

Index

Symbols

. = , 111, 112
 < ?php ? > (opening and closing tags), 20, 685
 \ (backslash), 26, 28, 687
 /*, 686
 //, 686
 & (ampersand), 34
 && (Boolean And operator), 73, 143
 " (double quotes), 73
 == (equal to), 50
 === (equal to, AND data types match), 50
 > (greater than), 50, 92
 >= (greater than or equal to), 50, 92
 < (less than), 50, 92
 != (not equal to), 50, 92
 ≠ (not equal to), 50
 !== (not equal to, OR the data types not same), 50
 . (operator), 687
 \$ (regex), 237
 * (regex), 237
 + (regex), 237
 - (regex), 237
 . (regex), 237
 ? (regex), 237
 ^ (regex), 237
 { n }, 237
 { n,m }, 237
 \d, 237
 \D, 238
 \s, 238
 \S, 238
 \w, 238
 \W, 238
 ' (single quotation marks), 26
 ?: (ternary operator), 144–145, 688. *See also* if/else statements
 % (wildcard), 92
 _ (wildcard), 92
 < = (less than or equal to), 50, 92

|| (logical operator alternate), 73
 [] (regex), 237
 [^] (regex), 237
 -- \$value, 73

A

abandonment, shopping-cart, 512–513
 abs(), 124
 access logs, 627
 account functionality (BBS), 593–606
 frm_admin.php, 597–600, 610
 frm_forgotpass.php, 595, 596
 frm_index.php, 59, 594
 frm_login.php, 593, 596
 frm_useraccount.php, 600–602, 604
 initial login, 593–596
 User Administration page, 605–606
 user management, 597–605
 acronym, recursive, 10
 ADD link, 156, 160
 Add submit button, 141
 admin_area.php, 397–398, 404
 administration GUIs, 767
 administration interface, 156
 administration page
 CMS, 443–447
 mailing list, 472–486
 movie review database, 153–156
 administration transaction pages (BBS), 580–583
 admin.php, 154–155
 advertising mailing lists, 470
 ait.com, 768
 E_ALL, 249
 alt attributes, 119
 ALTER, 84
 ALTER TABLE, 121
 AMP. *See* Apache, MySQL, and PHP
 ampersand (&), 34
 Analog, 634
 AND (logical operator), 73

And, Boolean (&&), 73, 143

announcement mailing lists, 470

Apache

- configuration, PHP and, 11–12
 - on Linux, 782–783
- error handling, 241–248
- ErrorDocument directive, 242–243
- functions (list), 695–696
- installation, 6–10
 - help/information, 18
 - on Linux, 779–780
 - online information, 6
 - testing, 9–10
- logs, 628–630
- role of, 6–7
- starting/stopping, 8
- web site, 18, 648

Apache, MySQL, and PHP (AMP), 3

- component interaction, 5–6

Apache Service Monitor, 8

array functions, 696–701

array pointer, 63

arrays, 59–67, 689. See also specific arrays

- adding, 63–67
- defined, 59, 689
- foreach constructs and, 63
- multidimensional, 60
- sorting, 61–62
- syntax, 60–61

arsort(\$array), 61

article transaction pages, 426–432

articles (CMS)

- creating, 447–451
- feedback for, 458–460
- publishing, 455–458
- reviewing, 451–458
- viewing, 458–460

AS, 91

asort(\$array), 61

atomicity, 265

auth.inc.php, 360, 364, 373

401: Authorization Required, 243

auto-increment command, 83

avatars, 624

AWStats, 634–635

B

back references, 614

backslash (\), 26, 28, 687

400: Bad Request, 243

BBcode Administration page, 612–614

BBcodes, 558, 609

BBS. See bulletin board system

BCC (blind carbon copy), 353, 485, 504, 674

BCNF (Boyce-Codd Normal Form), 269

BDB (BerkeleyDB), 84

BerkeleyDB (BDB), 84

BIGINT, 80, 753

BINARY, 755

BIT, 753

blind carbon copy (BCC), 353, 485, 504, 674

BLOB, 80, 178, 755

BMP, 176, 186, 187

IMAGETYPE_BMP, 186

board. See bulletin board system

Board Administration page, 610–612

BOOL, 753

BOOLEAN, 753

Boolean And operator (&&), 73, 143

Boyce-Codd Normal Form (BCNF), 269

breadcrumbs, 577–579

brightness, image, 201

bulletin board system (BBS), 557–625

- account functionality, 593–606
 - frm_admin.php, 597–600
 - frm_forgotpass.php, 595, 596
 - frm_index.php, 59, 594
 - frm_login.php, 593, 596
 - frm_useraccount.php, 600–602, 604
- initial login, 593–596
- User Administration page, 605–606
- user management, 597–605

additions

- avatars, 624
- polls, 625
- quoting text, 625
- smilies, 624
- user profiles, 625

BBcodes, 558, 609

breadcrumbs, 577–579

database, preparation, 558–564

features, 558

as forum, 557

frm_admin.php, 597–600, 610

BBcode Administration, 612–614

Board Administration, 610–612

Forum Administration, 612

User Administration, 605–606

functionality, 606–624

pagination, 558, 573–577
 regex in, 558, 612–614
 reusable scripts, 564–573
 searching in, 558, 623–624
 settings, editing of, 606–610
 tables, 562–564

frm_access_levels, 562
 frm_admin, 562
 frm_bbcode, 563
 frm_forum, 563
 frm_post_count, 563
 frm_posts, 563–564
 frm_users, 564
 transaction pages, 580–593

- administration, 580–583
- frm_transact_admin.php, 580–583
- frm_transact_affirm.php, 591–593
- frm_transact_post.php, 584–586
- frm_transact_user.php, 586–590
- post, 584–586
- removal/deletion, 591–593
- user-related, 586–590

user authentication, 558, 579–580
 using (exercise), 614–622

C

calculate_differences(), 124, 125

captions, in images, 202–209

cart. See shopping cart

Cart32, 507

Cascade DELETE, 164–167

catch. See try/catch method

ceil(), 33

CHAR, 78, 275, 755

CHAR BYTE, 755

CHARACTER, 755

characters application, 276–310

edit_characters.php, 296–300, 306–310
 list_characters.php, 293–295, 303–306
 management of characters page, 293–310
 pages in, 276–277
 superhero powers page, 289–293
 transaction page, 277–289

char_transaction.php, 277–281

check boxes, 45, 135, 151

check out process, 530–550

ecomm_checkout2.php, 508, 533–537, 546–547
 ecomm_checkout3.php, 508, 537–543,
 547–550

ecomm_checkout.php, 507, 530–532, 545–546
 steps in, 530, 545
 testing, 543–545

checkdate(), 238, 239

check_effect.php, 200

check_image.php, 180, 183, 200, 201

captions and, 202–207
 filters and, 193–197

child page, 119

classes, 74–75, 691–692

encapsulation and, 344, 348, 349
 SimpleMail, 343–352, 474–476, 497

class.SimpleMail.php, 344–346, 348, 474–476, 483–484

closed source model, 4

closing/opening tags (< ?php ? >), 20, 685

CMS. See content management system

cms_access_levels table, 410–411, 441, 445

cms_admin.php, 443–444

cms_articles table, 411

cms_comment.php, 459, 460

cms_compose.php, 430, 447–450

cms_cpanel.php, 461–463

cms_footer.inc.php, 415, 418

cms_forgot_password.php, 433, 436

cms_header.inc.php, 414–415, 418, 436

cms_http_functions.inc.php, 415, 419–420, 423

cms_index.php, 423, 424, 433–434, 436

cms_login.php, 432–433, 436

cms_output_functions.inc.php, 412–414, 418, 420

cms_pending.php, 451–452, 456

cms_review_article.php, 452–453, 456, 457

cms_search.php, 466, 467

cms_transact_article.php, 426–429

cms_transact_user.php, 420–423, 441, 442

cms_user_account.php, 437–439

cms_users table, 411

cms_view_article.php, 459, 460

code/coding practices, 21–23. See also reusable code

comments in, 22
 consistency in, 22
 efficiency. See efficient code
 line numbers in, 22

colorizing images, 201

comic book fan web site, 3

bulletin board system, 557–625
 account functionality, 593–606
 additions, 624–625

comic book fan web site (continued)

- BBcodes, 558, 609
- breadcrumbs, 577–579
- database preparation, 558–564
- features, 558
 - as forum, 557
 - functionality, 606–624
 - pagination, 558, 573–577
 - regex in, 558, 612–614
 - reusable scripts, 564–573
 - searching in, 558, 623–624
 - settings, editing of, 606–610
 - tables, 562–564
 - transaction pages, 580–593
 - user authentication, 558, 579–580
 - using (exercise), 614–622
- characters application, 276–310
 - edit_characters.php, 296–300, 306–310
 - list_characters.php, 293–295, 303–306
 - management of characters page, 293–310
 - pages in, 276–277
 - superhero powers page, 289–293
 - transaction page, 277–289
- CMS, 310, 407–468
 - articles, 447–460
 - database structure, 409–412
 - reusable scripts, 412–420
 - search feature, 466–467
 - transaction pages, 420–432
 - user control panel, 461–465
 - user interface, 432–467
- database, 77, 261–276
 - creating, in MySQL, 271–276
 - designing, 265–271
 - normalization, 264–269
 - standards, 270
- e-commerce, 311, 505–556
- e-mail, 247–248, 315–353
 - sending, 316–328
 - SimpleMail class, 343–352, 474–476, 497
- mailing list, 469–504
 - administration page, 472–486
 - advertising, 470
 - announcements, 470
 - database, 470–472
 - ethics, 502–503
 - ml_admin.php, 427–473, 480, 482
 - ml_admin_transact.php, 477–480, 481, 483–484
 - ml_quick_msg.php, 473–474, 482–483
 - ml_remove.php, 500–502
 - ml_thanks.php, 491–492, 496
 - ml_user.php, 486–488, 495
 - ml_user_transact.php, 488–491, 496–497
 - newsletters, 469
 - opt-in, 503
 - opt-out, 503
 - removing subscriptions, 500–502
 - signup form, 486–499
 - spam, 469, 502
 - tables, 471–472
 - types of, 469–470
 - web site notifications, 469
- postcard application
 - confirmation and, 330–343
 - images and, 328–329
 - JavaScript and, 341–342
- registration system. See registration system
- tables
 - creation of, 272–276
 - normalization and, 265–269
 - user logins. See logins
- comic_character_power, 286, 287**
- comic_rivalry, 285, 286**
- commands (MySQL), 84**
- comments, 686**
 - coding practice, 22
 - debugging and, 23
 - future changes and, 23
 - PHP, 21
- commit.php, 159–162**
 - checking dates/numbers, 230–233
 - editing, 170–174
 - erroneous user input, 222–225
 - switch, 162, 167
- common links, 554**
- comparison operators, 92**
 - !=, 50, 92
 - =, 92
 - <, 50, 92
 - >, 50, 92
 - >=, 50, 92
 - <=, 50, 92
 - LIKE, 92
 - WHERE and, 92
- E_COMPILE_ERROR, 249**
- E_COMPILE_WARNING, 249**
- composite primary key, 265**
- condition clauses, 758–759**

confirmation, 330–343

workflow application and, 330

confirm.php, 334–336**connecting to MySQL server, 86****consistency, code, 22****constants, 29–31****content management system (CMS), 310, 407–468**

articles

creating, 447–451

feedback for, 458–460

publishing, 455–458

reviewing, 451–458

viewing, 458–460

database structure, 409–412

files

cms_access_levels table, 410–411, 441, 445

cms_admin.php, 443–444

cms_articles table, 411

cms_comment.php, 459, 460

cms_compose.php, 430, 447–450

cms_cpanel.php, 461–463

cms_footer.inc.php, 415, 418

cms_forgot_password.php, 433, 436

cms_header.inc.php, 414–415, 418, 436

cms_http_functions.inc.php, 415,
419–420, 423

cms_index.php, 423, 424, 433–434, 436

cms_login.php, 432–433, 436

cms_output_functions.inc.php, 412–414,
418, 420

cms_pending.php, 451–452, 456

cms_review_article.php, 452–453, 456, 457

cms_search.php, 466, 467

cms_transact_article.php, 426–429

cms_transact_user.php, 420–423, 441, 442

cms_user_account.php, 437–439

cms_users table, 411

cms_view_article.php, 459, 460

reusable scripts, 412–420

search feature, 466–467

transaction pages, 420–432

user control panel, 461–465

user interface, 432–467

contrast, of image, 201**converting image types, 188–192****cookies, 41–44, 355, 405**

defined, 41, 359

passing variables with, 41–44

security risks, 41

sessions v., 359, 388

setting, 42–44

tracking, with PHP, 388–393

cookies_delete.php, 389**cookies_set.php, 388–389****cookies_test.php, 390****cookies_view.php, 389****copyrighted images, 202, 209****E_CORE_ERROR, 249****E_CORE_WARNING, 249****CREATE, 84****CREATE DATABASE *yourdatabase*, 271****CREATE TABLE, 275****createimagefrom* (), 192****cron jobs, 767****ctype_* functions, 235, 236, 239****ctype_alnum(), 236****ctype_alpha(), 236****ctype_cntrl(), 236****ctype_digit(), 236****ctype_graph(), 236****ctype_lower(), 236****ctype_print(), 236****ctype_punct(), 236****ctype_space(), 236****ctype_upper(), 236****ctype_xdigit(), 236****custom error messages, 243–246****custom logs, 627****custom_error.php, 252–255****customers (e-commerce)**

characteristics, 551

communication with, 555

feedback, 555

personal customer service, 553

privacy policy, 552

return policy, 552–553

secure credit card

processing, 553

trust, 552–553

D

data types. See **field types**

databases. See *also* **MySQL; relational databases; tables**

bulletin board. See **bulletin board system**

comic book. See **comic book fan web site**

DB++, 769

databases (continued)

- dBase, 769
- editing, 153–174
- filePro, 770
- Firebird, 766, 770
- FrontBase, 769
- IBM DB2, 770
- Informix, 770
- Ingres Database, 770
- mailing list, 470–472
- MaxDB, 770
- Microsoft Access, 766
- Microsoft SQL Server, 766, 770
- movie review. *See* movie review web site
- mSQL, 770
- MySQL
 - data retrieval from, 758–759
 - manipulation commands, 757–758
 - parameters, 82–83
 - normalization, 264–269
 - Oracle OC18, 770
 - Ovrimos SQL, 770
 - Paradox File Access, 770
 - PDO and, 769–771, 775
 - PHP supported, 766, 769–770
 - PostgreSQL, 766, 770
 - SQLite, 766, 770
 - Sybase, 766, 770
- DATE, 79, 755**
- date(), 162**
- date.php, 50–51**
- dates/numbers, user input errors in, 226–238**
- DATETIME, 79, 755**
- date/time**
 - field types, 755
 - formatting codes, 706–708
 - functions, 702–706
- DB++, 769**
- dBase, 769**
- db_ch03-1.php, 87–88**
- db_ch03-2.php, 88–89**
- db_ch04-1.php, 120–121**
- db_ch04-2.php, 125–126**
- db_ch07-1.php, 178–179**
- db_ch07-2.php, 189**
- db_ch08.php, 218**
- db_ch10.php, 273–274**
- db_ch11-1.php, 328–329**
- db_ch11-2.php, 330–331**
- db_ch12-1.php, 366, 367**

- db_ch12-2.php, 394, 403**
- db_ch13.php, 409–410**
- db_ch14.php, 470–471**
- db_ch15-1.php, 507**
- db_ch15-2.php, 507, 510, 514**
- db_ch16.php, 558–562**
- db.inc.php, 273, 409**
- debugging**
 - comments and, 23
 - echo and, 645–646
 - tips, 645–647
 - Xdebug and, 647
- DEC, 753**
- DECIMAL, 79, 753**
- decrementing values, 73**
 - \$value, 73
 - \$value --, 73
- define() function, 30**
- DELETE, 84, 162–167, 288**
 - Cascade, 164–167
- DELETE links, 156, 165**
- delete.php, 164–166**
- deletion**
 - Cascade DELETE, 164–167
 - of items in cart, 521–524
 - of records, 162–167
 - of transaction pages, 591–593
- DESCRIBE, 84**
- design rules (standards), 270**
- designing database (Comic Book), 269–271**
- directory/file functions, 709–713**
- discussion forum. *See* bulletin board system**
- documentation, MySQL, 102**
- DOUBLE, 754**
- DOUBLE PRECISION, 754**
- double quotation marks (“), 73**
- do/while, 68, 690**
- Dreamweaver CS3, 762, 763**
- DROP, 84**
- drop-down list boxes, 45, 135**

E

- echo, 23–26, 27, 28, 29, 685**
 - debugging and, 645–646
 - print v., 72, 685
- ecomm_checkout2.php, 508, 533–537, 546–547**
- ecomm_checkout3.php, 508, 537–543, 547–550**
- ecomm_checkout.php, 507, 530–532, 545–546**
- ecomm_customers table, 510**

e-commerce, 311, 505–556

- common links, 554
- competitive pricing, 554
- customers
 - characteristics, 551
 - communication with, 555
 - feedback, 555
 - personal customer service, 553
 - privacy policy, 552
 - return policy, 552–553
 - secure credit card processing, 553
 - trust, 552–553
- guidelines, 551–555
- home page, 515–517
- information, textual/graphical, 552
- navigation, 554
- products
 - appropriate, 554
 - ideas for, 506–507
 - timely delivery, 555
 - viewing information on, 517–521
- professional look, 553–554
- search feature, 554
- shopping cart
 - abandonment, 512–513
 - Cart32, 507
 - check out process, 530–550
 - coding, 507
 - database, 508–510
 - db_ch15 - 1.php, 507
 - db_ch15 - 2.php, 507
 - ecomm_checkout2.php, 508, 533–537, 546–547
 - ecomm_checkout3.php, 508, 537–543, 547–550
 - ecomm_checkout.php, 507, 530–532, 545–546
 - ecomm_shop.php, 507, 516–517, 519
 - ecomm_update_cart.php, 507
 - ecomm_view_cart.php, 507
 - ecomm_view_product.php, 507
 - products, 521–524, 524–529
 - tables, 508–514
 - temporary, 512–513
 - third-party software, 507

ecomm_order_details table, 512**ecomm_orders table, 511****ecomm_products table, 510****ecomm_shop.php, 507, 516–517, 519****ecomm_temp_cart table, 512, 527****edges, of image, 201****EDIT link, 156, 171, 172****edit_characters.php, 296–300, 306–310****editing**

- commit.php, 170–174
- databases, 153–174
- movie, 167–174

EditPlus, 762, 763**edit_power.php, 289–293****E_ERROR, 249****efficient code, 22**

- functions and, 55
- include statement, 52–54

else statements, 51–52, 688. See also if/else statements**e-mail (PHP), 315–353**

- error, creation of, 247–248
- mail(), 317, 321
 - errors and, 248
- mail functions, 724–725
- mailing lists. See mailing lists
- PHP setup for, 316
- postcard application
 - confirmation implementation, 330–343
 - images and, 328–329
- sending, 316–322
 - data collection and, 317–322
 - headers and, 323–325
 - HTML and, 322–325
 - multipart messages, 326–328
 - simple, 317
 - SimpleMail class, 343–352, 474–476, 497

empty(), 239**empty variables, 643****encapsulation, 344, 348, 349****enctype attribute, 183****ENDHTML, 113****enemies data, referential integrity and, 287–288****ENUM, 79, 755****equal to (==), 50****equal to, AND data types match (===), 50****error constants**

- E_ALL, 249
- E_COMPILE_ERROR, 249
- E_COMPILE_WARNING, 249
- E_CORE_ERROR, 249
- E_CORE_WARNING, 249
- E_ERROR, 249
- E_NOTICE, 249
- E_PARSE, 249

error constants (*continued*)

`E_RECOVERABLE_ERROR`, 249

`E_STRICT`, 249

`E_USER_ERROR`, 249

`E_USER_NOTICE`, 249

`E_USER_WARNING`, 249

`E_WARNING`, 249

error e-mail, creation of, 247–248

error handling, 241–260. See also troubleshooting

Apache, 241–248

custom, creating, 252–255

exceptions, 256–258

full-featured, creating, 255–256

functions, 714

PHP, 248–256

troubleshooting and, 260

try/catch method, 256–258

error key, 184

error logs, 627

error types (PHP), 249

ErrorDocument directive, 242–243

error.php, 243–244

errors

fatal, 250, 251

generating, 250–252

'headers already sent,' 40, 44, 143, 644–645

heredoc closing tag line, 113

messages

custom, 243–246

500: Internal Server Error, 243, 246

400: Bad Request, 243

401: Authorization Required, 243

403: Forbidden, 243

404: Not Found, 243, 245

online list, 243

simulating, 243–246

not meeting conditions, 258–259

parse, 260, 642–643

syntax, 260

trapping, 256–258

user input, 217, 238

dates/numbers, 226–238

forgetting information, 218–219

formatting, 226–238

escaping, 26, 687

ethics, mailing list, 502–503

exceptions, 256–258

exercises. See also Try It Out

chapter 2, 76

answers, 649–653

chapter 3, 103

answers, 653–656

chapter 4, 129

answers, 656–659

chapter 5, 152

answers, 659–661

chapter 6, 174

answers, 661–662

chapter 7, 216

answers, 665–668

chapter 8, 239

answers, 668–669

chapter 9, 260

answers, 670–671

chapter 10, 311

answers, 671–674

chapter 11, 353

answers, 674

chapter 12, 406

answers, 675

chapter 13, 468

answers, 676–677

chapter 14, 504

answers, 677–679

chapter 15, 556

answers, 679–684

chapter 16, 625

answers, 684

explode(), 238

extract(), 94, 110

F

fatal errors, 250, 251

feature_error.php, 255–256

feedback for articles (CMS), 458–460

feedback, logs as, 637

fetch(), 773–774

fetch mode constants, PDO, 734, 773–774

fetchAll(), 773–774

field types (MySQL), 78–82, 270–271. See also specific field types

choosing, 80–82

date/time, 755

numeric, 753–754

reference list, 753–756

string, 755–756

- fields, 78, 151**
 - in forms, 151
 - not null, 82
 - null, 82
- Fifth Normal Form (5NF), 269**
- file/directory functions, 709–713**
- filePro, 770**
- \$_FILES array, 183, 184**
- filters, 193–202**
 - IMG_FILTER_BRIGHTNESS, 201
 - IMG_FILTER_COLORIZE, 201
 - IMG_FILTER_CONTRAST, 201
 - IMG_FILTER_EDGEDETECT, 201
 - IMG_FILTER_EMBOSS, 201
 - IMG_FILTER_GAUSSIAN_BLUR, 201
 - IMG_FILTER_GRAYSCALE, 201
 - IMG_FILTER_MEAN_REMOVAL, 201
 - IMG_FILTER_NEGATE, 201
 - IMG_FILTER_SELECTIVE_BLUR, 201
 - IMG_FILTER_SMOOTH, 201
- Firebird, 766, 770**
- First Normal Form (1NF), 266, 269**
- 1NF (First Normal Form), 266, 269**
- firstprog.php**
 - echo in, 23–26
 - PHP/HTML in, 27–28
- 500: Internal Server Error, 243, 246**
- 5NF (Fifth Normal Form), 269**
- FIXED, 754**
- FLOAT, 754**
- floor(), 33**
- for statement, 161–162, 690**
 - 403: Forbidden, 243**
- foreach, 63, 94–97, 690**
 - table creation and, 96–97
- foreign keys, 156, 166, 263, 264**
- form element, 134**
- form1.html, 132**
- form2.html, 136**
- form3.php, 139–140**
- form4a.php, 147–148**
- form4b.php, 148–149**
- form4.php, 146–147**
- formatting codes**
 - date/time, 706–708
 - string, 747
- formatting errors, 226–238**
- formprocess1.php, 132–134**
- formprocess2.php, 136–138**
- formprocess3.php, 140–142**
- forms, 44–49, 131–152**
 - fields, 151
 - for getting information, 45–49
 - linking, 145–151
 - multiple processing, 139–142
 - parts of, 44–45
 - passing variables through, 44–49, 687
 - user input, 135–145
- forum, 557. See also bulletin board system**
- Forum Administration page, 612**
- FOUND_ROWS(), 575**
- 400: Bad Request, 243**
- 401: Authorization Required, 243**
- 403: Forbidden, 243**
- 404: Not Found, 243, 245**
- 4NF (Fourth Normal Form), 269**
- Fourth Normal Form (4NF), 269**
- Friedl, Jeffrey, 238**
- frm_access_levels, 562**
- frm_admin table, 562**
- frm_admin.php, 597–600, 610**
 - BBcode Administration, 612–614
 - Board Administration, 610–612
 - Forum Administration, 612
 - User Administration, 605–606
- frm_bbcode, 563**
- frm_compose.php, 617–619**
- frm_config.inc.php, 571**
- frm_edit_forum.php, 606–610**
- frm_footer.inc.php, 573**
- frm_forgotpass.php, 595, 596**
- frm_forum, 563**
- frm_header.inc.php, 572–573, 579–580**
- frm_index.php, 59, 594**
- frm_login.php, 593, 596**
- frm_output_functions.inc.php, 565–571**
 - functionality, 573
 - pagination and, 573–577
 - show_topic(), 574
- frm_post_count, 563**
- frm_posts, 563–564**
- frm_search.php, 619–620, 623**
- frm_transact_admin.php, 580–583**
- frm_transact_affirm.php, 591–593**
- frm_transact_post.php, 584–586**
- frm_transact_user.php, 586–590**
- frm_useraccount.php, 600–602, 604**
- frm_users, 564**
- frm_view_forum.php, 614–616**
- frm_view_topic.php, 617**

FROM, 91**FrontBase, 769****full-featured error handler, 255–256****functions. See also specific functions**

- array-sorting, 61
- ctype_*, 235, 236, 239
- customized, 55–59, 691
- defined, 55
- efficient code and, 55
- is_*, 235, 236, 239
- methods v., 351
- reference list*, 695–752
 - Apache/PHP, 695–696
 - array, 696–701
 - date/time, 702–706
 - directory/file, 709–713
 - error-handling, 714
 - HTTP, 724–725
 - image, 716–723
 - logging, 714
 - mail, 724–725
 - mathematical, 33, 725–727
 - miscellaneous, 751–752
 - MySQL, 728–730
 - network, 724–725
 - object handling, 715–716
 - online, 695
 - output buffer, 731
 - PDO database interface, 732–734
 - PHP configuration information, 734–736
 - process, 737
 - program execution, 737
 - session functions, 738–739
 - SimpleXML, 739–740
 - string, 740–747
 - URL, 748
 - variable, 749–750
- type-validating, 235

G**gallery.php, 214–215****Gaussian blur, 201****GD library, 175–177**

- enabling, in PHP, 176
- image types and, 176
- online information, 177
- testing, 176–177

gd_info(), 176, 177**Geany, 762, 763****generate_ratings(), 128****generating errors, 250–252****GET method, 44, 134****\$_GET superglobal array, 123, 127, 129****get_director(), 117, 124****getimageinfo(), 186****getimagesize(), 186****get_leadactor(), 117, 124****get_movietype(), 117, 124****gettor methods, 349****GIF, 176, 186**

- IMAGETYPE_GIF, 186
- support, enabling, 176

global, 55**Google Analytics, 636–637****graphical user interfaces. See GUIs****Graphics Draw. See GD Library****grayscale, image in, 201****greater than (>), 50, 92****greater than or equal to (>=), 50, 92****GUIs (graphical user interfaces),
administration, 767****H****handling errors. See error handling****hashing, 367****header(), 143–144**

- problem code and, 144
- warning message and, 143

header.php, 53–54**'headers already sent' error, 40, 44, 143,
644–645****headers, e-mail and, 323–325****Hello World, 26, 132, 135, 342****heredoc, 73, 110–114**

- closing tag line, error and, 113
- syntax, 110–114

hits/page views, 638**hosting, 765**

- third-party, 765–768
 - administration GUIs, 767
 - bandwidth usage, 767
 - configuration ability, 767
 - online companies (list), 768
 - pricing, 768
 - server access, 766–767
 - server control, 766–767
 - site usage, 767
 - supported databases, 766

supported languages, 766

htaccess files, 766–767

creating, 356–359

HTML

e-mail and, 322–325

forms. See forms

PHP and, 20, 27–29

references, 134

tables. See tables

HTML–Kit Tools, 762, 763

htpasswd, 356–359, 767

creating, 356–359

drawbacks, 359

HTTP Analyze, 635–636

HTTP functions, 724–725

HTTP headers, 143, 144

httpd.conf file, 241, 242, 243

I

IBM DB2, 770

if statements, 49–51

nested, 688

operators, 49–50

semicolons and, 50

if/else statements, 51–52, 688

IFF, 176, 186

IMAGETYPE_IFF, 186

IGNORE, 283, 284

images, 175–216

brightness, 201

captions in, 202–209

colorizing, 201

contrast, 201

copyrighted, 202, 209

edges, 201

e-mailing, 328–329

embedding text in, 202–209

filters for, 193–202

Gaussian blur, 201

grayscale, 201

logo (Movie Review site), 209

mean removal, 201

negate color, 201

selective blur, 201

smoothing, 201

thumbnails, 212–216

uploading, 177–188

image functions, 716–723

image table, 178–188

image types

BMP, 176, 186, 187

converting, 188–192

GD library and, 176

GIF, 176, 186

IFF, 176, 186

JB2, 176, 186

JP2, 176

JPC, 176, 186

JPG, 176, 186

JPX, 176, 186

PNG, 176, 186

predefined constants, 186

PSD, 176, 186

SWC, 176, 186

SWG, 176, 186

TIFF, 176, 186

WBMP, 176, 186, 187

XBM, 176, 186

ImageBMP library classes, 187

imagecopymerge(), 212

imagecreatefrom* (), 187

ImageCreateFromBMP, 187

imagecreatefrompng(), 212

imagedestroy(), 188

image_effect.php, 197–200

imagefilter(), 192, 193, 200, 201

filters, 201

imagegif(), 188, 192

imagejpeg(), 188, 192, 200

imagepng(), 188, 192

images directory, 178

imagettftext(), 208–209

IMAGETYPE_BMP, 186

IMAGETYPE_GIF, 186

IMAGETYPE_ICO, 186

IMAGETYPE_IFF, 186

IMAGETYPE_JB2, 186

IMAGETYPE_JP2, 186

IMAGETYPE_JPC, 186

IMAGETYPE_JPEG, 186

IMAGETYPE_JPX, 186

IMAGETYPE_PNG, 186

IMAGETYPE_PSD, 186

IMAGETYPE_SWC, 186

IMAGETYPE_SWF, 186

IMAGETYPE_TIFF_II, 186

IMAGETYPE_TIFF_MM, 186

IMAGETYPE_WBMP, 186

IMAGETYPE_XBM, 186

IMG_FILTER_BRIGHTNESS, 201

IMG_FILTER_COLORIZE, 201

IMG_FILTER_CONTRAST, 201

IMG_FILTER_EDGEDETECT, 201

IMG_FILTER_EMOSS, 201

IMG_FILTER_GAUSSIAN_BLUR, 201

IMG_FILTER_GRAYSCALE, 201

IMG_FILTER_MEAN_REMOVAL, 201

IMG_FILTER_NEGATE, 201

IMG_FILTER_SELECTIVE_BLUR, 201

IMG_FILTER_SMOOTH, 201

include statement, 52–54, 689

welcome message and, 53–54

incrementing values, 73

\$value++, 73

++\$value, 73

\$value += 1, 73

\$value = \$value + 1, 73

indexes, 82

infiniology.com, 768

Informix, 770

Ingres Database, 770

initial login (BBS), 593–596

INNER JOIN, 485

InnoDB, 84

input element, 44, 134–135. See also user input

check boxes, 45, 135, 151

drop-down list boxes, 45, 135

password, 45

radio buttons, 45, 135, 139–143

submit, 134, 135

text, 44, 134, 151

input testing, 143–144

INSERT, 87, 161

INSERT INTO tablename VALUES, 84, 87

inserting movie with known movie type and people, 157–162

inserting records, 156–162

installation

Apache, 6–10

help/information, 18

on Linux, 779–780

online information, 6

testing, 9–10

Linux

Apache on, 779–780

MySQL on, 778–779

PHP on, 781–783

MySQL, 13–17

help/information, 18

on Linux, 778–779

mysql.exe — help, 18

online information, 6

testing, 15

PHP

on Linux, 781–783

manual, 10–13

online information, 6

testing, 13

troubleshooting, 641

INT, 79, 275, 754

INTEGER, 754

500: Internal Server Error,

243, 246

invision.net, 768

ipowerweb.com, 768

IRC channels, PHP, 648

is_* functions, 235, 236, 239

is_array(), 235

is_binary(), 235

is_bool(), 235

is_callable(), 235

is_float(), 235

is_int(), 235

is_null(), 235

is_numeric(), 235

is_object(), 235

is_resource(), 235

isset(), 225

is_string(), 235

is_unicode(), 235

J

JavaScript, 341–342

postcard application and, 341–342

ppk on JavaScript (Koch), 342

JB2, 176, 186

IMAGETYPE_JB2, 186

jEdit, 762, 763

JOINS, 100–101, 759

INNER, 485

LEFT, 101, 117

JP2, 176

IMAGETYPE_JP2, 186

JPC, 176, 186

IMAGETYPE_JPC, 186

JPG, 176, 186

JPX, 176, 186

IMAGETYPE_JPX, 186

jumpline.com, 768

junk mail, 469, 502. See also mailing lists

K

keys, 82, 263. *See also* indexes

- defined, 263
- error, 184
- foreign, 156, 166, 263, 264
- name, 184
- primary, 82, 156, 161, 162, 263, 624
 - composite, 265
 - defined, 263
- size, 184
- tmp_name, 184
- type, 184
- values for, 263

keywords

- namespace, 692
- private, 75
- public, 75

Koch, Peter-Paul, 342

L

LAMP. *See* Linux, Apache, MySQL, and PHP

land1.com, 768

lastInsertId(), 774

leapyear.php, 51–52

LEFT JOIN, 101, 117

less than (<), 50, 92

LIKE (comparison operator), 92

LIMIT, 91, 759

limiting input choice, 136–139

line numbers, 22

linking

- forms, 145–151
- tables, 114–117, 156

links, common, 554

Linux

- Apache configuration on, PHP and, 782–783
- Apache installation on, 779–780
- MySQL installation on, 778–779
- as open source, 4
- PHP installation on, 781–783

Linux, Apache, MySQL, and PHP (LAMP), 4

list_characters.php, 293–295, 303–306

lists, 151. *See also* mailing lists

- drop-down, 45, 135
- editing, 173–174
- multiline, 135, 139–142
- single-selection, 136–138

LogFormat directive, 628–630

logging functions, 714

logical operators

- AND, 73, 92
- OR, 73, 92
- || and, 73
- && and, 73, 143
- alternates to, 73
- NOT, 92
- WHERE and, 92
- XOR, 92

login.php, 361–362, 373

logins

- database-driven
 - session tracking in, 368–373
 - tables for, 365–367
- htpasswd and, 356–359
- PHP for, 360–365
- sessions and, 359–365
- user accounts, editing, 373–376

logo image, 209

logs, 627–639

- access, 627
- analyzing, 633–637
 - Analog, 634
 - AWStats, 634–635
 - Google Analytics, 636–637
 - HTTP Analyze, 635–636
 - Webalizer, 633
- custom, 627
- defined, 627
- error, 627
- as feedback, 637
- information obtained from, 627–628
- location of, 628–633
 - Apache, 628–630
 - MySQL, 630–633
 - PHP, 630
- reports
 - hits/page views, 638
 - site health, 637
 - site referrals, 638–639
 - trends over time, 638
 - user preferences/information, 638

LONGBLOB, 80, 755

LONGTEXT, 80, 756

loops, 689–690. *See also* do/while; for statement; foreach; while

lunarpages.com, 768

M**mail()**, 317, 321, 352. *See also* e-mail

- errors and, 248
- SimpleMail class v., 349
- uses for, 352

mail functions, 724–725**mail_html.php, 347****mailing lists, 469–504**

- administration page, 472–486
- advertising, 470
- announcements, 470
- database, 470–472
- ethics, 502–503
- ml_admin.php, 427–473, 480, 482
- ml_admin_transact.php, 477–480, 481, 483–484
- ml_quick_msg.php, 473–474, 482–483
- ml_remove.php, 500–502
- ml_thanks.php, 491–492, 496
- ml_user.php, 486–488, 495
- ml_user_transact.php, 488–491, 496–497
- newsletters, 469
- opt-in, 503
- opt-out, 503
- removing subscriptions, 500–502
- signup form, 486–499
- spam, 469, 502
- tables
 - ml_lists, 471
 - ml_subscriptions, 472, 485, 497, 498, 501
 - ml_users, 471
- types of, 469–470
- web site notifications, 469

mail_multipart.php, 347**mail_quick.php, 348, 352****mail_text.php, 346****main.php, 368, 372****many-to-many relationships, 264****master page, 119****master/child relationships, 118–119****Mastering Regular Expressions (Friedl), 238****MATCH, 624****matching mechanisms. *See* pattern matching mechanisms****mathematical functions, 33, 725–727****max(), 33****MaxDB, 770****MAX_FILE_SIZE, 185, 186****MD5 hash, 342****MD5 Message-Digest Algorithm (RFC 1321), 342****mean removal, 201****MEDIUMBLOB, 80, 756****MEDIUMINT, 80, 754****MEDIUMTEXT, 80, 756****MEMORY, 84****MERGE, 83****merging images, 209–212****methods, 75. *See also* functions**

- functions v., 351
- gettor, 349

Microsoft Access, 766**Microsoft SQL Server, 766, 770****midphase.com, 768****min(), 33****miscellaneous functions, 751–752****mktime(), 238****ml_admin.php, 427–473, 480, 482****ml_admin_transact.php, 477–480, 481, 483–484****ml_lists table, 471****ml_quick_msg.php, 473–474, 482–483****ml_remove.php, 500–502****ml_subscriptions table, 472, 485, 497, 498, 501****ml_thanks.php, 491–492, 496****ml_user.php, 486–488, 495****ml_users table, 471****ml_user_transact.php, 488–491, 496–497****movie review web site, 3**

- database, 77, 86–87
 - administrative page, 153–156
 - creating, 87–90
 - editing, user and, 153–174
 - image table, 178–188
 - querying, 91–101
 - referencing multiple tables, 98–100
- forms, 44–49, 131–152
 - fields, 151
 - for getting information, 45–49
 - linking, 145–151
 - multiple processing, 139–142
 - parts of, 44–45
 - passing variables through, 44–49, 687
 - user input, 135–145
- logo image, 209
- rating stars, 128, 129
- table (for database), 105–129
 - adding data, 120–121
 - creation, 105–110
 - displaying movie details, 121–125

- heredoc and, 110–114
 - linking, 114–117
 - master/child relationships, 118–119
 - movie review, 125–129
 - validating user input, 217–239
 - welcome message for, 53–54
 - movie1.php, 35–36**
 - functions in, 55–59
 - passing visitor's username, 38–40
 - setting cookie, 42–44
 - urlencode(), 37
 - using forms to get information, 45–49
 - while in, 68–72
 - movie_details.php, 121–125**
 - displaying reviews, 126–129
 - movie.php, 157–159**
 - checking dates/numbers, 226–230
 - editing, 167–174
 - erroneous user input, 219–222
 - movie_rating, 218**
 - movie_release, 218**
 - movies table, 86**
 - creation, 89–90
 - movie_rating, 218
 - movie_release, 218
 - moviesite.php**
 - arrays in, 63–67
 - constants in, 30–31
 - URL variables in, 34–36
 - variables in, 31–33
 - while in, 68–72
 - movietype table, 86**
 - creation, 90
 - mSQL, 770**
 - multidimensional arrays, 60**
 - multiline list boxes, 135, 139–142**
 - multipart messages, 326–328**
 - multiple submit buttons, 143**
 - my_error_handler, 255**
 - MyISAM, 83**
 - MySQL**
 - commands, 84
 - configuring, 14–15
 - databases. *See also* tables
 - comic book, 271–276
 - data retrieval from, 758–759
 - manipulation commands, 757–758
 - parameters, 82–83
 - documentation, 102
 - field types, 78–82, 270–271
 - reference list*, 753–756
 - functions, 728–730
 - installation, 13–17
 - help/information, 18
 - on Linux, 778–779
 - mysql.exe —help, 18
 - online information, 6
 - testing, 15
 - logs, 630–633
 - PHP configuration and, 11
 - Query Browser, 102–103
 - reference notes*, 692–693, 757–759
 - role of, 6, 13–14
 - server, connecting to, 86
 - session tracking, 368–373
 - spatial data formats, 756
 - starting/stopping, 15
 - storage engines, 83–84
 - Tools package, 102
 - user privileges, 16–17
 - web site, 18, 648
 - MySQL Databases module, 272**
 - mysql_* functions, PDO v., 771, 773**
 - MySQL Server Instance Configuration Wizard, 14–15**
 - mysqlbinlog utility, 632**
 - mysql_close, 775**
 - mysql_connect, 85, 86**
 - mysql_error, 85**
 - mysql_fetch_array, 85, 94, 95**
 - mysql_fetch_assoc, 85**
 - mysql_insert_id, 188, 284, 497, 774**
 - mysql_num_rows, 110, 457, 774**
 - mysql_query, 85, 97**
 - mysql_select_db, 85**
- ## N
- name key, 184**
 - names, for variables, 643, 686**
 - namespace keyword, 692**
 - namespaces, 692**
 - NCHAR, 756**
 - negate color, in images, 201**
 - nested if statements, 688**
 - net command, 8, 15**
 - network functions, 724–725**
 - newsletter mailing lists, 469**
 - non-transaction-safe tables (NTSTs), 83**

normalization, 264–269

- 1NF, 266, 269
- 2NF, 266–267, 269
- 3NF, 268, 269
- 4NF, 269
- 5NF, 269
- BCNF, 269
- comic book database and, 265–269
- guideline v. rules, 269
- zero form, 265, 269

NOT (logical operator), 92

not equal to

- (!=), 50, 92
- (\neq), 50

not equal to, OR the data types not same (!=), 50

404: Not Found, 243, 245

NOT NULL, 82

Notepad, 762, 763

notices, 250

- E_NOTICE, 249

NTSTs (non-transaction-safe tables), 83

NULL, 82

- zero v., 82

number_format(), 33, 529

numbers/dates, user input errors in, 226–238

NUMERIC, 754

numeric field types, 753–754

NVARCHAR, 756

O

ob_end_flush(), 644

object-handling functions, 715–716

object-oriented programming (OOP), 74–76

- advantages of, 75–76
- classes, 74–75, 691–692
- encapsulation and, 344, 348, 349
- SimpleMail, 343–352, 474–476, 497
- methods, 75
- properties, 75

ob_start(), 644

olm.net, 768

1NF (First Normal Form), 266, 269

one-to-many relationships, 264

one-to-one relationships, 264

online stores. See e-commerce

OOP. See object-oriented programming

open source, 4–5

- advantages, 5

Linux as, 4

sourceforge.net, 4

Open Source Definition test, 4

Open Source Initiative (OSI), 4

opening/closing tags (< ?php ? >), 20, 687

operators, 49–50. See also comparison operators; logical operators; ternary operator

opt-in, 503

opt-out, 503

OR (logical operator), 73, 92

Oracle OC18, 770

ORDER BY, 91, 129, 759

OSI (Open Source Initiative), 4

output buffer functions, 144, 644, 645, 731

- reference list, 731

output_story(), 416, 457

Ovrimos SQL, 770

P

page views/hits, 638

paginate(), 575

pagination, 558, 573–577

Paradox File Access, 770

parameters, database (MySQL), 82–83

parse errors, 260, 642–643

E_PARSE, 249

passing variables

- with cookies, 41–44
- through forms, 44–49, 687
- through sessions, 38–40, 686
- through URLs, 33–37, 686

passing visitor's username, 38–40

PASSWORD(), 367

password (input field), 45

pattern matching mechanisms, 237–238. See also regular expressions

- \$, 237
- *, 237
- +, 237
- , 237
- ., 237
- ?, 237
- ^, 237
- [], 237
- [^], 237

PDO. See PHP Data Objects

PDOStatement, 773–774

people table, 86

- creation, 90

PHP (PHP: Hypertext Preprocessor)

- Apache configuration and, 11–12
 - on Linux, 782–783
- closing/opening tags, 20, 687
- comments, 21
- configuration information functions, 734–736
- configuration, MySQL and, 11
- cookie tracking with, 388–393
- databases and, 766, 769–770. *See also* MySQL
- displaying to browser, 685
- e-mail. *See* e-mail
- error handling, 248–256
- error types, 249
- functions. *See* functions
- GD enabled in, 176
- HTML and, 20, 27–29
- installation
 - on Linux, 781–783
 - manual, 10–13
 - online information, 6
 - testing, 13
- IRC channels, 648
- for logins, 360–365
- logs, 630
- looping structures, 689–690
- marking code, 20, 685
- OOP and, 74–76
- recursive acronym, 10
- reference notes*, 685–693
- role of, 6, 10
- semicolon and, 20, 642
- session tracking, 368–373
- syntax rules, 20–21
 - online information, 685
- web site, 18, 648

PHP Data Objects (PDO), 769–775

- databases and, 769–771, 775
- fetch mode constants, 734, 773–774
- functions, 732–734
- mysql_* functions v., 771, 773
- online information, 775
- requirements, 771

PHPBB, 557**PHPBuilder.com, 647****PhpED, 762, 763****PHPEdit, 762, 763****php.ini file, 10****PHPMyAdmin, 272****pipe characters, regular expressions and, 237****PNG, 176, 186**

- IMAGETYPE_PNG, 186

pointer, array, 63**polls (BBS), 625****\$_POST global array, 135****POST method, 44, 134, 183****post transaction pages, 584–586****postcard application**

- confirmation and, 330–343
- images and, 328–329
- JavaScript and, 341–342

postcard.php, 317–318, 331–332, 336–340**PostgreSQL, 766, 770****powweb.com, 768****ppk on JavaScript (Koch), 342****predefined constants, 186****preg_match(), 236****primary keys, 82, 156, 161, 162, 263, 624**

- composite, 265
- defined, 263

print construct, echo v., 72, 685**print_r(), 646, 647****private keyword, 75****privileges, MySQL user accounts, 16–17****process functions, 737****program execution functions, 737****properties, 75****proprietary software, 4****PSD, 176, 186**

- IMAGETYPE_PSD, 186

public keyword, 75**publishing articles (CMS), 455–458****put method, 183****Q****Query Browser, MySQL, 102–103****query string, 33****Quick Message page, 494****quotation marks**

- “ (double), 73
- ‘ (single), 26

quoting text, BBS and, 625**R****radio buttons, 45, 135, 139–143**

- multiple, 143

rand(), 33

rating stars, 128, 129

RDBMS (relational database management systems), 156

REAL, 754

E_RECOVERABLE_ERROR, 249

recursive acronym, 10

redirect(), 420

reference materials

lists

field types, 753–756

functions, 695–752

notes

MySQL, 692–693, 757–759

PHP, 685–693

referential integrity, 264

comic_character_power and, 286, 287

comic_rivalry and, 285, 286

enemies data and, 287–288

online information, 264

regex. See regular expressions

register.php, 369–372

registration system

administrator section, 393–405

logins

database-driven, 365–367, 368–373

htpasswd and, 356–359

PHP for, 360–365

sessions and, 359–365

user accounts, editing, 373–376

user section, 356–388

regular expressions (regex), 226, 236–238, 612–614

back references, 614

BBS and, 558, 612–614

defined, 236

Mastering Regular Expressions (Friedl), 238

matching mechanisms, 237–238

pipe characters and, 237

syntax, 238

relational database management systems (RDBMS), 156

relational databases, 78, 125. See also databases

defined, 262–263

deleting records, 162–167

inserting records, 156–162

updating records, 167–174

relationships, 125, 262, 263–264

many-to-many, 264

one-to-many, 264

one-to-one, 264

removal

of mailing list subscriptions, 500–502

of transaction pages, 591–593

Report Magic, 634

reports

hits/page views, 638

site health, 637

site referrals, 638–639

trends over time, 638

user preferences/information, 638

reusable code

BBS, 564–573

CMS, 412

frm_config.inc.php, 571

frm_footer.inc.php, 573

frm_header.inc.php, 572–573, 579–580

frm_output_functions.inc.php, 565–571

functionality, 573

pagination and, 573–577

show_topic(), 574

SimpleMail class, 343–352, 474–476, 497

reviewing articles (CMS), 451–458

RFC 1321: MD5 Message-Digest Algorithm, 342

rowCount(), 774

rsort(\$array), 61

runtime

notices, 250

warnings, 250

S

Say My Name, 132–134

search feature

BBS, 558, 623–624

CMS, 466–467

Search submit button, 141

Second Normal Form (2NF), 266–267, 269

secret.php, 360, 364

Secure Shell (SSH), 766

Secure Socket Layer (SSL), 393

security

cookies and, 41

file protection. See htpasswd

online credit card processing and, 553

online information, 579

w3.org/Security/Faq/, 579, 610

SELECT, 84, 91

condition clauses, 758–759

query, 92–94

- select1.php, 92–94**
 - foreach in, 95
- select2.php, 95–97**
 - joining two tables, 100–101
 - referencing multiple tables, 98–100
- selective blur, 201**
- semicolons**
 - if statements and, 50
 - PHP statements and, 20, 642
- send(), 349, 350, 485**
- sendconfirm.php, 333–334**
- sending e-mail. See e-mail**
- sendmail_from, 316**
- sendmail_path, 316**
- sendmail.php, 318–319, 321**
- session functions, 355, 405, 738–739**
- session tracking, 368–373**
- session_destroy(), 424**
- sessions, 38–40**
 - cookies v., 359, 388
 - defined, 38, 359
 - logins and, 360–365
 - passing variables through, 38–40, 686
- session_start(), 38, 520, 686**
- session_unset(), 424**
- SET, 756**
- setcookie() function, 41, 392**
- setHTMLBody(), 351**
- setTextBody(), 351**
- 7-Zip, 10**
- shopping cart**
 - abandonment, 512–513
 - Cart32, 507
 - check out process, 530–550
 - steps in, 530, 545
 - testing, 543–545
 - coding, 507
 - database, 508–510
 - files
 - db_ch15 – 1.php, 507
 - db_ch15 – 2.php, 507
 - ecomm_checkout2.php, 508, 533–537, 546–547
 - ecomm_checkout3.php, 508, 537–543, 547–550
 - ecomm_checkout.php, 507, 530–532, 545–546
 - ecomm_shop.php, 507, 516–517, 519
 - ecomm_update_cart.php, 507
 - ecomm_view_cart.php, 507
 - ecomm_view_product.php, 507
 - products
 - adding/changing/deleting, 521–524
 - viewing, 524–529
 - tables, 508–513
 - adding product information, 513–514
 - ecomm_customers, 510
 - ecomm_order_details, 512
 - ecomm_orders, 511
 - ecomm_products, 510
 - ecomm_temp_cart, 512, 527
 - temporary, 512–513
 - third-party software, 507
- SHOW DATABASES, 271**
- show_comments(), 417–418**
- show_topic(), 574**
- signup form (mailing list), 486–499**
- SimpleMail class, 343–352, 474–476, 497**
- SimpleXML functions, 739–740**
- simulating error messages, 243–246**
- single quotation marks ('), 26**
- single-selection list, 136–138**
- site health, 637**
- site referrals, 638–639**
- site_user table, 366**
- site_user_info table, 366**
- size key, 184**
- SMALLINT, 80, 754**
- smilies, 624**
- smoothing images, 201**
- SMTP, 316**
- smtp_port, 316**
- sort(\$array), 61**
- sorting arrays, 61–62**
- sorting.php, 62**
- sourceforge.net, 4**
- spam, 469, 502. See also mailing lists**
- spatial data formats, 756**
- spreadsheets, 78. See also tables**
- SQL (Structured Query Language) server, 13**
- SQLite, 766, 770**
- SSH (Secure Shell), 766**
- SSL (Secure Socket Layer), 393**
- standards (design rules), 270**
- startlogic.com, 768**
- storage engines (MySQL), 83–84**
 - BDB, 84
 - InnoDB, 84
 - MEMORY, 84
 - MERGE, 83
 - MyISAM, 83

store, online. See **e-commerce**
E_STRICT, 249
string field types, 755–756
string functions, 740–747
string-formatting codes, 747
strings, 687
strlen(), 416
strrpos(), 416
Structured Query Language (SQL) server, 13
submit, 134, 135
submit buttons, 139, 141

- Add, 141
- multiple, 143
- Search, 141

subscriptions, removal of, 500–502

substr(), 416

SUM(), 550

superhero powers page, 289–293

SWC, 176, 186

- IMAGETYPE_SWC, 186

SWF

- IMAGETYPE_SWF, 186

SWG, 176, 186

switch() statement, 162, 167, 246

Sybase, 766, 770

syntax errors, 260

T

table1.php, 106–110

table2.php, 110–118

table3.php, 118–119

tables, 78, 105–129. See also *specific tables*

- BBS, 562–564
- comic book. See *comic book fan web site*
- creating, 105–110, 275
- for database-driven logins, 365–367
- foreach and, 96–97
- joining, 100–101. See also *JOINS*
- linking, 114–117, 156
- mailing list
 - ml_lists, 471
 - ml_subscriptions, 472, 485, 497, 498, 501
 - ml_users, 471
- movie review. See *movie review web site*
- non-transaction-safe, 83
- shopping cart. See *shopping cart*
- as spreadsheets, 78
- transaction-safe, 83
- types, 83

tags, closing/opening, 20, 687

temporary shopping cart, 512–513

ternary operator (?:), 144–145, 688. See also *if/else statements*

testing

- check out process, 543–545
- GD library, 176–177
- troubleshooting and, 646

TEXT, 79, 756

text (input), 44, 134, 151

text editors, 761–763

- Dreamweaver CS3, 762, 763
- EditPlus, 762, 763
- features, comparison of, 762–763
- Geany, 762, 763
- HTML-Kit Tools, 762, 763
- jEdit, 762, 763
- Notepad, 762, 763
- online information, 762, 763
- PhpED, 762, 763
- PHPEdit, 762, 763
- TextPad, 762, 763
- UltraEdit-32, 762, 763
- WordPad, 762, 763
- Zend Studio, 762, 763

TextPad, 762, 763

Third Normal Form (3NF), 268, 269

third-party hosting, 765–768

- administration GUIs, 767
- bandwidth usage, 767
- configuration ability, 767
- online companies (list), 768
- pricing, 768
- server access, 766–767
- server control, 766–767
- site usage, 767
- supported databases, 766
- supported languages, 766

3NF (Third Normal Form), 268, 269

thumbnails, 212–216

TIFF, 176, 186

- IMAGETYPE_TIFF_II, 186
- IMAGETYPE_TIFF_MM, 186

TIME, 79, 755

time/date. See *date/time*

TIMESTAMP, 755

TINYBLOB, 80, 756

TINYINT, 80, 754

TINYTEXT, 80, 756

title attributes, 119

tmp_name key, 184**Tools package, MySQL, 102****tooltips, 119**

- alt attributes, 119
- title attributes, 119

transaction pages, 580–593

BBS

- administration, 580–583
- post, 584–586
- removal/deletion, 591–593
- user-related, 586–590

CMS, 420–432

- article, 426–432
- user-related, 420–426

comic book characters application, 277–289

frm_transact_admin.php, 580–583

frm_transact_affirm.php, 591–593

frm_transact_post.php, 584–586

frm_transact_user.php, 586–590

transaction-safe tables (TSTs), 83**trapping errors, 256–258****trends over time, 638****trim(), 225, 235, 236****trim_body(), 416, 573****troubleshooting, 641–648**

- empty variables, 643
- error handling and, 260
- installation, 641
- parse errors, 260, 642–643
- testing and, 646

trust (e-commerce), 552–553

- personal customer service, 553
- privacy policy, 552
- return policy, 552–553
- secure credit card processing, 553

Try It Out. See also exercises

administrator registration, 393–405

arrays

- adding, 63–67
- sorting, 62

articles

- creating, 447–451
- feedback for, 458–460
- publishing, 455–458
- reviewing, 451–458
- viewing, 458–460

BBS

- account functionality, 593–605
- database preparation, 558–564
- editing settings, 606–610

transaction pages, 580–593

using, 614–622

CMS

- database structure, 409–412
- reusable scripts, 412–420
- search feature, 466–467
- transaction pages, 420–432
- user control panel, 461–465

Comic Book site

- management of characters page, 293–310
- superhero powers page, 289–293
- table creation, 272–276
- transaction pages, 277–289

constants, 30–31

cookies

- setting, 42–44
- tracking, with PHP, 388–393

database (Movie Review site), 87–90

dates/numbers, user input errors in, 226–238

deleting records, 162–167

cascade, 164–167

echo function, 23–26

e-commerce home page, 515–517

editing movie, 167–174

e-mail

- confirmation, 330–343
- data collection and, 317–322
- simple, 317

embedding text in images, 202–209

error handling

- custom error handler, 252–255
- custom error messages, 243–246
- error e-mail, creation of, 247–248
- full-featured error handler, 255–256

ErrorDocument directive, 242–243

exceptions, 256–258

filters, 193–202

foreach, 95

table creation and, 96–97

forms

- for getting information, 45–49
- linking, 145–151

functions, 55–59

GD, testing, 176–177

htpasswd and htaccess, 356–359

if and else, 51–52

if statement, 50–51

image table, 178–188

image types, converting, 188–192

images, merging, 209–212

Try It Out (continued)

- include, welcome message and, 53–54
- inserting movie with known movie type and people, 157–162
- joining two tables, 100–101
- mailing list
 - administration page, 472–486
 - database preparation, 470–472
 - removal of subscriptions, 500–502
 - signup form, 486–499
- multiline list boxes, 139–142
- passing variables through URLs, 34–36
- passing visitor's username, 38–40
- PHP for logins, 360–365
- PHP within HTML, 27–28
- radio button, 139–142
- referencing multiple tables, 98–100
- reusable scripts, BBS, 564–573
- Say My Name, 132–134
- SELECT, 92–94
- session tracking, 368–373
- shopping cart
 - adding/changing/deleting items in, 521–524
 - creating tables, 508–513
 - product information for tables, 513–514
 - viewing contents, 524–529
- SimpleMail class, 343–352, 474–476, 497
- tables
 - adding data, 120–121
 - creation, 105–110
 - for database-driven logins, 365–367
 - displaying movie details, 121–125
 - foreach and, 96–97
 - heredoc and, 110–114
 - linking, 114–117
 - master/child relationships, 118–119
 - movie review, 125–129
- thumbnails, 212–216
- transaction pages, 580–593
 - administration, 580–583
 - article, 426–432
 - post, 584–586
 - removal/deletion, 591–593
 - user-related, 420–426, 586–590
- user accounts, editing, 373–376
- user input
 - adapting script to, 218, 219–226
 - limiting choices, 136–139
- variables, 31–33
- while function, 67–72

- try/catch method, 256–258
- TSTs (transaction-safe tables), 83
- 2NF (Second Normal Form), 266–267, 269
- type key, 184
- type-validating functions, 235

U

- ucase(), 144
- UltraEdit-32, 762, 763
- UNIQUE, 82
- UPDATE, 84, 121, 167, 286
- update_user.php, 398–400
- updating records, 167–174
- UPLOAD_ERR_CANT_WRITE, 184
- UPLOAD_ERR_EXTENSION, 184
- UPLOAD_ERR_FORM_SIZE, 184, 185
- UPLOAD_ERR_INI, 184, 185
- UPLOAD_ERR_NO_FILE, 184
- UPLOAD_ERR_NO_TMP_DIR, 184
- UPLOAD_ERR_OK, 184
- UPLOAD_ERR_PARTIAL, 184
- upload_image.html, 179–180, 183
- uploading images, 178–188
- URL functions, 748
- urlencode(), 36–37, 225
- URLs, passing variables through,
33–37, 686
- user accounts, editing, 373–376
- User Administration page (BBS), 605–606
- user authentication (BBS), 558, 579–580
- user input
 - adapting script to, 218, 219–226
 - choices, limiting, 136–139
 - errors, 217, 238
 - dates/numbers, 226–238
 - forgetting information, 218–219
 - formatting, 226–238
 - forms and, 135–145
 - validating, 217–239
- user interface (CMS), 432–467
 - account creation, 437–442
 - administration page, 443–447
 - main index/login screen, 432–436
 - user management, 442–447
- user logins. *See* logins
- user management (BBS), 597–605
- user preferences/information, reports and, 638
- user privileges, MySQL, 16–17
- user profiles, BBS and, 625

user transaction pages

BBS, 586–590

CMS, 420–426

E_USER_ERROR, 249**E_USER_NOTICE, 249****E_USER_WARNING, 249****user_option_list(), 605–606****V****validating functions, 235****validating user input, 217–239****validation, 217****\$value++, 73****++\$value, 73****\$value --, 73****\$value += 1, 73****\$value = \$value + 1, 73****VARBINARY, 756****VARCHAR, 78, 275, 756****var_dump(), 646, 647****variable functions, 749–750****variables, 31–33, 686**

empty, 643

names, 643, 686

passing

with cookies, 41–44

through forms, 44–49, 687

through sessions, 38–40, 686

through URLs, 33–37, 686

Vbulletin, 557**viewing articles (CMS), 458–460****Virtual Vacation site, 216, 662****W****w3.org/Security/Faq/, 579, 610****warnings, 250**

E_WARNING, 249

header() and, 143

watermarks, 209**WBMP, 176, 186, 187**

IMAGETYPE_WBMP, 186

web site notification mailing lists, 469**web sites. See comic book fan web site; movie****review web site; specific web sites****Webalizer, 633****websitesource.com, 768****welcome message, for movie review site,****53–54****WHERE, 91–92**

comparison operators, 92

logical operators, 92

while, 67–72, 690**wildcards, 92**

%, 92

_, 92

Windows Service Manager, 8, 15**WordPad, 762, 763****workflow application, 330****wrox.com, 647****X****XBM, 176, 186**

IMAGETYPE_XBM, 186

Xdebug, 647**XOR, 92****Y****YEAR, 80, 755****Z****Zend Studio, 762, 763****zero form (normalization), 265, 269****zero, NULL v., 82****7-Zip, 10**