust property (CSS), 321
- font-stretch property (CSS), 321
- font-style property (CSS), 151, 319, 698

- font-variant property (CSS), 320, 321, 322, 698
 - font-weight property (CSS), 318, 319, 699
 - footers
 - three-column layouts, 425, 426, 427, 428
 - two-column layouts, 421, 422, 423, 424
 - for attribute (label), 496
 - for keyword, 469
 - for...in loop, 478
 - foreground color, 355–357
 - form controls, 248, 250–263, 298, 496
 - form element
 - action attribute, 248
 - aligning, 268–270
 - encoding and, 250
 - enctype attribute, 250
 - id attribute, 264
 - method attribute, 249–250
 - name attribute, 249, 264
 - overview, 655, 656
 - forms
 - accessibility and, 66, 263–267
 - appearance of, 267–270
 - form controls, 250–263
 - form element, 248–250
 - WCAG, 63
 - forward compatibility, 6
 - forward slash (see slash)
 - FOUC (flash of unstyled content), 449
 - fps (frames per second), 596
 - fragments, 171, 172
 - frame attribute (table), 219
 - frame delay, 566
 - frame element
 - frameborder attribute, 241
 - margins, 240
 - noresize attribute, 239
 - overview, 234–235, 656, 657
 - scrolling attribute, 239
 - title attribute, 245
 - frame rate, 596
 - frame size, 596
 - frameborder attribute (frameset), 241
 - frames
 - animated GIFs, 566–569
 - design tips and tricks, 244–246
 - Flash and, 614
 - frameset structure, 234–239
 - function and appearance, 239–241
 - inline, 203–204
 - overview, 232–233
 - targeting, 241–243
 - video compression and, 597
 - WCAG, 63
 - Frames DTD, 119, 120, 123
 - frames per second (fps), 596
 - Frameset DTD
 - description, 122
 - frame borders, 241
 - frames and, 232, 235
 - options, 133
 - frameset element
 - border attribute, 241
 - frameborder attribute, 241
 - noframes element and, 236
 - overview, 234–236, 657
 - rows/columns, 237–238
 - frontend web development, 42
 - FTP (File Transfer Protocol), 50–52, 585
 - ftp:// protocol, 174
 - function keyword, 469, 479
 - Function object (JavaScript), 480
 - functions, 479–481
- ## G
- gamma settings, 523–524, 557–559
 - Garage Band audio tool, 580
 - Garrett, Jesse James, 507
 - Gecko layout engine, 14, 15, 456
 - general entities, 102
 - General MIDI (GM), 587
 - generated content, 412–418, 437, 633
 - generic elements, 144, 153–156
 - get command, 52
 - get method, 249
 - getAttribute() method, 495, 496, 501
 - getDate() method, 482
 - getDay() method, 480, 482
 - getElementById() method, 491, 492, 494
 - getElementsByName()
 - method, 491, 492, 494
 - getFullYear() method, 482
 - GIF (Graphic Interchange Format)
 - choosing as format, 517
 - color and, 530, 531
 - images and, 179, 196, 517
 - interlacing, 533, 534
 - LZW compression, 531–533

- matching colors, 528
- minimizing file sizes, 536–540
- optimization, 562
- overview, 515, 516, 529
- PNG format and, 553
- production tips, 525, 526
- spacing and, 180
- suffix, 50
- transparency, 534–536
- web palette and, 541–543
 - (see also animated GIFs)
- GIFmation utility, 566, 569
- Gilder, Tom, 439, 440
- Gilder/Levin Method, 439, 440
- Gillespie, Joe, 528
- global variables, 479
- globalization, 72
- glyphs, 73, 80, 99
- GM (General MIDI), 587
- Golding, Mike, 30
- Goodman, Danny, 487
- gopher:// protocol, 175
- graphics
 - choosing right format, 516, 517
 - color, 519–524
 - file formats, 515–517
 - image resolution, 517–519
 - production tips, 524–528
 - text and, 308
 - transparency and, 534
 - (see also images)
- grayscale images, 545, 554, 555
- greater-than sign (>)
 - character entity, 167
 - child selectors and, 299
 - escaping the character, 79
- Greek character entities, 727–729
- grid cells, 393
- > character entity, 80, 96
- Gustafson, Aaron
 - browser bugs, 448–461
 - DOM Scripting, 488–512
 - JavaScript, 465–487
 - URLs into endnotes, 634

H

- h1 through h6 elements, 146, 658
- H.264/AVC codec, 597, 598
- hack management
 - Box Model Hack, 451
 - Commented Backslash Hack, 453

- Holly Hack, 455
- overview, 459–461
- Tan Hack, 454
- halos, preventing, 535–536
- handheld devices, 522, 623
- handheld media type, 282
- hanging indents, 327
- Harold, Elliotte Rusty, 112
- hasChildNodes() method, 492
- hashes, 471
- hCalendar microformat, 744
- hCard microformat, 743–744
- head element
 - base element and, 171, 242
 - description, 130
 - overview, 136, 658
- headers
 - associating with data, 223–225
 - defined, 130
 - document structure and, 136–142
 - frameset documents and, 234
 - MIME types and, 44, 53
 - nesting, 224
 - text elements, 146
 - (see also HTTP headers; th element)
- headers attribute (td), 224, 225
- height
 - adding video and, 605
 - aligning text relative to, 330–332
 - element boxes, 338, 341–343
 - em measurement, 314
 - line-height property, 325–327
 - table, 397, 401–403
- height attribute
 - adding video and, 605
 - applet element, 202
 - embed element, 200, 605, 620, 621
 - iframe element, 204
 - img element, 181, 182
 - object element, 618
 - table element, 218
- height property (CSS)
 - box model, 341–343
 - browser bugs, 454, 455
 - overview, 699
 - positioning and, 379
 - tables and, 397
- hexadecimal notation
 - conversions, 734–735
 - RGB values, 293, 356
 - space character, 174, 250
 - web palette and, 523

- Hicks, Jon, 421
- Hickson, Ian, 215, 397
- hidden attribute (embed), 605
- Highcolor color depth, 519, 520
- history property (Browser Object), 486
- Holly Hack, 455, 456
- Holzschlag, Molly E.
 - CSS design, 294, 421, 446
 - informative personal sites, 296
- homepage, importance of, 37
- horizontal alignment
 - cell content, 219
 - centering pages, 420
 - img element and, 183
 - text, 328
- horizontal rule, 116, 165–166
- horizontal scrolling, 39
- “hotspots”, 186
- hover property (CSS), 67
- :hover selector
 - browser bugs, 458
 - LVHA, 303
 - overview, 303, 306
 - rollovers, 440, 442
- Howard, Ross, 632
- hr element, 116, 165–166, 658
- href attribute
 - a element, 170
 - embed element, 606, 637
 - generated content, 414
 - link element, 176
 - link relationships, 744
 - linking fragments, 172
- hspace attribute
 - applet element, 202
 - img element, 183
- html element
 - description, 130, 135
 - overview, 659
 - root elements and, 454, 490
- .html extension, 50
- HTML (Hypertext Markup Language)
 - adding video, 603–608
 - .asp files, 45
 - authoring tools, 126–129
 - character encoding, 78
 - character references, 78
 - character sets, 74
 - comments, 95
 - CSS and, 275
 - defined, 113
 - deprecated elements, 9, 10, 145, 161
 - development of, 4, 92
 - document structure, 131
 - DOM and, 488, 496
 - DTDs and, 121, 122
 - extending, 742–746
 - Flash and, 617
 - frameset documents and, 235
 - FTP process and, 51
 - language specification, 80
 - markup basics, 115–119
 - mobile devices, 39
 - PDF and, 634
 - PHP and, 45
 - relative pathnames, 49
 - RGB colors in, 736
 - role of, 114–115
 - semantic markup and, 91
 - standards, 5, 122, 123
 - tables and, 392
 - text editors and, 90
 - WAP browsers, 38
- HTTP headers
 - character encoding, 76, 140
 - file suffixes and, 50
 - head element and, 139
 - index files and, 44
 - media types in, 139
 - overview, 44
- HTTP (Hypertext Transfer Protocol)
 - absolute URLs, 170
 - character encoding, 76
 - MP3s and, 585
 - servers and, 42
- http-equiv attribute (meta), 77, 138, 139, 141
- HTTP-streaming, 583
- Huffman table, 549
- Hyatt, David, 457
- hypertext links, 169–171, 325, 633, 746
- Hypertext Transfer Protocol (see HTTP)
- hyphen (-)
 - attributes, 301
 - naming conventions, 50
 - soft, 165
 - subtraction operator and, 501
 - XML names, 99

I

- i element, 151, 161, 659
- IANA (Internet Assigned Numbers Authority), 53, 81

- iCalendar Internet standard, 744
- Ice Rocket search engine, 746
- .ico format, 187
- icon keyword, 322
- id attribute
 - browser bugs, 456
 - div/span elements, 153
 - DOM and, 497
 - embed element, 620
 - extending, 742
 - form element, 264
 - ID selectors and, 299, 300
 - naming fragments, 171
 - overview, 126, 154, 155, 641
 - th element, 225
- ID selectors, 299–300
- identity, comparison operators for, 473
- ideographs, 73, 75
- IETF (Internet Engineering Task Force), 4, 109
- if...else statement, 474
- iframe element, 203–204, 659, 660
- IIS (Internet Information Server), 43, 128
- image editing tools
 - embedded text, 558
 - GIF file optimization, 538–540
 - PNG format and, 553
 - (see also specific tools)
- image maps, 179, 186–192
- image resolution, 517–519
- images
 - attaching, 364–365
 - background, 68
 - binary mode, 51
 - bitmapped, 517
 - box model, 342
 - bullets from, 409
 - embedded text, 558
 - floating, 183, 369
 - generated content and, 412
 - GIF format and, 529
 - grayscale, 545, 554, 555
 - inline, 178–186
 - linking, 170
 - loading, 186
 - margins and, 347
 - positioning, 361–364
 - QuickTime player and, 586
 - raster, 517
 - repeating, 360–361, 364
 - resizing, 526
 - rollovers, 441–443
 - softening for compression, 549
 - submit buttons and, 257
 - SVG standard and, 110
 - text replacement, 309, 436–440
 - tiling, 360
 - upgrading, 632
 - vector, 517
 - (see also background images; graphics; photographic images)
- img element
 - alt attribute, 258
 - border attribute, 170
 - deprecated attributes, 182–186
 - empty elements, 116
 - float property, 369
 - overview, 179–181, 660–661
 - usemap attribute, 190
 - width/height attributes, 181–182
- @import directive
 - arguments, 453
 - CSS printing, 630
 - external style sheets, 280, 286
 - media attribute and, 281, 629
 - modular style sheets, 282
 - hack management, 459
- !important indicator, 285, 286
- in unit of measurement, 316
- indenting text, 327, 439
- Indeo codec, 598
- index, 44, 521, 531
- Indexed color depth
 - converting to, 542
 - GIF and, 530, 531
 - overview, 519, 521
 - PNG format and, 552, 554
 - transparency and, 555
- index.html file, 44
- indexOf() method, 483
- inherit keyword, 293
- inheritance
 - ActionScript and, 616
 - CSS and, 283–284
 - document structure and, 283, 284
 - properties and, 293
- initial containing blocks, 377, 387
- inline boxes, 327, 339–340, 374
- inline elements
 - borders and, 347
 - browser bugs, 458
 - containing blocks, 377

- inline elements (*continued*)
 - floating, 370
 - iframe element, 203–204
 - line breaks and, 146, 149
 - listed, 144
 - margins and, 346
 - normal flow, 368
 - overview, 149–152, 288–290
 - preformatted text and, 148
 - presentational, 161
 - text-decoration property and, 324
- inline frames, 203–204
 - (see also iframe element)
- inline images
 - overview, 178–186
 - PNG format, 558
 - replacing text with, 436
- inline list items, 444
- inline styles, 278, 314, 356
- inline tables, 393
- Inman, Shaun, 309
- inner edges, 338, 372
- innerHTML property (DOM)
 - Ajax and, 507–510
 - overview, 494, 495, 499
- input controls, 251–258
- input devices, 57–59
- input element
 - aligning form elements, 268
 - checked attribute, 255
 - overview, 251, 662–665
 - type attribute, 252–258
 - value attribute, 252, 257
- ins element, 152, 153, 666
- insertBefore() method, 500
- interframe compression, 597
- interframe delay, 566
- interlacing
 - animated GIFs, 569
 - GIF format and, 533, 534
 - PNG format, 557, 559, 563
 - Progressive JPEGs and, 547
- interlinear space, 314, 325
- internal elements, 393
- International Organization for Standardization (ISO), 4
- internationalization
 - character references, 78–80
 - character sets and encoding, 73–78
 - defined, 72
 - embedded style sheets, 279
 - language features, 80–84
 - style sheet language features, 84
- Internet Assigned Numbers Authority (IANA), 53, 81
- Internet Engineering Task Force (IETF), 4, 109
- Internet Explorer browser (see Microsoft Internet Explorer browser)
- Internet Information Server (IIS), 43, 128
- Internet Media Type encoding
 - format, 250
- Internet standards, 4, 744
- intraframe compression, 597
- isindex element, 137, 666
- ISO 3166 standard, 81
- ISO 639 standard, 81
- ISO 8601 standard, 744
- ISO (International Organization for Standardization), 4
- ISO-8859-1 encoding, 94, 140, 724–727
- ISO/IEC 10646-1 (see Unicode character set)
- ISO/IEC 15948:2003 standard, 553

J

- Java programming language, 465
- Java servlets, 45
- JavaScript
 - accessibility and, 66
 - Ajax and, 507–512
 - background, 8, 465, 466
 - Browser Object Model, 486, 487
 - comments, 468
 - control structures, 473–480
 - data types, 470–472
 - DHTML and, 488
 - DOM and, 488
 - DOM Scripting, 503
 - dos and don'ts, 466
 - ECMAScript and, 4, 8, 24
 - event handling, 484–486
 - implementing, 467–468
 - objects, 480–483
 - operators, 472–473
 - reserved characters, 96
 - statements, 468
 - subtraction operator, 501
 - variables, 469
- JavaServer Pages (JSP), 45
- J&G compression, 547

Johansson, Roger, 11, 221
join() method, 482
joining behavior, 84
JPEG (Joint Photographic Experts Group) format
 characteristics, 544
 choosing as format, 517
 color and, 544
 compression and, 545–547
 creating, 548
 file sizes, 548–551
 images and, 179, 517
 matching color, 528
 overview, 516
 photos and, 529
 production tips, 525, 526
 Progressive JPEGs, 547
 suffix, 50
JSP (JavaServer Pages), 45

K

kbd element, 150, 666
Kbps (kilobits per second), 577, 596
Keith, Jeremy, 30, 501
keyboards, 57, 58, 266
keywords
 absolute sizes, 313–314
 font property, 322
 numbering, 408
 positioning images, 362
 property values and, 277, 293
 relative sizes, 315
keywords meta name, 141
KHTML layout engine, 15, 18, 457
kilobits per second (Kbps), 577, 596
King, Andrew, 566, 570
K-limit, files, 525
Koch, Peter-Paul, 295
K/sec (kilobytes per second), 596

L

label attribute
 optgroup element, 262
 option element, 261
label element
 accessibility, 263, 264, 267
 aligning form elements, 268
 for attribute, 496
 form controls, 266
 id attribute (form), 264
 overview, 666, 667

LAMP acronym, 46
lang attribute
 dir attribute and, 83
 purpose, 81, 136, 642
 q element and, 152
 value of, 81
:lang selector, 303, 306
Langridge, Stuart, 438, 501
language tags, 81
languages
 CGI scripts, 44
 cursive joining behavior, 84
 directionality, 80, 83, 335, 336
 DOM scripting and, 488
 internationalization and, 72, 80–84
 open source, 45
 structural layer, 7
 WCAG, 61
large keyword, 313
larger keyword, 315
lastChild property (DOM), 492, 493
lastIndexOf() method, 483
Latin Extended-A set, 727
Latin Extended-B set, 727
Latin-1 (ISO-8859-1) set, 724–727
layers
 Flash and, 614
 tables and, 395
 transparent GIFs, 534
 web design and, 6
layout engines (see rendering engines)
layout tables, 206, 207, 226–231, 268
layouts
 three-column, 424–431
 two-column, 421–424
leading, 314, 325, 326, 340
Leahy, Seamus, 438
Leahy/Langridge Image Replacement (LIR), 438
left keyword, 362
left property (CSS)
 absolute positioning, 385
 calculating position, 389
 fixed positioning, 389
 overview, 377, 699
 relative positioning, 391
 table captions, 395
legend element, 265, 267, 667
Lehn, David, 522
Lemon, Gez, 69
Lempel-Zev-Welch compression (see LZW compression)

- length measurement
 - fonts, 316–318
 - images, 363
 - style sheets and, 291
- length property
 - arrays, 478, 482
 - strings, 483
- less-than sign (<)
 - character entity, 167
 - escaping the character, 79
- letter-spacing property (CSS), 333, 700
- li element, 156, 157, 667
- Library (Flash), 614
- Library of Congress web site, 81
- Lie, Håkon, 276
- line box, 340
- line breaks
 - br element, 116, 145, 164
 - CSS and, 277
 - generated text, 413
 - HTML and, 118
 - inline elements and, 146, 149
- linearization, 220, 229–231
- line-height property (CSS), 322, 325–327, 700
- link attribute (body), 143
- link element
 - browser bugs and, 449
 - CSS printing, 629
 - defined, 137
 - external style sheets, 280
 - media attribute, 281–283
 - overview, 175–177, 668
- :link selector, 302–303, 305, 440, 442
- links
 - alternative protocols, 173–175
 - audio files and, 590, 591
 - CSS printing, 630
 - extending HTML, 744–746
 - focus state, 67
 - frames and, 241, 244, 245
 - hypertext, 169–171, 325, 633, 746
 - images and, 179, 186
 - link element, 175–177
 - PDF files and, 634, 636
 - to RealMedia, 592
 - search engines and, 245
 - streaming audio, 593
 - targeting windows, 173
 - text-decoration property and, 324
 - within documents, 171–172
- Linux environment, 46, 523, 612
- liquid web pages, 30–36
- LIR (Leahy/Langridge Image Replacement), 438
- lists
 - counters and, 416, 418
 - elements listed, 144
 - navigation based on, 443–446
 - overview, 156–161, 406–411
- list-style property (CSS), 410, 445, 700, 701
- list-style-image property (CSS), 157, 409, 410, 701
- list-style-position property (CSS), 408–409, 410, 701
- list-style-type property (CSS)
 - choosing markers, 407, 408
 - list-based navigation, 444
 - ordered lists, 158
 - overview, 410, 701
 - unordered lists, 157
- literals, object, 483, 503
- Livingstone, Douglas, 434
- local variables, 479
- localization, 72
- location property (Browser Object), 486
- Logic audio tool, 580
- logical elements, 149–152
- logical operators, 475
- loop attribute
 - embed element, 606, 621
 - object element, 619
- loops
 - animated GIFs, 569
 - JavaScript and, 476–478
- lossless compression scheme
 - GIF format, 539
 - LZW compression, 531
 - PNG format, 516, 555
 - video and, 597
- lossy compression scheme, 516, 545, 553, 597
- lowercase (see capitalization)
- < character entity, 80, 96
- Luini, Jon, 582
- Lynx browser, 16, 18
- LZW (Lempel-Zev-Welch) compression
 - animated GIFs, 571
 - dithering and, 539
 - filters and, 555
 - GIF format, 530–533
 - PNG format and, 553

M

- .m4a file extension, 589
- .m4p file extension, 589
- Macintosh environment
 - audio tools, 579
 - browser bugs, 452–454
 - browser canvas dimensions, 29
 - color palettes, 532
 - favicons, 187
 - FTP and, 50
 - gamma settings, 523, 524
 - JavaScript and, 466
 - PNG format and, 559
 - web palette, 522
- Macromedia Breeze, 624
- Macromedia Director, 622
- Macromedia Dreamweaver
 - authoring tools, 23, 33, 36
 - description, 127
 - Flash and, 622
 - FTP functions, 50
 - image map tools, 188
 - URL pathnames, 49
- Macromedia Fireworks
 - animated GIFs, 566, 570
 - color palettes, 532
 - converting to web palette, 543
 - embedded text, 558
 - GIF format, 531, 536, 538
 - JPEG format, 548–550
 - PNG format, 561
 - web graphics, 524, 526
- Macromedia Flash Central, 624
- Macromedia Flash (see Flash)
- Macromedia FlashCast, 625
- Macromedia Flex, 623, 624
- Macromedia Zorn, 623
- Madsen, Soren, 436
- mailto: protocol, 174
- map element, 190, 668
- .map file extension, 192
- margin property (CSS)
 - border-style property and, 349
 - browser bugs, 456
 - centering pages, 420
 - img element and, 369
 - overview, 344, 345, 702
 - tables and, 395, 396
- margin-bottom property (CSS), 344, 456, 702
- marginheight attribute (frame), 240
- margin-left property (CSS), 344, 420, 702
- margin-right property (CSS), 344, 420, 703
- margins
 - box model and, 338, 344–347
 - browser bugs, 456
 - centering pages and, 420
 - direction property and, 335
 - element boxes and, 290, 291
 - expanding box style, 436
 - floated elements, 371
 - frame, 240
 - internal elements and, 393
 - negative, 374, 421
 - printing and, 633
 - tables and, 396
 - three-column layouts, 427, 429–431
 - two-column layouts, 424
- margin-top property (CSS), 344, 456, 703
- marginwidth attribute (frame), 240
- markers, 406–408, 491
- Marks, Todd, 609–625
- markup
 - DHTML and, 488
 - DTD and, 103
 - generated content and, 413
 - HTML basics, 115–119
 - math, 104
 - semantic, 90, 91, 145
 - SGML and, 92
 - XML documents and, 92
- masks, 539, 540
- match() method, 483
- Math object (JavaScript), 480, 482
- mathematical equations, 91
- Mathematical Markup Language (see MathML)
- mathematical operators, 730–732
- MathML (Mathematical Markup Language)
 - CSS and, 277
 - overview, 9, 111, 112
 - XHTML and, 104, 120
 - XML documents and, 91
- Matte color tool, 536
- max() method, 482
- max-height property (CSS), 343, 703, 704
- max-width property (CSS), 343, 704
- Means, W. Scott, 112

- measurement
 - length, 291, 316–318, 363, 424
 - percentage, 315
 - point, 629
 - relative, 31
- media attribute
 - CSS for printing, 627, 629
 - functionality, 40
 - style element, 279, 282–283
- @media directive, 281, 627, 629, 631
- media, embedded, 192–200
- media types, 139, 449, 629
 - (see also MIME types)
- medium keyword, 313
- members, arrays and, 471
- menu attribute
 - embed element, 621
 - object element, 619
- menu element, 161, 669
- menu keyword, 322
- menus
 - color property and, 357
 - select element and, 259–262
- message-box keyword, 322
- meta element
 - character encoding, 76, 77, 78, 136
 - defined, 138
 - description, 130
 - as empty element, 116
 - extending, 743
 - framesets and, 246
 - overview, 138–142, 669
- metadata
 - embedding, 743
 - meta element, 138–142
 - RDF and, 109
 - tables and, 221
- metafiles, 591, 592, 593
- method attribute (form), 249–250
- methods
 - Browser Object Model, 486, 487
 - commonly accessed, 482, 483
 - object data types, 480
- Meyer, Eric
 - calculating selector specificity, 288
 - CSS table model, 392
 - CSS techniques, 294, 447
 - effects using fixed images, 365
 - informative personal sites, 295, 447
 - positioning of floated objects, 372
 - print style sheets, 631
 - tutorial on using counters, 416
- microbrowsers, 38
- microformats, 742–746
- Microsoft FrontPage, 49, 50, 128
- Microsoft Internet Explorer browser
 - Accessibility Toolbar, 69
 - AOL and, 18
 - borders, 347
 - box model and, 338, 342
 - Browser Wars, 5, 13, 20
 - canvas dimensions, 29
 - description, 15, 16
 - dominance of, 21
 - history, 13
 - inline frames, 203
 - managing bugs, 450–456
 - name/element creation, 497
 - object element, 194, 197
 - PNG format and, 559
 - standards support, 5
 - three-column layouts, 431
 - transparency in, 556
 - usage trends, 22
 - XML support, 105
- .mid file extension, 586, 587
- MIDI (Musical Instrument Digital Interface), 586, 587
- MIME (Multipurpose Internet Mail Extension), 53
- MIME types
 - embedding JavaScript and, 467
 - headers and, 44, 76
 - media types and, 139
 - overview, 53–55
 - PDF files, 636
 - XHTML and, 77
- min() method, 482
- min-height property (CSS), 343, 704
- min-width property (CSS), 343, 705
- mm unit of measurement, 316
- MNG (Multiple-image Network Graphic), 558
- mobile devices
 - designing for, 37–41
 - Flash Player, 623
 - MIDI format, 587
 - (see also specific devices)
- Mobile Web Initiative, 282
- mobility impairment, 56
- modularization, XHTML, 120
- monitor brightness, 523–524, 557–559
- monitor resolution, 28–29, 35, 38
- mono channel configuration, 577, 580

- monospace fonts, 311, 312
- Moock, Colin, 625
- Mosaic browser, 13
- mouse, assistive technology, 58
- .mov file extension, 586, 599, 611, 622
- movie attribute (object), 618
- Moving Picture Experts Group (see MPEG)
- Mozilla browser, 14, 20, 456, 466
- MP3 format, 582, 583, 584–586, 615
- .mp4 file extension, 589
- MPEG (Moving Picture Experts Group)
 - MP3 and, 584
 - overview, 601
 - QuickTime player and, 586
 - video codecs, 597, 598
- .mpeg file extension, 601, 611
- MSN-TV Viewer, 41
- multicasting, 594, 604
- multichannel surround sound, 577
- multiple attribute (select), 260
- Multiple-image Network Graphic (MNG), 558
- Multipurpose Internet Mail Extension (MIME), 53
- Musical Instrument Digital Interface (MIDI), 586, 587
- MySQL database server, 46

N

- name attribute
 - a element, 171
 - DOM and, 497
 - embed element, 620
 - form controls, 250
 - form element, 249, 264
 - overview, 126, 139
- namespaces, 103, 104, 108, 136
- naming conventions
 - authoring practices, 129
 - JavaScript, 469
 - servers, 50
 - XML, 99
- National Center for Supercomputing Applications (NCSA), 13
- navigation
 - design considerations, 37, 226
 - floating and, 369
 - frames and, 232, 233
 - linking and, 171
 - list based, 443–446
 - lists and, 407
 - modular style sheets, 282
 - tutorials, 446
 - WCAG, 63
- NCSA (National Center for Supercomputing Applications), 13
- negative margins, 374, 421
- nesting
 - controls, 264
 - descendant selectors, 298
 - elements, 118, 124, 288, 289
 - frames, 238, 239
 - lists, 160
 - quotation marks and, 416
 - table headers, 224
 - tables, 226, 228
- Netscape Navigator browser
 - canvas dimensions, 29
 - description, 15, 16
 - frames and, 232
 - history, 13, 20
 - HTML and, 5
 - managing bugs, 449, 456
 - PNG format and, 559
 - usage trends, 22
 - XML support, 105
- Newhouse, Mark, 446
- news: protocol, 175
- news readers, 107
- nextSibling property (DOM), 492, 493
- ntp:// protocol, 175
- nobr element, 165
- node tree (DOM), 490–494
- nodeName property (DOM), 493, 494
- nodes
 - Ajax with, 510–512
 - attribute, 490, 492, 493
 - child, 490, 491, 492
 - DOM and, 490
 - parent, 490
 - sibling, 490
 - (see also element nodes)
- nodeType property (DOM), 492, 494
- nodeValue property (DOM), 495
- noembed element, 200, 669
- nofollow extension, 746
- noframes element, 233, 235–237, 245–246, 670
- nonbreaking space, 167
- non-replaced elements, 330, 340, 371
- non-validating parsers, 97

- noresize attribute (frame), 239
- normal flow, documents
 - overview, 368, 369
 - positioning, 376, 385–386, 389–391
- noscript element, 670
- noshade attribute (hr), 166
- not logical operator, 475
- numbering
 - automatic, 416–418
 - keywords, 408
- numbers, JavaScript, 470
- Numeric Character Reference, 79, 96, 167

O

- object element
 - adding applets, 203
 - adding video, 605, 607, 608
 - description, 193
 - embed element and, 637
 - embedded media, 193–198
 - embedding with, 592, 593
 - Flash movies and, 616–620
 - iframe element and, 204
 - overview, 670, 671
- object literals, 483, 503
- object models (see DOM)
- objects
 - anonymous table, 404
 - Browser Object model, 486, 487
 - embedded media, 192–200
 - Java applets, 201–203
 - JavaScript, 480–483
 - singleton, 484
- octothorpe (#)
 - character entity, 722
 - ID selectors, 300
- OFX (Open Financial Exchange), 112
- ol element, 157, 158, 455, 671
- onblur event handler, 484
- onchange event handler, 484, 508
- onclick event handler, 484, 485, 642
- ondblclick event, 642
- onerror event handler, 484
- onfocus event handler, 484
- onkeydown event handler, 484, 642
- onkeypress event handler, 484, 642
- onkeyup event handler, 484, 642
- online PDF converters, 636
- onload event handler, 484
- onmousedown event handler, 484, 642
- onmousemove event handler, 484, 642
- onmouseout event handler, 484, 642
- onmouseover event handler, 484, 642
- onmouseup event handler, 484, 642
- onsubmit event handler, 484
- open() method, 487
- Open Financial Exchange (OFX), 112
- Open Mobile Alliance, 38
- opener property (Browser Object), 486
- opening tags, 116
- Opera browser
 - accessibility and, 69
 - description, 15, 17
 - managing bugs, 458
 - PNG format and, 559
 - Small-Screen Rendering technology, 39
 - XML support, 105
- operators
 - arithmetic, 469, 472
 - character entities, 730–732
 - comparison, 472, 473
 - JavaScript, 472–473
 - logical, 475
 - ternary, 474
- optgroup element, 260, 262, 672
- optimization
 - animated GIFs, 567, 570–571
 - Flash movies, 614, 615
 - GIF format, 538–540, 562
 - JPEG format, 549
 - PNG format, 561
 - weighted, 539, 550, 570
- Optimize to File Size function (Photoshop), 540, 551
- Optimized Median Cut color palette, 532
- Optimized Octree color palette, 532
- option element
 - optgroup element and, 262
 - overview, 259, 260, 261, 672
 - selected attribute, 261
- option groups, 262
- or logical operator, 475
- ordered lists, 157, 158, 416, 418
- origin images, 361, 362
- orphans property (CSS), 714
- outer edges, element boxes, 338
- outline property (CSS), 705
- outline-color property (CSS), 705
- outline-style property (CSS), 706
- outline-width property (CSS), 706

output devices, 59
overflow property (CSS), 379, 380, 454,
706
overlap, 373, 374, 383
overlines, 323

P

p element

cell content alignment, 219
empty, 119
overview, 146, 147, 673
text wrapping, 184

packets, streaming audio and, 582

padding

box model and, 338, 352–354
cell, 217, 228
element boxes and, 290, 291
internal elements and, 393
tables and, 397
three-column layouts, 431
two-column layouts, 422

padding edge, 377

padding property (CSS)

browser bugs, 450, 456
overview, 353, 707
tables and, 397
td element, 217

padding-bottom property (CSS), 353,
458, 707

padding-left property (CSS), 353, 450,
707, 708

padding-right property (CSS), 353, 450,
708

padding-top property (CSS), 353, 456,
708

page-break-after property (CSS), 714

page-break-before property (CSS), 714

page-break-inside property (CSS), 715

pages (see web pages)

Paint Shop Pro

animated GIFs, 566
common palettes, 532
creating JPEGs, 548
embedded text, 558

palette, color

animated GIFs, 569
common, 532
Indexed color and, 531
web graphics and, 521–524

Paoli, Jean, 92

paragraphs

carriage returns, 436
ignoring empty elements, 119
quotation marks, 416
text elements and, 146, 147

param element

ActiveX controls and, 196
applets and, 202
browser support, 197
class selectors and, 299
embedding video, 608
overview, 194, 673

parameter entities, 102

parent directory, 46, 48

parent nodes, 490

parent property (Browser Object), 486

_parent target name, 243

parent/child relationships

child subdirectory, 46
document structure, 91, 284
nesting and, 118
parent directory, 46, 48
viewing XML in browsers, 105

parentNode property (DOM), 492

parsed character data (#PCDATA), 100

parsers

defined, 93
entity references, 96
namespaces and, 104
non-validating, 97
validating, 93, 99
XML declaration and, 94

passwords, 252

pathnames, 46–49

pause property (CSS), 717

pause-after property (CSS), 717

pause-before property (CSS), 717

pc unit of measurement, 316

#PCDATA, 100

PDF (Portable Document

Format), 634–637

PDFViewer plug-in, 634

Peak audio tool, 579

Pederick, Chris, 17

percent sign (%)

parameter entities, 102
percentage values, 293

percentage values

aligning text with, 332
box model, 342
color, 293

- percentage values (*continued*)
 - fonts, 315
 - positioning images, 363
 - web palette and, 523
- Perceptual color palette (Adobe), 532
- period (.)
 - in CSS selectors, 299
 - XML names, 99
- permissions, setting, 52
- photographic images
 - JPEG format and, 529, 546, 549, 562
 - web palette strategies, 543
- PHP language, 45, 46, 468
- phrase elements, 149–152
- Pilgrim, Mark, 108
- pitch property (CSS), 718
- pitch-range property (CSS), 718
- pixels per inch (ppi), 517, 518
- pixels (see px unit of measurement)
- Pixy No-Preload Rollover
 - technique, 443
- PlanetPDF web site, 635
- Platz, Brian, 295
- play attribute
 - embed element, 621
 - object element, 619
- play-during property (CSS), 718
- playeveryframe attribute (embed), 200, 606
- pluginspage attribute
 - adding video, 605
 - embed element, 200, 605, 620, 621
- pluginurl attribute (embed), 200
- plus sign (+), 299
- PNG (Portable Network Graphic)
 - format
 - choosing as format, 517
 - color, 554
 - compression, 555, 559, 563
 - creating files, 559–561
 - favicons, 187
 - further reading, 563
 - gamma settings, 557–559
 - GIF history and, 530
 - images and, 179, 517
 - interlacing, 557, 559, 563
 - matching colors, 528
 - optimization strategies, 561
 - overview, 516, 552
 - platform/browser support, 558, 559
 - production tips, 526
 - transparency and, 534, 554, 555–561
 - when to use, 552–554
- point measurements, 629
- pop() method, 482
- pop-up windows, 34, 173
- Portable Document Format (PDF), 634–637
- position property (CSS)
 - browser bugs, 455, 457
 - fixed elements, 389
 - frames, 232
 - overview, 376, 708
 - relative positioning, 391
 - table captions, 395
- positioning
 - elements, 226, 368
 - fixed, 232, 377, 389
 - floating and, 369, 372, 373
 - images, 361–364
 - markers, 408, 409
 - normal flow, 369
 - overview, 375–385
 - relative, 376, 390, 391
 - sidebars, 427
 - tables, 395, 397
 - (see also absolute positioning)
- post method, 249
- PostScript files, 635
- posture, font, 319
- pound symbol (£), 167
- Power Tools (Flash), 624
- ppi (pixels per inch), 517, 518
- pre element, 148, 673
- presentation
 - CSS and, 114, 273
 - definition lists, 160
 - designing “above the fold”, 37
 - document structure and, 115
 - fixed vs. liquid web pages, 30–36
 - img element, 180
 - mobile devices, 37–41
 - PDF files and, 634
 - SGML and, 114
 - style sheets for, 228
 - tables and, 206, 216–220, 392, 396
 - unknown monitor resolution, 28–29
 - unordered lists, 157
 - web standards and, 6
- presentation layer
 - defined, 6
 - HTML and, 114

- separating from structure, 9, 10
- style sheet standards, 7
- XHTML and, 275
- presentational elements, 144, 145, 161–166
- Presto layout engine, 15
- previewing printing, 626
- previousSibling property (DOM), 492
- print() method, 487
- print media type, 282, 629
- printing
 - browsers and, 626
 - CSS and, 627–634
 - Flash and, 637
 - PDF and, 634–637
 - previewing, 626
- processing instructions, 95, 97
- programming
 - browser differences and, 24
 - server-side, 44–46
- Progressive JPEGs, 547
- projection media type, 282, 629
- properties
 - Browser Object Model, 486, 487
 - commonly accessed, 482, 483
 - defined, 277
 - element boxes and, 290
 - HTML DOM, 496
 - inherited, 284, 293
 - keyword values, 277, 293
 - object data types, 480
 - shorthand, 353, 367
 - style property and, 501
 - (see also specific properties)
- Properties Inspector (Flash), 614, 622
- protocols
 - links and, 173–175
 - streaming audio, 582
 - (see also specific protocols)
- ProTools audio tool, 579
- Prototype library, 493
- prototyping, 127
- pseudoclasses, 302, 440
- pseudoelement selectors, 304, 412
- pseudoselectors, 302–304
- pseudostreaming, 583, 600, 611
- pt unit of measurement, 316
- public identifiers, 98
- Publish feature (Flash), 617
- pull-down menus, 260, 357
- punctuation, character entities, 729, 730

- push() method, 482
- put command, 52
- px unit of measurement, 32, 316, 317, 629

Q

- q element, 151, 152, 674
- quality attribute (object), 619
- query strings, 250
- QuickTime plug-in player (Apple)
 - audio files, 586
 - audio files and, 580
 - AVI format and, 601
 - embed element and, 200
 - embedding video, 604–606
 - Flash and, 622
 - MIDI format, 587
 - MPEG format, 602
 - param element and, 197
 - streaming audio, 581, 582, 583
 - video files, 599, 600
- Quirks mode
 - DOCTYPE declaration and, 95
 - DOCTYPE switching, 134
 - frameset documents, 235
 - specifying DTDs, 122
 - XML declaration, 77
- " character entity, 80, 96
- quotation marks ("")
 - attribute values, 123
 - character entities, 168
 - content property and, 413
 - escaping characters, 79
 - inline styles, 278
 - inserting automatically, 414–416
 - languages and, 84
 - q elements, 152
 - strings, 470
 - variables and, 469
 - well-formed XML, 97
 - XHTML and, 117
- quotes property (CSS), 84, 414–416, 709

R

- .ra file extension, 587, 588
- radio buttons, 255
- Randers-Pehrson, Glenn, 563
- random() method, 482
- raster images, 517
- Ray, Erik T., 112

- RDF (Resource Description Framework), 108, 109, 110
- readonly attribute, 267
- Reagle, Joseph, 108
- RealAudio (RealNetwork)
 - adding to web pages, 591–593
 - overview, 587, 588
 - streaming audio, 582, 583
- Really Simple Syndication (see RSS)
- RealMedia (RealNetwork)
 - adding to web pages, 591–593
 - compression and, 580
 - overview, 587, 588
 - streaming audio, 582, 583
 - streaming video, 603, 604
 - video files, 601
- RealPlayer, 581, 592
- RealProducer tool, 593
- RealPublisher tool, 593
- RealTime Streaming Protocol (RTSP), 582
- RealTime Transfer Protocol (RTP), 582
- Recommendations (W3C)
 - CSS, 276
 - deprecated HTML elements, 9, 161
 - HTML standards, 113
 - MathML, 111
 - namespace convention, 103
 - RGB color values, 356
 - as standards, 3
 - style sheet standards, 7
 - Web Accessibility Initiative, 60
 - Web Standards Project, 5
 - web technology, 7
 - XHTML family, 120–121
 - XML as, 92
- recording audio files, 578
- Recording Industry Association of America (RIAA), 577
- reference movies, 600
- refresh attribute, 140
- Reinhardt, Robert, 625
- rel attribute
 - extending, 743
 - link element, 176, 280, 281
 - link relationships, 744
- relative pathnames, 46–49
- relative positioning, 376, 390, 391, 455
- relative sizes, fonts, 313, 315
- relative URLs
 - defined, 170
 - favicons and, 187
 - HTML, 49
 - overview, 171
 - style sheets and, 410
- removeChild() method, 500
- rendering engines
 - anonymous table objects, 405
 - defined, 14
 - Gecko, 14, 15, 456
 - KHTML, 15, 18, 457
 - Presto, 15
 - Tasman, 15, 452
 - Trident, 15, 16, 454
 - WebCore, 457
- repeating images, 360–361, 364
- replace() method, 483
- replaceChild() method, 500
- replaced elements, 330, 347
- Request for Comments (RFCs), 4
- reserved characters, 96
- reset buttons, 255, 256
- resizing
 - images, 526
 - windows, 34
- resolution (see image resolution; monitor resolution)
- Resource Description Framework), 108, 109, 110
- responseText property (DOM), 507
- responseXML property (DOM), 507, 511
- Restrictive color palette (Adobe), 532
- return keyword, 479
- reusable shapes, 609
- rev attribute
 - link element, 177
 - meta element, 743
- reverse() method, 482
- RFC 3066, 81
- RFCs (Request for Comments), 4
- RGB color model
 - color depth and, 520, 521
 - converting to Indexed color, 542
 - JPEG format and, 544
 - matching colors, 527
 - overview, 519
 - production tips, 526
 - specifying by name, 736–741
 - specifying values, 293, 356, 733–736
 - web palette and, 523
- RIA (Rich Internet Applications), 507, 609

RIAA (Recording Industry Association of America), 577
Rich Internet Applications (RIA), 507, 609
right keyword, 362
right property (CSS)
 absolute positioning, 385
 fixed positioning, 389
 overview, 377, 709
 relative positioning, 391
 table captions, 395
.rm file extension, 587, 588, 601
robots meta name, 142
Roelofs, Greg, 563
rollovers
 border-color property and, 351
 ;hover selector, 303
 overview, 440–443
root directory, 43, 46
root element
 ancestors and, 284
 defined, 91
 html element as, 490
 initial containing block, 377
 overview, 135, 136
 well-formed documents, 97
 XHTML and, 454
round() method, 482
rounded corners, boxes, 432–436
row element, 393
row groups, 213, 214
rowgroup element, 393
rows
 basic structure, 207–210
 data tables, 206
 framesets and, 234, 237–238
 hiding, 383
 spanning, 210, 211
 stacking order, 395
 tables and, 393
rows attribute
 form controls, 259
 frameset element, 237–238
rowspan attribute (td), 211, 230
RSS (Really Simple Syndication), 104, 105, 107–109
RTP (RealTime Transfer Protocol), 582
RTSP (RealTime Streaming Protocol), 582
Ruby, Sam, 108
Ruby text, 84

rules attribute (table), 219
Rundle, Mike, 439, 440
Rundle/Phark Technique, 439
Rutledge, Lloyd, 111
Rutter, Richard, 30

S

s element, 161, 674
Safari browser
 canvas dimensions, 29
 description, 15, 18
 managing bugs, 457
 PNG format and, 559
 XML support, 105
salign attribute
 embed element, 621
 object element, 619
samp element, 150, 674
sampling rates, 576, 581
sans serif fonts, 311, 312
Scalable Inman Flash Replacement (sIFR), 309
Scalable Vector Graphics (see SVG)
scalar variables, 470
scale attribute
 embed element, 621
 object element, 619
scaling factors, 314, 326
Schutta, Nathaniel T., 512
scope attribute
 col/colgroup elements, 215
 td element, 224
 th element, 223
screen capture services, 25
screen magnifier software, 59
screen media type, 282, 629
screen readers
 accessible tables and, 220
 assistive technology, 59, 60
 FIR and, 438
 Flash and, 612
 linearization and, 229
screenLeft property (Browser Object), 486
screenTop property (Browser Object), 486
script element
 browser bugs and, 449
 defined, 137
 embedding JavaScript, 467, 468
 overview, 674

- scripts/scripting
 - .asp files and, 45
 - behavioral layer, 8
 - comments in, 468
 - custom buttons, 256, 257
 - externalizing, 467
 - Flash support, 611
 - id attribute and, 300
 - protecting, 125
 - server-side, 281
 - statements and, 468
 - variables and, 469
 - (see also DOM; JavaScript)
- scrolling attribute (frame), 239
- scrolling/scrollbars
 - background images and, 358, 364
 - frames and, 239
 - menus and, 261
 - mobile devices, 39
 - overflow property and, 380
 - textarea element and, 259
- search engines
 - frames and, 233, 245
 - Ice Rocket, 746
 - meta element and, 138, 141, 743
 - Technorati, 745, 746
- Section 508 standard, 64, 65
- security
 - FTP process and, 51
 - JavaScript and, 466
 - post method and, 250
- select element
 - menus and, 259–262
 - overview, 675
 - size attribute, 261
- selected attribute (option), 261
- Selective color palette (Adobe), 532, 542, 543
- selectors
 - attribute, 301, 302
 - class, 299–300
 - contextual, 298, 299
 - defined, 275, 297
 - element nodes and, 490
 - ID, 299–300
 - listed, 305–306
 - pseudoselectors, 302–304, 412, 440
 - type, 297, 298
 - _self target name, 243
- semantic markup, 91, 115, 145
- semicolon (;)
 - escaping the character, 79
 - as separator, 277
- separated borders model, 398–399
- sequences, multiple elements and, 100, 101
- serif fonts, 311, 312
- servers
 - basic functions, 43–44
 - character encoding, 76
 - configuring for Flash, 615
 - defined, 42
 - file naming conventions, 50
 - file types, 53–55
 - FTP and, 50–52
 - popular software, 43
 - Unix directory structures, 46–49
- server-side image maps, 188, 189, 192
- server-side processing
 - Ajax and, 507
 - defined, 42
 - programming, 44–46
 - streaming audio, 582
- servlets, Java, 45
- setAttribute() method, 495, 496, 501
- setTimeout() method, 487
- SGML (Standard Generalized Markup Language)
 - attribute minimization, 124
 - DTDs and, 92, 97
 - overview, 92
 - presentation and, 114
- Shea, Dave
 - centering a page, 421
 - CSS design, 294, 446
 - CSS Zen Garden site, 295
 - image replacement, 437
 - image-tab rollovers, 446
 - informative personal sites, 295, 447
 - min-height workaround, 343
- shift() method, 482
- shifting, color, 521
- shorthand properties, 353, 367
- SHOUTcast package (Nullsoft), 585
- sibling nodes, 490
- siblings, 284
- sidebars, positioning, 427
- sIFR (Scalable Inman Flash Replacement), 309

- single quote (')
 - escaping the character, 79
 - @import directive, 459
- singleton objects, 484
- size attribute
 - font element, 163
 - hr element, 166
 - select element, 261
- slash (/)
 - JavaScript comments, 469
 - opening/closing tags, 116
 - Unix directory structures, 46
 - URLs and, 44, 116, 250
- slice() method, 482, 483
- small caps font face, 320
- small element, 161, 675
- small keyword, 313
- small-caption keyword, 322
- smaller keyword, 315
- SMIL (Synchronized Multimedia Integration Language)
 - CSS and, 277
 - overview, 9, 110, 111
 - Windows Media and, 589
- snooping, vulnerability to, 44
- soft drop shadows, 554
- “soft hyphen”, 165
- Sorenson Video codec, 597
- sort() method, 482
- Sound Forge audio tool, 579
- sound (see audio)
- Sowden, Paul, 281
- space (see whitespace)
- spacing
 - cell, 217
 - modifier letters, 727
 - table layouts and, 226
 - text, 332–335
- span attribute (col), 216
- span element
 - FIR and, 437
 - hCard microformat and, 744
 - indicating emphasis, 151
 - overview, 154, 676
- spatial compression, 597
- speak property (CSS), 719
- speak-header property (CSS), 719
- speak-numeral property (CSS), 720
- speak-punctuation property (CSS), 720
- special characters, inserting, 499
- specificity, 287, 288
- speech media type, 283
- speech-rate property (CSS), 720
- Sperberg-McQueen, Michael, 92
- splice() method, 482
- split() method, 483
- src attribute (embed), 200, 605, 620
- stacking order
 - elements, 383–385
 - tables, 395
- Stage (Flash), 614
- standalone attribute, 94, 98
- Standard Generalized Markup Language (see SGML)
- Standards mode
 - box model and, 337, 338, 342
 - centering pages, 420
 - DOCTYPE switching, 134, 135
 - positioning and, 389
 - specifying DTDs, 122
- standards (see web standards)
- standby attribute (object), 195
- Staníček, Petr, 443
- start attribute (ol), 158
- start tags, 116
- state, focus, 67, 265, 266, 442
- statements
 - conditional, 474–476
 - JavaScript, 468
- statistics, usage, 19–22, 35–36
- status property (Browser Object), 486
- status-bar keyword, 322
- stereo channel configuration, 577, 580
- Stern, Hadley, 522
- streaming audio, 581–583, 593, 611
- streaming video
 - data rate and, 596
 - defined, 595
 - Flash and, 611
 - HTML documents and, 603, 604
 - QuickTime movies and, 599
- stress property (CSS), 719, 720
- Strict DTD
 - description, 122
 - DOCTYPE switching, 135
 - frames and, 235
 - options, 132, 133
 - XHTML, 98, 99, 119, 120, 121
- strike element, 161, 676
- strike-throughs, 323
- String object (JavaScript), 483
- strings, 470 (see also text)

- strong element
 - overview, 150, 151, 676
 - selector specificity, 287
 - z-index property and, 385
 - structural layer
 - defined, 6
 - HTML and, 114
 - separating from presentation, 9, 10
 - standard languages, 7
 - XHTML and, 275
 - structure (see document structure)
 - style attribute
 - escaping characters, 80
 - overview, 278, 641
 - style rules, 286
 - style element
 - CSS printing, 629
 - defined, 138
 - embedded style sheets, 278–279
 - overview, 676
 - style property, 501
 - style rules
 - cascade, 284–288
 - initial containing blocks, 387
 - syntax, 275–278
 - style sheets
 - absolute positioning, 33
 - alternate, 281
 - disabling/enabling, 501
 - embedded, 278–279
 - escaping characters, 80
 - external, 79, 280
 - filters and, 451
 - hr element, 166
 - language features, 84
 - length units, 292
 - modular, 282
 - ordered lists, 158
 - pixel measurements, 33
 - presentation and, 228
 - presentation layer, 7
 - row groups and, 214
 - shorthand properties and, 367
 - specifying color, 292, 293
 - WCAG, 61
 - XML and, 90, 93
 - (see also Cascading Style Sheets)
 - styles
 - borders and, 347–349, 351
 - inline, 278, 314, 356
 - sub element, 163, 677
 - submit buttons, 255, 256, 257
 - substring() method, 483
 - subtraction operator, 501
 - summary attribute (caption), 221
 - sup element, 163, 677
 - surgical correction, 461
 - surround sound, multichannel, 577
 - SVG (Scalable Vector Graphics)
 - CSS and, 277
 - mobile browsers and, 38
 - overview, 9, 110
 - XHTML and, 104, 120
 - XML documents and, 91
 - Swatches palette, 542
 - .swf file extension, 589, 612, 613
 - Swish, 612, 623
 - switch statement, 475, 478
 - switches, assistive technology, 59
 - switching, DOCTYPE, 134, 135
 - swLiveConnect attribute (embed), 621
 - symbols, character entities, 730, 732
 - Synchronized Multimedia Integration Language (see SMIL)
 - system fonts, 322
 - SYSTEM identifier, 98
 - system palette, 521, 522
- ## T
- tabindex attribute, 266
 - table element
 - align attribute, 219
 - borders, 218
 - boxes and, 393
 - browser bugs, 456, 457
 - caption element and, 213
 - cellpadding attribute, 217, 397
 - cellspacing attribute, 397
 - col/colgroup elements, 216
 - defined, 393
 - height attribute, 218
 - overview, 208, 210, 226, 677, 678
 - width attribute, 218
 - table-layout property (CSS), 401–403, 709
 - tables
 - absolute positioning, 33
 - accessible, 220–225
 - anonymous table objects, 404
 - borders, 398–401
 - cell padding, 217
 - cell spacing, 217, 397
 - cells and, 207–210

- column groups, 214–216
- columns and, 210, 211, 214–216
- CSS and, 10, 392–395
- data, 206
- descriptive elements, 211–213
- display values, 403–405
- inline, 393
- layout, 206, 207, 226–231, 268
- nesting, 226, 228
- presentation, 216–220
- row groups, 213, 214
- rows and, 207–211
- style sheets and, 337
- styling, 396–397
- WCAG, 61
- width and height, 401–403
- tabs, 118
- tags
 - Browser Wars, 5
 - case sensitivity, 90
 - closing, 116
 - language, 81
 - link relationships and, 745
 - meaningful markup, 90
 - opening, 116
 - semantic descriptions, 90
 - well-formed documents, 97
- Tan Hack, 454
- target attribute (a), 173, 242
- Tasman layout engine, 15, 452
- tbody element
 - cell content alignment, 219
 - overview, 214, 678, 679
- td element
 - cell content alignment, 219
 - headers and, 212, 221
 - headers attribute, 224, 225
 - internal elements and, 393
 - overview, 209, 210, 226, 679, 680
 - padding property, 217
 - rowspan attribute, 211, 230
 - scope attribute, 224
- Technorati search engine, 745, 746
- television, 41
- telnet:// protocol, 175
- temporal compression, 597
- ternary operator, 474
- testing
 - accessibility, 68–71
 - Acid2 test, 457
 - automated tools, 70
 - browsers, 25
 - loops and, 477
- text
 - aligning, 327–332
 - anti-aliased, 527
 - browsers and, 308–310
 - browsers ignoring in comments, 119
 - capitalization, 322, 323
 - as data, 91
 - deleted and inserted, 152, 153
 - direction, 335, 336
 - embedded, 558
 - float property, 370
 - generated content, 412, 413
 - image replacement, 309, 436–440
 - img element and, 181
 - indented, 148
 - line-height property, 325–327
 - preformatted, 148
 - printing, 632
 - rollovers, 440
 - scaling, 67
 - spacing, 332–335
 - styling tables, 396
 - SVG standard and, 110
 - type attribute (input), 251
 - wrapping, 184, 185
- text attribute (body), 143
- text editors
 - character encoding, 78
 - HTML, 90, 126
 - XHTML, 126
- text elements
 - character entity references, 167, 168
 - deleted and inserted text, 152, 153
 - generic elements, 153–156
 - inline elements, 149–152
 - listed, 144, 145
 - lists and, 156–161
 - overview, 146–149
 - presentational elements, 161–166
 - selecting, 145
- text nodes
 - depicted, 491
 - DOM and, 490
 - nodeType property and, 492
 - whitespace and, 493
- text-align property (CSS)
 - browser bugs, 458
 - cell content and, 220, 396
 - centering pages, 420

text-align property (CSS) (*continued*)
 overview, 710
 text horizontal alignment, 328
 text wrap and, 184

textarea element, 259, 680, 681

text/css style type, 279

text-decoration property (CSS), 323–325, 710

text/ecascript type, 467

text/html media type, 139

text-indent property (CSS), 327, 439, 710

text-transform property (CSS), 322, 323, 711

text/xml media type, 139

tfoot element, 214, 219, 681

th element
 abbr attribute, 222
 cell content alignment, 219
 data tables and, 221, 222
 id attribute, 225
 internal elements and, 393
 overview, 211, 212, 681
 scope attribute, 223

thead element, 214, 219, 681

this keyword, 469, 481, 482

three-column layouts, 424–431
 “three-pane environment”, 591

TIFF format, 553, 554

tiling images, 359, 360, 364

Timeline (Flash), 614, 616, 622

title attribute
 abbr/acronym elements, 151
 del/ins elements, 153
 form controls, 266
 frame element, 245
 hCalendar microformat, 744
 overview, 641

title element, 130, 137, 682

toLowerCase() method, 483

Toolbox (Flash), 614

top keyword, 362

top property (CSS)
 absolute positioning, 385
 calculating position, 389
 fixed positioning, 389
 overview, 377, 711
 relative positioning, 391
 table captions, 395

_top target name, 243

toUpperCase() method, 483

tr element
 cell content alignment, 219
 headers and, 212
 internal elements and, 393
 number of rows and, 211
 overview, 208, 210, 226, 682

trademark symbol, 167

transforming, 93

Transitional DTD
 body attribute, 143
 deprecated elements and, 145
 description, 122
 DOCTYPE switching, 135
 frames and, 235
 iframe element, 204
 options, 133
 XHTML, 119, 120

transparency
 animated GIFs, 567
 GIF format and, 516, 528, 534–536
 JPEG format and, 544
 PNG format and, 516, 554, 555–561

Trident layout engine, 15, 16, 454

true keyword, 470

Truecolor color depth
 JPEG format and, 544
 overview, 519
 PNG format and, 552, 554

TrueDoc Dynamic fonts, 310

try...catch block, 498

tt element, 162, 682

tty media type, 283, 629

tv media type, 283, 629

two-column layouts, 421–424

type attribute
 embed element, 606, 621
 embedding JavaScript, 467
 input element, 252–258
 lists, 158

type selectors, 297, 298

typefaces (see fonts)

typography, 307–310
 (see also fonts; text)

U

u element, 162, 683

UAAG (User Agent Accessibility Guidelines), 60

UCS (Universal Character Set), 74

UDP (User Datagram Protocol), 582

- ul element
 - browser bugs, 455
 - nesting, 160
 - overview, 156, 683
 - positioning and, 387
- Ulead GIF Animator utility, 566, 569
- underlines, 323, 324
- underscore (`_`)
 - attributes, 117
 - browser bugs, 456
 - naming conventions, 50
 - reserved target names, 242
 - variable names, 469
 - XML names, 99
- unicasting, 603
- Unicode character set
 - code points, 73
 - markup and, 115
 - Numeric Character Reference, 79
 - overview, 74–75
 - quotation marks, 415
 - standards body, 4
 - World Wide Web and, 73
 - XML and, 92
- Unicode Consortium, 4, 74
- unicode-bidi property (CSS), 84, 336, 711
- Uniform color palette, 532
- units of measurement, 291, 316
- Universal Character Set (UCS), 74
- universal element selector (*)
 - assigning color globally, 357
 - centering pages, 420
 - descendants and, 454
 - `getElementsByTagName()` method, 492
 - wildcards and, 298
- Unix environment
 - directory structure, 46–49
 - Flash and, 612
 - gamma settings, 523
 - PNG format and, 559
 - web palette, 522
- unordered lists, 156–157, 387
- `unshift()` method, 482
- uppercase (see capitalization)
- URLs
 - absolute, 170, 410
 - encoding and, 250
 - forms and, 249
 - property values and, 277
 - query strings and, 250
 - slashes in, 44, 116, 250 (see also relative URLs)
 - usage statistics, 19–22, 35–36
 - usemap attribute (`img`), 190
 - User Agent Accessibility Guidelines (UAAG), 60
 - user agent string, 19
 - user agents
 - character encoding, 76
 - row groups and, 214
 - style sheets and, 285
 - th element, 221
 - User Datagram Protocol (UDP), 582
 - user interfaces, WCAG, 62, 64
 - user testing, 70
 - UTF-16 encoding, 75, 77
 - UTF-32 encoding, 75
 - UTF-8 encoding, 75, 76, 77, 94
- V**
 - valid documents, 92, 94, 99
 - validating parsers, 93, 99
 - validation, 10, 11, 637
 - `valign` attribute, 219, 220
 - `value` attribute (`input`), 252, 257
 - values, 277, 291–293
 - `var` element, 150, 683
 - `var` keyword, 469
 - variable bit rate (VBR), 585
 - variables
 - arithmetic operators and, 469, 472
 - arrays and, 471
 - global, 479
 - JavaScript, 469
 - local, 479
 - scalar, 470
 - VBR (variable bit rate), 585
 - VBScript, 465
 - vector graphics
 - bitmapped images and, 517
 - Flash and, 609, 611
 - XML documents and, 91, 110
 - version attribute, 94
 - vertical alignment
 - cell content, 220
 - `img` element and, 183
 - inline box and, 327
 - text, 329–332
 - vertical bar (`|`)
 - attribute selector, 302
 - as separator, 101

- vertical scrolling, 39
 - vertical-align property (CSS)
 - box model, 340
 - cell content, 220
 - cell content and, 396
 - img element and, 183
 - overview, 712
 - text, 329–332
 - VFW (Video for Windows), 601
 - video
 - basic concepts, 595, 596
 - compression, 596–598
 - file formats, 598–602
 - Flash integration, 611, 623
 - HTML and, 603–608
 - overview, 595
 - (see also streaming video)
 - Video for Windows (VFW), 601
 - viewing area, 389
 - viewport, 389
 - visibility property (CSS)
 - col/colgroup elements, 215
 - empty-cells property and, 399
 - overview, 382–383, 712
 - tables and, 397
 - :visited selector, 302–303, 305, 440, 442
 - Visual Basic programming
 - language, 465
 - visual impairment, 56, 60, 220, 226
 - vlink attribute (body), 143
 - voice recognition software, 58
 - voice-family property (CSS), 451, 721
 - volume attribute (embed), 606
 - volume property (CSS), 721
 - vspace attribute
 - applet element, 202
 - img element, 184
- W**
- W3C (World Wide Web Consortium)
 - automated testing tools, 70
 - character encoding, 75
 - CSS and, 273, 276
 - DOM standard, 489
 - founding of, 113
 - HTML and, 114
 - internalization, 72
 - JavaScript standards, 8
 - mobile browsers, 38
 - Mobile Web Initiative, 282
 - PNG standard and, 553
 - selectors specification, 297
 - standards, 3–6
 - SVG standard, 110
 - WCAG, 59, 63
 - (see also Recommendations)
 - WAI (Web Accessibility Initiative), 60
 - wands, assistive technology, 58
 - WAP (Wireless Application Protocol), 38, 39
 - WaSP (see Web Standards Project)
 - WAT-C (Web Accessibility Tool Consortium), 69
 - WAV audio format, 583, 585
 - wbr element, 165
 - WCAG (Web Content Accessibility Guidelines), 60–64
 - Web Accessibility Initiative (WAI), 60
 - Web Accessibility Tool Consortium (WAT-C), 69
 - Web Adaptive palette (Fireworks), 532, 543
 - Web Analytics Association, 20
 - web authoring tools (see authoring tools)
 - web conferencing, 623
 - Web Content Accessibility Guidelines (WCAG), 60–64
 - web content (see content)
 - Web Developer Extension, 17, 36, 69
 - web graphics (see graphics)
 - web pages
 - accessibility, 242
 - adding audio, 590–594
 - adding PDF files, 636–637
 - centering, 419–421
 - CSS for printing, 627–634
 - fixed vs. liquid, 30–36
 - Flash movies and, 610–612, 616–621
 - fragments, 171, 172
 - frames and, 233, 234, 244
 - Java applets, 201–203
 - printing, 626
 - units of measurement, 317
 - WCAG, 61
 - web palette
 - defined, 521
 - GIF format, 541–543
 - hexadecimal values for, 736
 - overview, 522–524
 - web root directory, 43

- web servers (see servers)
- web standards
 - browser support for, 21, 22
 - compliance with, 115
 - CSS history and, 276
 - current, 6–9
 - HTML and XHTML, 122, 123
 - iCalendar, 744
 - mobile browsers, 38
 - mobile devices, 39–40
 - overview, 3–6
 - Section 508, 64, 65
 - standards-driven design, 9–11
- Web Standards Project (WaSP)
 - Acid2 test, 457
 - background, 5
 - character encoding, 140
 - DOM standard, 489
- Web216 color palette (Fireworks), 532
- WebCore layout engine, 457
- weblogs, 107
- web-safe colors, 542
- WebTV, 41
- weighted dithering, 540
- weighted lossiness, 540
- weighted optimization, 539, 550, 570
- Weinman, Lynda, 528
- well-formed documents, 93, 94, 96–97, 118
- well-formed XHTML, 123–126
- well-formed XML, 93, 96, 97
- well-formedness checkers, 97
- whitespace
 - around aligned images, 183
 - browsers and, 118
 - CSS and, 277
 - readability and, 468
 - text and, 334, 335
 - text nodes and, 493
 - well-formed documents, 97
 - XML naming convention, 99
- white-space property (CSS), 164, 334, 335, 712
- Whitman, Allen, 582
- widgets, 250–263
- widows property (CSS), 715
- width
 - borders and, 347, 349–350, 351
 - centering pages and, 420
 - element boxes, 338, 341–343
 - em measurement, 314
 - printing considerations, 633
 - table, 397, 401–403
- width attribute
 - applet element, 202
 - col/colgroup elements, 215, 216
 - embed element, 200, 605, 620, 621
 - hr element, 166
 - iframe element, 204
 - img element, 181, 182
 - object element, 618
 - table element, 218
- width property (CSS)
 - box model and, 341–343
 - browser bugs, 450, 454, 455
 - col/colgroup elements, 215
 - overview, 713
 - positioning and, 379
 - tables and, 397
 - three-column layouts, 431
- wildcards, 298
- Wildform, 612, 623
- Wilson, Brian, 294
- Window Size tool (Dreamweaver), 36
- windows
 - accessibility and, 242
 - frames and, 232
 - resizing, 34
 - targeting, 173
- Windows environment
 - audio tools, 579
 - browser bugs, 450–451
 - canvas dimensions, 29
 - color palettes, 532
 - dominance of, 21
 - favicons, 187
 - FTP and, 50
 - gamma settings, 523, 524
 - PNG format and, 559
 - web palette, 522
- Windows Media Audio codec, 588
- Windows Media (Microsoft)
 - audio files, 588, 589, 593, 594
 - embedding video, 606–608
 - streaming audio, 581, 582, 583
 - streaming video, 603
 - video files, 599
- Windows Media Video Codec, 598
- Winer, David, 108
- Wireless Application Protocol (WAP), 38, 39
- Wireless Markup Language (WML), 38, 39

- .wma file extension, 588, 589
 - WML (Wireless Markup Language), 38, 39
 - wmode attribute
 - embed element, 621
 - object element, 619
 - .wmv file extension, 599
 - word wrapping, 164
 - word-spacing property (CSS), 333, 334, 713
 - workaround management, 459–461
 - World Wide Web
 - history, 13
 - typography and, 307
 - Unicode and, 73
 - XML and, 104–105
 - XML applications, 105–112
 - World Wide Web Consortium (see W3C)
 - wrapping
 - clear property and, 374
 - strings, 470
 - text, 184, 185
 - word, 164
 - writing systems, 84
 - WYSIWYG authoring tools, 127–128, 617
 - Wyvern, Grey, 343
- X**
- XFN (XHTML Friends Network), 745
 - XHTML (Extensible Hypertext Markup Language)
 - authoring tools, 126–129
 - CDATA section, 96
 - character encoding, 76, 77, 78
 - character references, 78
 - character sets, 74
 - CSS and, 275
 - DOCTYPE declaration and, 103
 - document structure, 131
 - DOM and, 488
 - DOM Scripting, 503
 - DTD support, 133
 - extending, 742–746
 - Flash and, 618
 - HTML and, 113
 - language specification, 80
 - MIME types, 77
 - nodeName property and, 493
 - overview, 119–122
 - semantic markup and, 91
 - standards, 5, 122, 123
 - structural layer, 7
 - web documents, 104, 105, 106
 - well-formed, 123–126
 - XHTML Friends Network (XFN), 745
 - x-large keyword, 313
 - XML declarations, 77, 94, 95, 131
 - XML (Extensible Markup Language)
 - Ajax and, 507–512
 - character encoding, 76, 77, 78
 - character sets, 74
 - components, 91–93
 - description, 89
 - development of, 92
 - document syntax, 93–96
 - DOM and, 496
 - DTDs and, 97–103
 - MIME types, 139
 - overview, 8, 90–91
 - structural layer, 7
 - style sheets and, 93
 - Web and, 104–105
 - Web-related applications, 105–112
 - well-formed, 93, 96, 97
 - WML and, 39
 - XML namespaces (see namespaces)
 - XML parsers (see parsers)
 - XML Schema Definition (XSD), 92
 - XML Schemas, 92
 - XMLHttpRequest() object, 507, 508
 - xml:lang attribute, 81, 136, 642
 - xmlns attribute, 103, 104, 136
 - XSD (XML Schema Definition), 92
 - XSL (Extensible Stylesheet Language), 93
 - XSLT (Extensible Stylesheet Language for Transformations), 93
 - x-small keyword, 313
 - xx-large keyword, 313
 - xx-small keyword, 313
- Z**
- Zeldman, Jeffrey
 - A List Apart, 295
 - converting tables to CSS, 424
 - style sheet strategy, 24
 - web standards, 11
 - z-index property (CSS), 383–385, 713
 - Zoom layouts, 66