

Index

A

Accept-Language HTTP header, 465, 469

Access database, as data store, 66

accessibility

selling products online and, 377

site design process and, 48

use of tables and, 40–41

account box settings, 134

accounts, managing user accounts, 86

actions, controller, 31–32, 175

AddOption **action, opinion poll controllers, 273**

AddShoppingCartItem **action, e-commerce**

controllers, 401–402

administration

e-commerce store. *See storefront administration views*

newsletter, 296

administration console, for polls module, 257

administration pages, tools for creating, 89

administrators

managing user accounts, 86

role, 176

AdminProductItem.aspx **control**

ManageProducts.aspx view, 434–435

ViewDepartment.aspx views, 440–441

AdminSidebar.aspx **control**

forum views, 350–351

news, articles, and blog views, 222

opinion poll views, 280

Adobe Photoshop, site mockup with, 35

advertising

newsletters and, 296

opinion polls and, 255

as revenue option, 375

AJAX

default files in project creation and, 23

extension methods, 29

MVC applications and, 83

UpdatePanel, 307

ALL (application logic layer), 65

anonymous users, support for, 106–107

Apple Safari, 34

application logic layer (ALL), 65

application settings, ASP.NET Web-based

administration tools for, 107

architecture, planning

BLL (business logic layer), 74

caching data, 76

CDNs (Content Delivery Networks), 76–77

controller class in BLL, 74–75

DAL (data access layer), 67

data store selection, 66–67

Design section, 64–83

exception handling and, 77–78

JavaScript integration, 82–83

layered approach to, 64–65

LINQ Entity Framework, 72

LINQ impact on DAL, 69–71

LINQ-to-SQL and, 71–72

multiple data store support, 67–69

MVC framework and, 64

output options and, 78

presentation layer best practices, 80

Problem section, 63–64

search engine optimization, 81–82

securing DAL, 72–74

security and, 75

Solution section, 83

summary, 83

transaction management, 78

user interface, 79

views and, 80–81

web.config configuration, 78–79

archiving opinion polls, 258

Article **class, 166–168**

extending LINQ objects, 187–188

methods, 167–168

overview of, 166

properties, 166–167

article item view user control, 172–173

ArticleItem.aspx **control, 231–233**

articles

approved status for contributors, 153

ArticleItem.aspx control, 231–233

CreateArticle action, 207–209

CreateArticles.aspx view, 235–241

EditArticle action, 209–211

extension method queries, 163–164

images included in, 172

Index action for displaying published, 199–201

ManageArticle action, 205–206

ManageArticles.aspx view, 233–235

RateArticle action, 204–205

rating, 249–250

RemoveArticle action, 212–213

articles (continued)

`RemoveArticles.aspx` view, 241–242
securing the viewing of, 191–192
`ViewArticle` action, 202–204
writing with WYSIWYG editor, 171–172

articles table

article content information in, 157–159
LINQ-to-SQL schema and, 180

ASP.NET

tools for creating login and administration pages, 89
tools for managing users, 107–108

ASP.NET MVC, introduction to

ASP.NET Web Forms compared with, 10–11
choosing between ASP.NET Web Forms and ASP.NET MVC, 12–13
controller, 30–32
creating first project, 19–25
installing, 17–19
installing prerequisite software, 13–17
model, 25–26
MVC pattern defined, 9–10
overview of MVC pattern, 7–9
prerequisites for, 13
strengths/weaknesses, 11–12
summary, 32
view, 26–29

ASP.NET Web Forms

ASP.NET MVC compared to, 10–11
choosing between ASP.NET Web Forms and ASP.NET MVC, 12–13
MVC view objects inheriting from, 27–28
strengths/weaknesses, 10–11

Atom

content syndication with, 151–152
producing/consuming Atom feeds, 173–174
syndication view, 251–253

attach method, for database deployment, 479–483

Atwood, Jeff, 8

authentication

distributed authentication system, 88
membership used for, 89–93
Windows vs. Forms based, 88

authorization

defined, 86
roles, 100–102

`Authorize` method, MVC security and, 103

B

background threads, 302–306

backup and maintenance plan, site deployment and, 483–486

TheBeerHouse project

Design section, 2–3
overview of, 1

Problem section, 1–2

Solution section, 4–5

summary, 5

BLL (business logic layer), 74–79

caching data, 76
CDNs (Content Delivery Networks), 76–77
controller class in, 74–75
exception handling and, 77–78
layered design and, 65
output options and, 78
overview of, 74
security and, 75
transaction management, 78
`web.config` configuration, 78–79

breadcrumbs, as navigational hints, 33

business logic layer. See BLL (business logic layer)

`ByDepartment` query, LINQ queries for e-commerce store, 397

C

C# 3.0

synchronizing access to shared resources, 304–306
syntax for getters and setters, 191

caching data, 76

CAs (certificate authorities), 377–378

Cascading Style Sheets. See CSS (Cascading Style Sheets)

catalogs, of online products, 376

categories

forums supporting, 328
of products in online store, 376

categories, in article, news, and blog management

category extension method queries, 164–165
`CategoryIndex` actions, 201–202
`CategoryIndex.aspx` view, 246
`CategoryItem.ascx` control, 220–222
`CreateCategory` action, 213–214
`CreateCategory.aspx` view, 225–229
`EditCategory` action, 214–215
`ManageCategories.aspx` view, 222–225
`RemoveCategory` action, 216–217
`RemoveCategory.aspx` view, 229–231

categories table

article category information in, 156–157
LINQ-to-SQL schema and, 181

`Category` class, 168

CDNs (Content Delivery Networks), 76–77

certificate authorities (CAs), 377–378

ChangePassword action method, membership system controller action, 123–124

`ChangePassword.aspx` view, membership system views, 138–139

`Cheapest` query, LINQ queries for e-commerce store, 395

`ClosePost` **action, forum controller actions, 349–350**

CMS (Content Management System), 85

code behind

- code-behind page for sharing behaviors, 49
- HTML model in ASP.NET 1.x, 36

coding, declarative vs. imperative, 176

collections

- `IEnumerable` class and, 165
- paging through, 189–191
- transparent collection enumerator, 191–192

colors, best practices for presentation layer, 80

`Comment` **class, 168–170, 189**

comments, in news, articles, and blog management

- adding, 250–251
- `CommentItem.ascx` control, 242–243
- `CreateComment` action, 217–218
- `EditComment` action, 218–219
- editing, 245–246
- `ManageComments.aspx` view, 243–246
- `RemoveComment` action, 219–220
- removing, 244–245
- sorting, 169–170

comments table

- feedback on published articles, 159
- LINQ-to-SQL schema, 181

`commerce.js`

- for departments, 428
- for products, 435–436
- for shipping carts, 446
- for shipping methods, 437–438

`CommerceSidebar.ascx` **control, storefront administration views, 423**

communication

- important features of content-based sites, 3
- uses of opinion polls, 255

community, building site community, 327

`CompleteOrder` **action, e-commerce controllers, 403–408**

- `CompleteOrder.aspx` **view**
- designing e-commerce views, 386
- order processing views, 451

configuration module, for e-commerce store

- designing, 384
- implementing, 392–393

configuration module, for news, articles, and blogs

- designing, 161
- implementing, 176–177

configuration module, for newsletters

- configuring `web.config`, 310
- designing, 307–308

configuration module, for opinion polls

- designing, 260
- implementing, 263–264

configuration module, forums

- designing, 330
- implementing, 333

content

- email notification when adding new content to websites, 295
- important features of content-based sites, 3

Content Delivery Networks (CDNs), 76–77

Content Management System (CMS), 85

content pages

- accessing master page from, 44–45
- editing and effect on master pages, 43
- inheriting from master pages, 42

`ContentPlaceHolder` **control, 42–43**

contributors role, articles and, 176

controller classes

- in BLL, 74–75
- output options and, 78

controller factory, 31

controllers, 30–32

- actions, methods, results, filters, and selectors, 31–32
- in Atwood’s example, 9
- author’s definition, 9
- controller class in BLL, 74–75
- controller factory, 31
- default controllers created during project creation, 22
- localization of, 475–476
- overview of, 30
- Reenskaug’s definition of, 8
- securing actions of, 103–104
- URL routes and, 30–31

controllers, e-commerce store

- `AddShoppingCartItem` action, 401–402
- `CompleteOrder` action, 403–408
- `CreateDepartment` action, 409–411
- `CreateProduct` action, 414–415
- `CreateShipping` action, 420–421
- `DeleteProduct` action, 417
- `DeleteShipping` action, 421
- `DeleteShoppingCartItem` action, 402–403
- designing, 387–389
- `EditDepartment` action, 411–412
- `EditProduct` action, 415–417
- implementing, 397
- `Index` action, 398
- `ManageDepartments` action, 409
- `ManageOrders` action, 418
- `ManageProducts` action, 413
- `ManageShipping` action, 420
- `ManageStore` action, 408–409
- `OrderDetail` action, 418–420
- overview of, 397
- `ViewDepartment` action, 398–399
- `ViewProduct` action, 399
- `ViewShoppingCart` action, 399–400

controllers, forum

- `ClosePost` action, 349–350
- `CreateForum` action, 342–343

controllers, forum (continued)

- CreatePost action, 346–349
- designing, 332
- EditForum action, 343–345
- implementing, 336
- Index action, 337
- ManageForums action, 341
- ManagePosts action, 342
- RemoveForum action, 345–346
- RemovePost action, 350
- ViewForum action, 337–338
- ViewPost action, 338–339
- Vote action, 340–341

controllers, membership system

- ChangePassword action method, 123–124
- CreateRole action method, 129
- DeleteRole action method, 129–130
- DeleteUser action method, 127
- designing, 111–112
- EditUser action method, 127–129
- ForgotPassword action method, 121–122
- GetErrorMessage helper method, 120–121
- implementing, 119
- ManageRole action method, 129
- ManageUsers action method, 126–127
- Registration action method, 119–120
- UserProfile action method, 124–126

controllers, news, articles, and blog management

- CategoryIndex actions, 201–202
- CreateArticle action, 207–209
- CreateCategory action, 213–214
- CreateComment action, 217–218
- designing, 174–175
- EditArticle action, 209–211
- EditCategory action, 214–215
- EditComment action, 218–219
- implementing, 199
- Index action, 199–201
- ManageArticle action, 205–206
- RateArticle action, 204–205
- RemoveArticle action, 212–213
- RemoveCategory action, 216–217
- RemoveComment action, 219–220
- ViewArticle action, 202–204

controllers, newsletter

- CreateNewsletter action, 313–314
- designing, 310
- EditNewsletter action, 314–315
- implementing, 311
- Index action, 312
- ManageNewsletters action, 312–313
- RemoveNewsletter action, 317
- SendNewsletter non-action, 315–316
- UpdateStatus action, 313

controllers, opinion poll

- AddOption action, 273

- CreatePoll action, 269–270
- designing, 262
- EditOption action, 273–274
- EditPoll action, 270–271
- implementing, 266
- Index action, 266–267
- ManagePolls action, 268–269
- RemoveOption action, 274
- RemovePoll action, 271–272
- SetArchived action, 275
- SetCurrent action, 274–275
- Vote action, 267–268

cookies, handling multiple votes in opinion

- polling, 258–259

CPUs, multi-threading and, 303

CreateArticle action, news, articles, and blog controllers, 207–209

- CreateArticles.aspx view, 171, 235–241

CreateCategory action, news, articles, and blog controllers, 213–214

- CreateCategory.aspx view, 225–229

CreateComment action, comment controllers, 217–218

CreateDepartment action, department controllers, 409–411

- CreateDepartment.aspx view, 387, 424–426

CreateForum action, forum controllers, 342–343

- CreateForum.aspx view, 332, 356–359

CreateNewsletter action, newsletter controllers, 313–314

- CreateNewsletter.aspx view, 309, 320–323

CreatePoll action, opinion poll controllers, 269–270

- CreatePoll.aspx view, 262, 284–289

CreatePost action, forum controllers, 346–349

- CreatePost.aspx view, 331, 370–372

CreateProduct action, product controllers, 414–415

- CreateProduct.aspx view, 387, 429–433

CreateRole action method, membership system controller action, 129

CreateShipping action, shipping controller actions, 420–421

cross-site scripting attacks, 168

CSS (Cascading Style Sheets)

- creating site design, 52–54
- creating style sheets, 57–61
- designing styles for web site, 37–40
- displaying tabular data with, 40–41
- MVC and, 9

CSS Templates, 36

culture

- cultural information class, 468–469
- setting current culture, 469–471

current poll view, opinion polls, 292–293

- CurrentPoll query, LINQ queries for opinion polls, 264–265

D**DAL (data access layer), 67–74**

- designing, 67
- layered design and, 64–65
- LINQ Entity Framework, 72
- LINQ impact on, 69–71
- LINQ-to-SQL, 71–72
- multiple data store support, 67–69
- securing, 72–74

data, caching, 76**data access layer. See DAL (data access layer)****data stores**

- choosing, 66–67
- exploring default SQL Server data store, 98–100
- layered design and, 64
- multiple data store support, 67–69
- provider model design pattern and, 93

database locking, multi-threading and, 306**Database Meta Language (DBML)**

- extending LINQ objects to add business functionality to forums, 334
- LINQ-to-SQL and, 179–180

databases

- designing tables for newsletters, 307
- importing existing data into, 486–490

databases, deploying

- attach method for, 480–483
- scripted solution for, 486–490
- to SQL Server 2008, 479

databases, for e-commerce store

- building, 389–391
- table design, 382–383
- transaction preservation, 383–384

databases, for forums

- querying, 329–330
- table design, 329

databases, for membership system

- configuring, 115–116
- designing tables for, 109

databases, for news, articles, and blogs

- designing tables for, 155
- querying, 159–161

databases, for opinion polls

- designing tables, 259–260
- querying, 260
- working with, 262–263

DataContext class, transaction management and, 78**DBML (Database Meta Language)**

- extending LINQ objects to add business functionality to forums, 334
- LINQ-to-SQL and, 179–180

declarative coding, 176**decoupling tiers, of multi-tier design, 63**

Default.aspx

default files in project creation and, 24

IIS versions and, 52

DeleteProduct **action, e-commerce controllers, 417**DeleteRole **action method, membership controllers, 129–130**DeleteShipping **action, e-commerce controllers, 421**DeleteShoppingCartItem **action, e-commerce controllers, 402–403**DeleteUser **action method, membership controllers, 127**DepartmentItem.aspx **control, 429****departments, e-commerce store**

- CreateDepartment action, 409–411
- CreateDepartment.aspx view, 424–426
- designing multiple departments, 376
- EditDepartment action, 411–412
- ManageDepartment.aspx view, 427–429
- ManageDepartments action, 409
- ViewDepartment action, 398–399
- ViewDepartment.aspx views, 440–441

deploying Web sites. See site deployment**Design section, TheBeerHouse project, 2–3****Design section, e-commerce store**

- configuration module design, 384
- controller design, 387–389
- database table design, 382–383
- model design, 384–386
- online payment options, 377–380
- overview of, 376–377
- PayPal as payment service, 380–382
- transaction preservation, 383–384
- view design, 386–387

Design section, forums

- configuration module design, 330
- controller design, 332
- database queries, 329–330
- database table design, 329
- model design, 330–331
- overview of, 328
- view design, 331–332

Design section, localization

- cultural information class, 468–469
- global resources, 465–467
- overview of, 462
- page-level resources, 467–468
- setting current culture, 469–471

Design section, membership system

- accessing user profiles, 106
- anonymous user support, 106–107
- ASP.NET Web-based administration tools, 107–108
- authentication options, 88
- authorization roles, 100–102
- controllers designed for, 111–112
- database table design, 109

Design section, membership system (continued)

- Design section, 109
- exploring default SQL Server data store, 98–100
- features to implement, 109
- models designed for, 109–110
- overview of, 86
- password storage mechanisms, 87–88
- profiling user information, 104–106
- provider model design pattern, 93–96
- securing controller actions, 103–104
- security module built into MVC framework, 108
- `SqlMembershipProvider`, 96–97
- `System.Web.Security.Membership` class, 89–93
- views designed for, 110–111

Design section, news, articles, and blogs

- `Article` class, 166–168
- article extension method queries, 163–164
- article item view user control, 172–173
- `Articles` table, 157–159
- `Categories` table, 156–157
- `Category` class, 168
- category extension method queries, 164–165
- `Comment` class, 168–170
- `Comments` table, 159
- configuration module design, 161
- controller design, 174–175
- database table design, 155
- extending model, 162–163
- features to implement, 153–154
- images included in articles, 172
- model design, 161–162, 165
- producing/consuming Atom feeds, 173–174
- queries accessing database, 159–161
- security and, 176
- view design, 170–171
- writing articles with WYSIWYG editor, 171–172

Design section, newsletters

- background threads, 302–306
- configuration module design, 307–308
- controller design, 310
- creating/sending e-mails, 298–301
- database table design, 307
- jQuery for partial view updates, 306–307
- managing long operations on server, 301–302
- model design, 308–309
- overview of, 297
- spam and, 297–298
- view design, 309

Design section, opinion polls, 257

- configuration module design, 260
- controller design, 262
- designing database tables for, 259–260
- features to implement, 257–258
- handling multiple votes, 258–259

- model design, 261
- querying database, 260
- view design, 261–262

Design section, site deployment

- database deployed to SQL Server 2008, 479
- MVC Framework applications, 478
- MVC web application deployment, 479–480
- overview of, 478

Design section, site design

- accessibility of site, 48
- accessing master page from content pages, 44–45
- avoiding use of HTML tables for layout control, 40–41
- CSS styles, 37–40
- master page feature, 42–44
- navigation system, 46–47
- nesting master pages, 44
- overview of, 34–35
- sharing common behavior among pages, 49–50
- sharing common design between multiple pages, 41–42
- site layout, 35–36
- switching master pages at runtime, 46
- technologies for implementing design, 36–37
- top-level navigation, 47–48

designing sites. See site design

developers, graphic designers assisting, 363

discounts, selling products online and, 376

discussion boards. See forums

distributed authentication system, 88

DIVs, displaying tabular data with, 40–41

DOM (Document Object Model), 220–221

dynamic content, 2

E

e-commerce store

- `AddShoppingCartItem` action, 401–402
- `CompleteOrder` action, 403–408
- `CompleteOrder.aspx` view, 451
- configuration module design, 384
- configuration module implementation, 392–393
- controller design, 387–389
- controller implementation, 397
- `CreateDepartment` action, 409–411
- `CreateDepartment.aspx` view, 424–426
- `CreateProduct` action, 414–415
- `CreateProduct.aspx` view, 429–433
- `CreateShipping` action, 420–421
- database construction, 389–391
- database table design, 382–383
- `DeleteProduct` action, 417
- `DeleteShipping` action, 421
- `DeleteShoppingCartItem` action, 402–403
- Design section, 376–377

- EditDepartment action, 411–412
 - EditProduct action, 415–417
 - extending LINQ objects, 393–395
 - important features of content-based sites, 3
 - Index action, 398
 - Index.aspx view, 438–439
 - LINQ queries, 395–397
 - ManageDepartment.aspx view, 427–429
 - ManageDepartments action, 409
 - ManageOrder.aspx view, 455–456
 - ManageOrders action, 418
 - ManageProducts action, 413
 - ManageProducts.aspx view, 433–436
 - ManageShipping action, 420
 - ManageShipping.aspx view, 436–438
 - ManageStore action, 408–409
 - ManageStore.aspx view, 422–424
 - model design, 384–386
 - model implementation, 393
 - online payment options, 377–380
 - order management views, 455
 - order processing views, 446–451
 - OrderDetail action, 418–420
 - OrderDetail.aspx view, 456–459
 - overview of, 375
 - PayPal as payment service, 380–382
 - Problem section, 375–376
 - product reviews and, 327
 - Solution section, 389
 - storefront administration views, 421–422
 - storefront views, 438
 - summary, 459–460
 - transaction preservation, 383–384
 - TransactionError.aspx view, 452–454
 - view design, 386–387
 - view implementation, 421
 - ViewDepartment action, 398–399
 - ViewDepartment.aspx views, 440–441
 - ViewProduct action, 399
 - ViewProduct.aspx views, 441–443
 - ViewShoppingCart action, 399–400
 - ViewShoppingCart.aspx views, 443–446
 - EditArticle **action, article controllers, 209–211**
 - EditCategory **action, category controllers, 214–215**
 - EditComment **action, comment controllers, 218–219**
 - EditDepartment **action, e-commerce controllers, 411–412**
 - EditForum **action, forum controllers, 343–345**
 - EditNewsletter **action, newsletter controllers, 314–315**
 - EditOption **action, opinion poll controllers, 273–274**
 - editor role, articles management, 176**
 - EditPoll **action, opinion poll controllers, 270–271**
 - EditProduct **action, e-commerce controllers, 415–417**
 - EditUser **action method, membership system controllers, 127–129**
 - EditUser.aspx **view, membership system views, 145–147**
 - e-mail. See also newsletters**
 - creating/sending, 298–301
 - example of newsletter email, 323
 - managing e-mail addresses for newsletter subscriptions, 296
 - spam and, 297–298
 - encryption**
 - password storage mechanisms, 87–88
 - SSL (Secure Sockets Layer), 377–378
 - Entity Framework, LINQ, 72, 308**
 - environment resources, saved in web.config file, 78–79**
 - exception handling**
 - GetErrorMessage helper method, 120–121
 - using custom error pages, 77–78
 - Exist query, LINQ, 198**
 - expressions, localization, 464**
 - extension methods**
 - article extension method queries, 163–164
 - category extension method queries, 164–165
 - HTML and AJAX extension methods and, 29
 - ExtractValue **method, of CompleteOrder action, 407**
- ## F
- file structures, project creation and, 22**
 - filters, controller, 31–32**
 - Firefox**
 - news feed readers, 152
 - site design and browser compatibility, 34
 - Flash, search engine optimization and, 81**
 - Flickr, high-quality images with, 172**
 - foreign keys**
 - for opinion poll database, 259
 - table relationships and, 178
 - ForgotPassword **action, membership system controllers, 121–122**
 - ForgotPassword.aspx **view, membership system views, 136–138**
 - forms-based authentication, vs. Windows authentication, 88**
 - forums**
 - AdminSidebar.ascx control, 350–351
 - ClosePost action, 349–350
 - configuration module design, 330
 - configuration module implementation, 333
 - controller design, 332
 - controller implementation, 336
 - CreateForum action, 342–343

forums (continued)

- CreateForum.aspx view, 356–359
- CreatePost action, 346–349
- CreatePost.aspx view, 370–372
- database queries, 329–330
- database table design, 329
- Design section, 328
- EditForum action, 343–345
- Index action, 337
- Index.aspx view, 360–361
- LINQ queries, 334–336
- ManageForums action, 341
- ManageForums.aspx view, 351–352
- ManagePosts action, 342
- ManagePosts.aspx view, 352–356
- model design, 330–331
- model implementation, 333
- overview of, 327
- Problem section, 327–328
- RemoveForum action, 345–346
- RemoveForum.aspx view, 359–360
- RemovePost action, 350
- Solution section, 332
- summary, 372–374
- view design, 331–332
- view implementation, 350
- ViewForum action, 337–338
- ViewForum.aspx view, 361–365
- ViewPost action, 338–339
- ViewPost.aspx view, 365–370
- Vote action, 340–341
- forums.js
 - CreatePost.aspx view, 372
 - ViewPost.aspx view, 369–370
- FTP, uploading files with, 172**

G

- GetArticle query, LINQ queries, 197**
- GetArticles query, LINQ queries, 195–196**
- GetArticlesCount query, LINQ queries, 196–197**
- GetCategories query, LINQ queries, 197**
- GetCategory query, LINQ queries, 198**
- GetComment query, LINQ queries, 198**
- GetCommentsForModeration query, LINQ queries, 198**
- GetDepartment query, LINQ queries, 396**
- GetErrorMessage helper method, membership system controller, 120–121**
- GetForum query, LINQ queries, 335**
- GetForums query, LINQ queries, 336**
- GetPoll query, LINQ queries, 265**
- GetPollOption query, LINQ queries, 265**
- GetPolls query, LINQ queries, 265–266**
- GetPost query, LINQ queries, 335**
- GetPosts query, LINQ queries, 335–336**

- GetProduct query, LINQ queries, 396**
- GetProducts query, LINQ queries, 396–397**
- GetPublishedArticles query, LINQ queries, 193–194**
- GetPublishedArticlesCount query, LINQ queries, 195**
- GetReplies query, LINQ queries, 336**
- GetShippingMethod query, LINQ queries, 395**
- GetShippingMethods query, LINQ queries, 395**
- GetVote query, LINQ queries, 335**
- global resources**
 - strongly typed, 464
 - using, 465–467
- Global.asax file, 24**
- globalization, 461. See also localization**
- Globally Recognized Avatar (Gravatar), 328**
 - extending LINQ objects to add business functionality to forum, 334
- Google, nonlinear paging, 189**
- Google Analytics, 256**
- Google Chrome, 34**
- Google Reader, 152**
- graphic designers assisting**
 - developers working with, 363
 - site design and, 36
- Gravatar (Globally Recognized Avatar), 328**
 - extending LINQ objects to add business functionality to forum, 334

H

- hashing, password storage mechanisms, 87–88**
- hosting servers, deployment and, 478**
- HTML**
 - avoiding use of HTML tables for layout control, 40–41
 - extension methods, 29
 - MVC and, 9
 - sending e-mail and, 299
 - technologies for working with, 36

I

- identity, user. See membership system**
- IE (Internet Explorer), 34**
- IEnumerable class, 165**
- IETF (Internet Engineering Task Force), 151**
- IIS (Internet Information Services)**
 - configuration settings in web.config file, 79
 - Default.aspx and, 52
 - IIS 6 configured for MVC framework, 479, 492–495
 - IIS 7 configured for MVC framework, 480, 495–502
- images**
 - included in articles, 172
 - selling products online and, 376
- imperative coding, 176**
- Import/Export Wizard, SSMS, 486**
- incentives, subscriber, 296**

Index action

- e-commerce controllers, 398
- forum controllers, 337
- news, articles, and blog controllers, 199–201
- newsletter controllers, 312
- opinion poll controllers, 266–267

Index.aspx view

- designing e-commerce views, 386
- designing forum views, 331
- designing newsletter views, 309
- designing opinion poll views, 261
- e-commerce views, 438–439
- forum views, 360–361
- news, articles, and blog management views, 246
- newsletter views, 323–324
- opinion poll views, 291–292
- overview of, 170

initial setup, membership system, 113–115**InStock query, LINQ queries, 397****Internet Engineering Task Force (IETF), 151****Internet Explorer (IE), 34****Internet Information Services. See IIS (Internet Information Services)****introduction, to this book**

- companion website to book, xxv
- conventions used, xxv
- forums and peer discussions, xxvi–xxvii
- intended audience, xxiv
- overview of, xxi
- requirements and resources needed to use book, xxiv
- source code, xxvi
- structure of book, xxiii–xxiv
- what is covered in book, xxii–xxiii

IP locking, handling multiple votes in opinion polling, 258–259**J****JavaScript**

- best practices for presentation layer, 80
- commerce.js, for departments, 428
- commerce.js, for products, 435–436
- commerce.js, for shipping carts, 446
- commerce.js, for shipping methods, 437–438
- CreateArticles.aspx view, 238–239
- CreateCategory.aspx view, 228
- CreateForum.aspx view, 358
- CreateNewsletter.aspx view, 322
- CreatePoll.aspx view, 286–287
- CreatePost.aspx view, 371
- default files in project creation and, 23
- forums.js, 369–370, 372
- integration in web sites, 82–83
- manage-articles.js, 239–240

- manage-categories.js, 228–229
- manage-department.js, 426
- manage-forum.js, 354–356, 358
- ManageNewsletter.aspx view, 319
- manage-newsletter.js, 319, 322–323
- ManagePolls.aspx view, 282
- manage-polls.js, 283–284, 287–289
- ManagePosts.aspx view, 354
- manage-product.js, 431
- ManageRole.aspx view, 149
- manage-role.js, 149
- ManageUser.aspx view, 144–145
- poll.js, 279–280
- Register.aspx view, 132–134
- register.js, 133
- ViewForum.aspx view, 365
- ViewPost.aspx view, 368

jQuery

- default files in project creation and, 23
- for partial view updates, 306–307

JSON, 78**K****keywords, search engine optimization and, 82****kickers, subscriber incentives, 296****L****language, localization and, 461–462****language tables, designing for membership system, 109****layout**

- avoiding use of HTML tables for layout control, 40–41
- designing, 35–36
- master pages. *See master pages*

lazy load, LINQ using, 168**legacy systems, provider model design pattern for migration of, 94****linear paging, through collections, 189–191****LINQ (Language Integrated Query)**

- creating LINQ queries for e-commerce store, 395–397
- creating LINQ queries for forums, 334–336
- creating LINQ queries for news, articles and blogs, 192–198
- creating LINQ queries for opinion polls, 264–266
- DataContext class and, 78
- Entity Framework, 71–72
- Exist query, 198
- extending LINQ objects for e-commerce store, 393–395
- extending LINQ objects for forums, 334
- extending LINQ objects for news, articles, blogs, 187–189

LINQ (Language Integrated Query) (continued)

lazy load pattern used by, 168
queries, 334–336
SQL compared with, 69–71

LINQ-to-SQL

classes, 181–186
entity designer, 308
vs. Entity Framework, 71–72
schema for multiple tables, 179–181
transaction management and, 78
in Visual Studio 2008, 71–72

localization

in ASP.NET 1.x, 463
in ASP.NET 2.0, 464–465
in ASP.NET 3.5 and MVC, 465
creating localized controller, 476
creating localized view, 475–476
cultural information class, 468–469
Design section, 462
global resources, 465–467
importance of localized content on web sites, 3
overview of, 461
page-level resources, 467–468
Problem section, 461–462
resource file creation, 471–475
setting current culture, 469–471
Solution section, 471
summary, 476
TinyMCE and, 172

lock **statement, C#, 304–306**

logging, exception handling and, 78

login

Login.aspx view, 134–136
tools for creating login pages, 89

Login.aspx **view, membership system, 134–136**

look and feel, site design and, 33

M

Machine.Config file, 95

mailing lists, 295. *See also newsletters*

MainContent section

ChangePassword.aspx view, 138
CreateArticles.aspx view, 237–238
CreateCategory.aspx view, 226–228
CreateForum.aspx view, 357
CreateNewsletter.aspx view, 321–322
CreatePoll.aspx view, 285–286
CreatePost.aspx view, 371
EditUser.aspx view, 145–147
ForgotPassword.aspx view, 137–138
Index.aspx view, 291–292, 324, 361
Login.aspx view, 135–136
ManageArticles.aspx view, 235

ManageCategories.aspx view, 224
ManageForums.aspx view, 352
ManageNewsletter.aspx view, 318
ManagePolls.aspx view, 281–282
ManagePosts.aspx view, 353–354
ManageRole.aspx view, 147–148
ManageUser.aspx view, 142–144
Register.aspx view, 131–132
RemoveArticles.aspx view, 242
RemoveCategory.aspx view, 230–231
RemoveForum.aspx view, 359–360
RemovePoll.aspx view, 290
UserProfile.aspx view, 140–142
ViewForum.aspx view, 362
ViewPost.aspx view, 366–368

maintenance plan, site deployment and, 483–486

ManageArticle **action, news, articles, and blog controllers, 205–206**

ManageArticles.aspx **view, 171, 233–235**

manage-articles.js, **239–240**

ManageCategories.aspx **view, 171, 222–225**

manage-categories.js, **228–229**

ManageComments.aspx **view, 171, 243–246**

ManageDepartment.aspx **view, 387, 427–429**

manage-department.js, **426**

ManageDepartments **action, e-commerce controllers, 409**

manage-forum.js

CreateForum.aspx view, 358

ManagePosts.aspx view, 354–356

ManageForums **action, forum controllers, 341**

ManageForums.aspx **view, 331, 351–352**

ManageNewsletter.aspx **view, 309, 317–319**

manage-newsletter.js, **319, 322–323**

ManageNewsletters **action, newsletter controllers, 312–313**

ManageOrder.aspx **view, 387, 455–456**

ManageOrders **action, e-commerce controllers, 418**

ManagePolls **action, opinion poll controllers, 268–269**

ManagePolls.aspx **view, 261, 280–284**

manage-polls.js

CreatePoll.aspx view, 287–289

ManagePolls.aspx view, 283–284

ManagePosts **action, forum controllers, 342**

ManagePosts.aspx **view, 331, 352–356**

manage-product.js, **431**

ManageProducts **action, e-commerce controllers, 413**

ManageProducts.aspx **view, 387, 433–436**

ManageRole **action method, membership system controllers, 129**

ManageRole.aspx **view, 147–149**

manage-role.js, **149**

- ManageShipping **action, e-commerce controllers, 420**
- ManageShipping.aspx **view, 387, 436–438**
- ManageStore **action, e-commerce controllers, 408–409**
- ManageStore.aspx **view, 387, 422–424**
- ManageUser.aspx **view, 142–145**
- ManageUsers **action method, membership system controllers, 126–127**
- marketing, targeting user profiles, 86**
- @Master **directive, for master pages, 42**
- master pages**
 - accessing from content pages, 44–45
 - creating, 54–57
 - nested, 44
 - overview of, 33, 42–44
 - switching at runtime, 46
- Membership **class**
 - membership providers, 93–96
 - methods, 89–90
 - MSDN Library for class details, 91–92
- membership providers, 93–96**
 - ASP.NET Web-based administration tools for, 107
 - configuring, 95
 - creating new, 94–95
 - overview of, 93–94
 - registering, 95–96
 - SqlMembershipProvider, 96–97
- membership system**
 - account box settings, 134
 - anonymous user support, 106–107
 - ASP.NET Web-based administration tools for, 107–108
 - authentication options, 88
 - authorization roles, 100–102
 - ChangePassword action method, 123–124
 - ChangePassword.aspx view, 138–139
 - controller design, 111–112
 - controller implementation, 119
 - CreateRole action method, 129
 - database configuration, 115–116
 - database table design, 109
 - DeleteRole action method, 129–130
 - DeleteUser action method, 127
 - Design section, 87, 109
 - EditUser action method, 127–129
 - EditUser.aspx view, 145–147
 - exploring default SQL Server data store, 98–100
 - features to implement, 109
 - ForgotPassword action method, 121–122
 - ForgotPassword.aspx view, 136–138
 - GetErrorMessage helper method, 120–121
 - initial setup, 113–115
 - Login.aspx view, 134–136
 - ManageRole action method, 129
 - ManageRole.aspx view, 147–149
 - ManageUser.aspx view, 142–145
 - ManageUsers action method, 126–127
 - model design, 109–110
 - model implementation, 117–119
 - newsletters and, 297
 - overview of, 85
 - password storage mechanisms, 87–88
 - Problem section, 85–86
 - profiling user information, 104–106
 - provider model design pattern, 93–96
 - Register.aspx view, 130–134
 - Registration action method, 119–120
 - securing controller actions, 103–104
 - security module built into MVC framework, 108
 - Solution section, 112
 - SqlMembershipProvider, 96–97
 - summary, 149
 - System.Web.Security.Membership class, 89–93
 - user profile access, 106
 - UserProfile action method, 124–126
 - UserProfile.aspx view, 139–142
 - view design, 110–111
 - view implementation, 130
- MembershipUser **class**
 - methods and properties, 90–92
 - MSDN Library for class details, 91–92
- menu system, 46–48. See also navigation**
- metatags, search engine optimization and, 81–82**
- methods, controller, 31–32**
- Microsoft Outlook 2007, news feed readers, 152**
- Microsoft SQL Server. See SQL Server**
- Microsoft Web Platform Installer, 499–502**
- Microsoft.NET Framework 3.5 SP1**
 - ASP.NET MVC prerequisites, 13
 - Syndication model in, 251
- mock-ups, site design and, 35–36**
- models**
 - in Atwood's example, 9
 - author's definition, 9
 - business layer and domain objects in, 25–26
 - Reenskaug's definition of, 8
- models, e-commerce store**
 - designing, 384–386
 - extending LINQ objects, 393–395
 - implementing, 393
 - LINQ queries, 395–397
- models, forums**
 - designing, 330–331
 - extending LINQ objects, 334
 - implementing, 333
 - LINQ queries, 334–336

models, membership system

- designing, 109–110
- implementing, 117–119

models, news, articles, and blogs

- Article class, 166–168
- Category class, 168
- Comment class, 168–170
- defining the model, 165
- designing, 161–162
- extending, 162–163

models, newsletter

- designing, 308–309
- implementing, 311

models, opinion polls

- CurrentPoll query, 264–265
- designing, 261
- GetPoll query, 265
- GetPollOption query, 265
- GetPolls query, 265–266
- implementing, 264–266
- LINQ queries, 264

Model-View-Controller (MVC) pattern. *See also MVC framework*

- defined, 9–10
- overview of, 7–9

moderation, of forums, 328

MoxieCode Systems, TinyMCE, 171–172

Mozilla Firefox

- news feed readers, 152
- site design and browser compatibility, 34

multi-threaded programming, 303

multi-tier design

- defined, 63
- designing layered infrastructure, 64–65

MVC (Model-View-Controller) pattern

- defined, 9–10
- overview of, 7–9

MVC framework

- architectural planning and, 64
- challenges when deploying applications, 478
- deploying MVC web site, 491–492
- IIS 6 configured for, 492–495
- IIS 7 configured for, 495–502
- MVC web application deployment, 479–480
- preparing to deploy MVC web applications, 490–491
- security and, 75

N

names

- database table names, 155
- username, 480–481

navigation

- overview of navigation system, 46–47
- site maps and breadcrumbs as navigational hints, 33
- top-level navigation, 47–48

nested master pages, 44

network properties, designing configuration module for newsletters, 308

news, articles, and blog management

- AdminSidebar.ascx control, 222
- Article class, 166–168
- article extension method queries, 163–164
- article item view user control, 172–173
- ArticleItem.ascx control, 231–233
- Articles table, 157–159
- Atom feeds, 173–174
- Atom syndication view, 251–253
- Categories table, 156–157
- Category class, 168
- category extension method queries, 164–165
- CategoryIndex actions, 201–202
- CategoryIndex.aspx view, 246
- CategoryItem.ascx control, 220–222
- Comment class, 168–170
- CommentItem.ascx control, 242–243
- Comments table, 159
- configuration module design, 161
- controller design, 174–175
- controller implementation, 199
- CreateArticle action, 207–209
- CreateArticles.aspx view, 235–241
- CreateCategory action, 213–214
- CreateCategory.aspx view, 225–229
- CreateComment action, 217–218
- database table design, 155
- Design section, 153
- EditArticle action, 209–211
- EditCategory action, 214–215
- EditComment action, 218–219
- extending LINQ objects, 187–189
- extending model, 162–163
- features to implement, 153–154
- images included in articles, 172
- implementing configuration module, 176–177
- Index action, 199–201
- Index.aspx view, 246
- LINQ queries, 192–198
- LINQ-to-SQL classes, 181–186
- LINQ-to-SQL schema, 179–181
- ManageArticle action, 205–206
- ManageArticles.aspx view, 233–235
- ManageCategories.aspx view, 222–225
- ManageComments.aspx view, 243–246
- model design, 161–162, 165
- overview of, 151
- page-able collections, creating, 189–191
- Problem section, 151–153
- queries accessing database, 159–161
- RateArticle action, 204–205
- RemoveArticle action, 212–213
- RemoveArticles.aspx view, 241–242

RemoveCategory action, 216–217
 RemoveCategory.aspx view, 229–231
 RemoveComment action, 219–220
 securing the viewing of articles, 191–192
 security and, 176
 Solution section, 176
 summary, 253–254
 table relationships, 177–178
 view design, 170–171
 view implementation, 220
 ViewArticle action, 202–204
 ViewArticle.aspx view, 246–251
 writing articles with WYSIWYG editor, 171–172

news aggregators, 151

newsfeeds, XML index documents, 151

newsletters

background threads, 302–306
 configuration module design, 307–308
 configuring web.config, 310–311
 controller design, 310
 controller implementation, 311
 CreateNewsletter action, 313–314
 CreateNewsletter.aspx view, 320–323
 creating/sending e-mails, 298–301
 database table design, 307
 Design section, 297
 EditNewsletter action, 314–315
 Index action, 312
 Index.aspx view, 323–324
 jQuery for partial view updates, 306–307
 ManageNewsletter.aspx view, 317–319
 ManageNewsletters action, 312–313
 managing long operations on server, 301–302
 model design, 308–309
 model implementation, 311
 NewsletterStatus.ascx control, 319–320
 overview of, 295
 Problem section, 295–296
 RemoveNewsletter action, 317
 SendNewsletter non-action, 315–316
 Solution section, 310
 spam and, 297–298
 summary, 325
 UpdateStatus action, 313
 view design, 309
 view implementation, 317

NewsletterStatus.ascx **control, 319–320**

nonlinear paging, through collection, 189–191

n-tier design. See multi-tier design

O

online payment

options, 377–380
 PayPal as payment service, 380–382

OpenID, distributed authentication system, 88

opinion polls

AddOption action, 273
 AdminSidebar.ascx control, 280
 configuration module design, 260
 configuration module implementation, 263–264
 controller design, 262
 controller implementation, 266
 CreatePoll action, 269–270
 CreatePoll.aspx view, 284–289
 current poll, 292–293
 Design section, 257
 designing database tables for, 259–260
 EditOption action, 273–274
 EditPoll action, 270–271
 features to implement, 257–258
 handling multiple votes, 258–259
 Index action, 266–267
 Index.aspx view, 291–292
 ManagePolls action, 268–269
 ManagePolls.aspx view, 280–284
 model design, 261
 model implementation, 264–266
 overview of, 255
 PollItem.ascx control, 278–280
 PollResultItem.ascx control, 276–278
 Problem section, 255–257
 querying database, 260
 RemoveOption action, 274
 RemovePoll action, 271–272
 RemovePoll.aspx view, 289–290
 SetArchived action, 275
 SetCurrent action, 274–275
 Solution section, 262
 summary, 293
 view design, 261–262
 view implementation, 276
 Vote action, 267–268
 working with database, 262–263

OrderDetail **action, e-commerce controllers, 418–420**

OrderDetail.aspx **view, 387, 456–459**

orders, e-commerce

CompleteOrder action, 403–408
 CompleteOrder.aspx view, 386, 451
 ManageOrder.aspx view, 387, 455–456
 ManageOrders action, 418
 order management views, 455
 order processing views, 446–451
 OrderDetail action, 418–420
 OrderDetail.aspx view, 387, 456–459
 TransactionError.aspx view, 452–454

output options, controller classes and, 78

P

page-level resources

new in ASP.NET 2.0, 464

using, 467–468

paging through collections, linear vs. nonlinear, 189–191

Paint.NET, 35

partial classes

extending objects and, 186

HTML models in ASP.NET, 36

passwords

attach method for database deployment and, 480–481

ChangePassword action method, 123–124

ChangePassword.aspx view, 138–139

ForgotPassword action method, 121–122

ForgotPassword.aspx view, 136–138

not storing in clear text, 97

storage mechanisms, 87–88

payment

online payment options, 377–380

PayPal as payment service, 380–382

payment gateways, 377–380

PayPal, 380–382

performance

best practices for speeding up websites, 57

caching data and, 76

permissions, managing user accounts, 86

personalization

important features of content-based sites, 2

newsletters and, 296

plain-text, sending e-mail and, 299

planning architecture. *See architecture, planning*

policy statements, forums and, 329

poll box, user control for, 257

PollItem.ascx control, 278–280

poll.js, 279–280

PollResultItem.ascx control, 276–278

polls. *See opinion polls*

pop-ups, best practices for presentation layer, 80

Post class, 334

posts, to forums

ClosePost action, 349–350

CreatePost action, 346–349

CreatePost.aspx view, 370–372

designing for, 328

ManagePosts action, 342

ManagePosts.aspx view, 352–356

RemovePost action, 350

ViewPost action, 338–339

ViewPost.aspx view, 365–370

prerequisites, ASP.NET MVC

installing, 13–19

list of, 13

presentation layer (UI). *See also UI (user interface)*

best practices for, 80

layered design and, 65

primary keys

for opinion poll database, 259

table relationships and, 178

Problem section

architectural planning, 63–64

TheBeerHouse project, 1–2

e-commerce store, 375–376

forums, 327–328

localization, 461–462

membership system, 85–86

news, articles, and blogs, 151–153

newsletters, 295–296

opinion polls, 255–257

site deployment, 477–478

site design, 33–34

Problem-Design-Solution approach

Design sections. *See Design section*

overview of, 1

Problem sections. *See Problem section*

Solution sections. *See Solution section*

processes, best practices for presentation layer, 80

product reviews, 327

products, e-commerce store

CreateProduct action, 414–415

CreateProduct.aspx view, 429–433

DeleteProduct action, 417

EditProduct action, 415–417

ManageProducts action, 413

ManageProducts.aspx view, 433–436

ViewProduct action, 399

ViewProduct.aspx views, 441–443

Profile module, ASP.NET, 104

ProfileInformation class

designing models for managing user membership, 110

implementing models for managing user membership, 117

profiles. *See user profiles*

projects, ASP.NET MVC, 25–26

provider model design pattern

designing membership system and, 93–96

migration of legacy systems and, 94

multiple data store support, 67–69

Q

queries

article extension method queries, 163–164

category extension method queries, 164–165

creating LINQ queries for e-commerce store, 395–397

creating LINQ queries for forums, 334–336

creating LINQ queries for news, articles and blogs, 192–198
 that access forum database, 329–330
 that access opinion poll database, 260
 that access the news, articles, and blog database, 159–161

R

RateArticle action, news, articles, and blog controllers, 204–205

RDBMSs (Relational Database Management Systems), 66–67

Really Simple Syndication. See RSS (Really Simple Syndication)

Reenskaug, Trygve, 7

Register.aspx view

MainContent section, 131–132
 membership system views, 130–134
 ScriptContent section, 132–134

register.js, **133**

registration

newsletter members, 297
 Register.aspx view, 130–134
 Registration action method, 119–120

Registration action method, membership system controller, 119–120

Relational Database Management Systems (RDBMSs), 66–67

relationships, between database tables, 177–178

RemoveArticle action, news, articles, and blog controllers, 212–213

RemoveArticles.aspx view, **171, 241–242**

RemoveCategory action, news, articles, and blog controllers, 216–217

RemoveCategory.aspx view, **171, 229–231**

RemoveComment action, news, articles, and blog controllers, 219–220

RemoveForum action, forum controllers, 345–346

RemoveForum.aspx view, **332, 359–360**

RemoveNewsletter action, newsletter controllers, 317

RemoveOption action, opinion poll controllers, 274

RemovePoll action, opinion poll controllers, 271–272

RemovePoll.aspx view, **262, 289–290**

RemovePost action, forum controllers, 350

resource files, creating, 471–475

resources

global, 465–467
 page-level, 467–468

results, controller, 31–32

revenue options, for Web sites, 375

reviewing products, e-commerce and, 327

roles, authorization

CreateRole action method, 129
 DeleteRole action method, 129–130
 ManageRole action method, 129
 ManageRole.aspx view, 147–149
 overview of, 100–102

RSS (Really Simple Syndication)

content syndication with, 151–152
 making content accessible as RSS feed, 154

RSS Bandit, 152

S

Safari browser, Apple, 34

Sandbox, PayPal, 381

screen readers, accessibility and, 40–41

screen-scraping, for data retrieval, 151

ScriptContent section

CreateArticles.aspx view, 238–239
 CreateCategory.aspx view, 228
 CreateForum.aspx view, 358
 CreateNewsletter.aspx view, 322
 CreatePoll.aspx view, 286–287
 CreatePost.aspx view, 371
 ManageNewsletter.aspx view, 319
 ManagePolls.aspx view, 282
 ManagePosts.aspx view, 354
 ManageRole.aspx view, 149
 ManageUser.aspx view, 144–145
 Register.aspx view, 132–134
 ViewForum.aspx view, 365
 ViewPost.aspx view, 368

scripted solution, for database deployment, 479, 486–490

script-injection attacks, 168

search engine optimization (SEO)

making site content accessible to search engines, 152
 overview of, 81–82

Secure Sockets Layer (SSL), 377–378

security

ASP.NET Web-based administration tools for, 107
 attach method for database deployment and, 480
 DAL (data access layer) and, 72–74
 issues in ASP.NET, 75

news, articles, and blog management and, 176

security module, built into MVC framework, 108

selectors, controller, 31–32

SendNewsletter non-action, **315–316**

SEO (search engine optimization)

making site content accessible to search engines, 152
 overview of, 81–82

Server Explorer, Visual Studio 2008, 262–263

servers

- deployment and, 477–478
- managing long operations on, 301–302

SetArchived **action, opinion poll controllers, 275**

SetCurrent **action, opinion poll controllers, 274–275**

sharing

- common behavior among pages, 49–50
- common design between multiple pages, 41–42
- multi-threading and shared resources, 304

shipping methods

- CreateShipping action, 420–421
- DeleteShipping action, 421
- ManageShipping action, 420
- ManageShipping.aspx view, 436–438
- selling products online and, 377

shopping carts

- AddShoppingCartItem action, 401–402
- DeleteShoppingCartItem action, 402–403
- selling products online and, 377
- ViewShoppingCart action, 399–400
- ViewShoppingCart.aspx views, 443–446

ShoppingCart **class, 394–395**

ShoppingCartItem **class, 393**

SidebarContent section

- ManageCategories.aspx view, 225
- ManageForums.aspx view, 352
- ManagePolls.aspx view, 282

Simple Mail Transfer Protocol (SMTP)

- designing configuration module for newsletters, 307
- mail protocol, 298–301

site deployment

- attach method for database deployment, 480–483
- backup and maintenance plan, 483–486
- database deployed to SQL Server 2008, 479
- deploying MVC web site, 491–492
- Design section, 478
- IIS 6 configured for MVC framework, 492–495
- IIS 7 configured for MVC framework, 495–502
- MVC framework applications and, 478
- MVC web application deployment, 479–480
- overview of, 477
- preparing to deploy MVC web applications, 490–491
- Problem section, 477–478
- scripted solution for database deployment, 486–490
- Solution section, 480
- summary, 502

site design

- accessibility and, 48
- avoiding using HTML tables for layout control, 40–41
- content pages, accessing master page from, 44–45
- creating, 52–54
- creating master page, 54–57
- creating style sheets, 57–61
- CSS styles and, 37–40

- Design section, 34–35
- master pages and, 42–44
- navigation system, 46–47
- nesting master pages, 44
- overview of, 33
- Problem section, 33–34
- sharing common design between multiple pages, 41–42
- site layout, 35–36
- Solution section, 50–52
- summary, 61
- switching master pages at runtime, 46
- technologies for implementing design, 36–37
- top-level navigation, 47–48

site statistics, 256

SMTP (Simple Mail Transfer Protocol)

- designing configuration module for newsletters, 307
- mail protocol, 298–301

Solution section, *TheBeerHouse* project, 4–5

Solution section, e-commerce store, 389

- AddShoppingCartItem action, 401–402
- CompleteOrder action, 403–408
- CompleteOrder.aspx view, 451
- configuration module implementation, 392–393
- controller implementation, 397
- CreateDepartment action, 409–411
- CreateDepartment.aspx view, 424–426
- CreateProduct action, 414–415
- CreateProduct.aspx view, 429–433
- CreateShipping action, 420–421
- database construction, 389–391
- DeleteProduct action, 417
- DeleteShipping action, 421
- DeleteShoppingCartItem action, 402–403
- EditDepartment action, 411–412
- EditProduct action, 415–417
- extending LINQ objects, 393–395
- Index action, 398
- Index.aspx view, 438–439
- LINQ queries, 395–397
- ManageDepartment.aspx view, 427–429
- ManageDepartments action, 409
- ManageOrder.aspx view, 455–456
- ManageOrders action, 418
- ManageProducts action, 413
- ManageProducts.aspx view, 433–436
- ManageShipping action, 420
- ManageShipping.aspx view, 436–438
- ManageStore action, 408–409
- ManageStore.aspx view, 422–424
- model implementation, 393
- order management views, 455
- order processing views, 446–451
- OrderDetail action, 418–420
- OrderDetail.aspx view, 456–459

storefront administration views, 421–422
 storefront views, 438
 TransactionError.aspx view, 452–454
 view implementation, 421
 ViewDepartment action, 398–399
 ViewDepartment.aspx views, 440–441
 ViewProduct action, 399
 ViewProduct.aspx views, 441–443
 ViewShoppingCart action, 399–400
 ViewShoppingCart.aspx views, 443–446

Solution section, forums

AdminSidebar.ascx control, 350–351
 ClosePost action, 349–350
 configuration module implementation, 333
 controller implementation, 336
 CreateForum action, 342–343
 CreateForum.aspx view, 356–359
 CreatePost action, 346–349
 CreatePost.aspx view, 370–372
 EditForum action, 343–345
 extending LINQ objects, 334
 Index action, 337
 Index.aspx view, 360–361
 LINQ queries, 334–336
 ManageForums action, 341
 ManageForums.aspx view, 351–352
 ManagePosts action, 342
 ManagePosts.aspx view, 352–356
 model implementation, 333
 overview of, 332
 RemoveForum action, 345–346
 RemoveForum.aspx view, 359–360
 RemovePost action, 350
 view implementation, 350
 ViewForum action, 337–338
 ViewForum.aspx view, 361–365
 ViewPost action, 338–339
 ViewPost.aspx view, 365–370
 Vote action, 340–341

Solution section, localization

creating localized controller, 475–476
 creating localized view, 474–475
 overview of, 471
 resource file creation, 471–474

Solution section, membership system

account box settings, 134
 ChangePassword action method, 123–124
 ChangePassword.aspx view, 138–139
 controller implementation, 119
 CreateRole action method, 129
 database configuration, 115–116
 DeleteRole action method, 129–130
 DeleteUser action method, 127
 EditUser action method, 127–129
 EditUser.aspx view, 145–147

ForgotPassword action method, 121–122
 ForgotPassword.aspx view, 136–138
 GetErrorMessage helper method, 120–121
 initial setup, 113–115
 Login.aspx view, 134–136
 ManageRole action method, 129
 ManageRole.aspx view, 147–149
 ManageUser.aspx view, 142–145
 ManageUsers action method, 126–127
 model implementation, 117–119
 overview of, 112
 Register.aspx view, 130–134
 Registration action method, 119–120
 UserProfile action method, 124–126
 UserProfile.aspx view, 139–142
 view implementation, 130

Solution section, news, articles, and blogs

AdminSidebar.ascx control, 222
 ArticleItem.ascx control, 231–233
 Atom syndication view, 251–253
 CategoryIndex actions, 201–202
 CategoryIndex.aspx view, 246
 CategoryItem.ascx control, 220–222
 CommentItem.ascx control, 242–243
 controller implementation, 199
 CreateArticle action, 207–209
 CreateArticles.aspx view, 235–241
 CreateCategory action, 213–214
 CreateCategory.aspx view, 225–229
 CreateComment action, 217–218
 EditArticle action, 209–211
 EditCategory action, 214–215
 EditComment action, 218–219
 extending LINQ objects, 187–189
 implementing configuration module, 176–177
 Index action for displaying published articles, 199–201
 Index.aspx view, 246
 LINQ queries, 192–198
 LINQ-to-SQL classes, 181–186
 LINQ-to-SQL schema, 179–181
 ManageArticle action, 205–206
 ManageArticles.aspx view, 233–235
 ManageCategories.aspx view, 222–225
 ManageComments.aspx view, 243–246
 overview of, 176
 page-able collections, creating, 189–191
 RateArticle action, 204–205
 RemoveArticle action, 212–213
 RemoveArticles.aspx view, 241–242
 RemoveCategory action, 216–217
 RemoveCategory.aspx view, 229–231
 RemoveComment action, 219–220
 securing the viewing of articles, 191–192
 table relationships, 177–178

Solution section, news, articles, and blogs (continued)

view implementation, 220
ViewArticle action, 202–204
ViewArticle.aspx view, 246–251

Solution section, newsletters

configuring web.config, 310–311
controller implementation, 311
CreateNewsletter action, 313–314
CreateNewsletter.aspx view, 320–323
EditNewsletter action, 314–315
Index action, 312
Index.aspx view, 323–324
ManageNewsletter.aspx view, 317–319
ManageNewsletters action, 312–313
model implementation, 311
NewsletterStatus.ascx control, 319–320
overview of, 310
RemoveNewsletter action, 317
SendNewsletter non-action, 315–316
UpdateStatus action, 313
view implementation, 317

Solution section, opinion polls, 262

AddOption action, 273
AdminSidebar.ascx control, 280
configuration module implementation, 263–264
controller implementation, 266
CreatePoll action, 269–270
CreatePoll.aspx view, 284–289
current poll, 292–293
EditOption action, 273–274
EditPoll action, 270–271
Index action, 266–267
Index.aspx view, 291–292
ManagePolls action, 268–269
ManagePolls.aspx view, 280–284
model implementation, 264–266
PollItem.ascx control, 278–280
PollResultItem.ascx control, 276–278
RemoveOption action, 274
RemovePoll action, 271–272
RemovePoll.aspx view, 289–290
SetArchived action, 275
SetCurrent action, 274–275
view implementation, 276
Vote action, 267–268
working with database, 262–263

Solution section, site deployment

attach method for database deployment, 480–483
backup and maintenance plan, 483–486
IIS 6 configured for MVC framework, 492–495
IIS 7 configured for MVC framework, 495–502
MVC application deployment, 491–492
overview of, 480
preparing to deploy MVC web applications, 490–491
scripted solution for database deployment, 486–490

Solution section, site design process, 50–52

creating master page, 54–57
creating site design, 52–54
creating style sheet, 57–61

sorting comments, 169–170

spam, newsletters and, 297–298

SQL (Structured Query Language), 69–71

SQL injection attaches, 72–74

SQL Server

ASP.NET MVC prerequisites, 13, 15–16
choosing as RDBMS, 66–67
deploying database to SQL Server 2008, 479
exploring default SQL Server data store, 98–100

SQL Server Management Studio. See SSMS (SQL Server Management Studio)

SqlMembershipProvider, 96–97

SSL (Secure Sockets Layer), 377–378

SSMS (SQL Server Management Studio)

ASP.NET MVC prerequisites, 13
attach database using, 480
importing existing data into database, 486–490
setting up backup plan in, 483

Stat Counter, 256

statistics services, Web sites, 256

stock availability, product sales and, 376

storage mechanisms, passwords, 87–88

store departments. See departments, e-commerce store

storefront administration views

CreateDepartment.aspx view, 424–426
CreateProduct.aspx view, 429–433
ManageDepartment.aspx view, 427–429
ManageProducts.aspx view, 433–436
ManageShipping.aspx view, 436–438
ManageStore.aspx view, 422–424
overview of, 421–422

storefront views

Index.aspx view, 438–439
overview of, 438
ViewDepartment.aspx views, 440–441
ViewProduct.aspx views, 441–443
ViewShoppingCart.aspx views, 443–446

Structured Query Language (SQL), 69–71

subscriptions

as revenue option, 375
storing subscription data, 297
subscriber incentives, 296

symmetric encryption, passwords and, 87

syndication, Atom, 173–174, 251–253

System.Collections.Generic.Enumerable
class, 165

System.Globalization.CultureInfo, 463

System.Net.Mail namespace, 298

System.Web.Routing class, 103

System.Web.Security.Membership class

methods, 89–90
 MSDN Library for class details, 91–92
 System.Web.Security.MembershipUser **class**
 methods and properties, 90–92
 MSDN Library for class details, 91–92
 System.Web.Security.Roles **class**
 methods, 101
 MSDN Library for class details, 102

T

tables, database

Articles table, 157–159
 Categories table, 156–157
 Comments table, 159
 designing for e-commerce store, 382–383
 designing for forums, 329
 designing for membership system, 109
 designing for news, articles, and blogs, 155
 designing for newsletters, 307
 designing for opinion polls, 259–260
 naming, 155
 relationships between, 177–178

tables, HTML

avoiding use of HTML tables for layout control, 40–41
 best practices for presentation layer, 80

technologies, for implementing site design, 36–37

TempData **property**, views, 28–29

Template Monster, 36

templates, for site design, 36

testing frameworks, 21

text editors, writing articles with WYSIWYG editor, 171–172

threads

background threads, 302–306
 forums and, 328

TinyMCE, 171–172, 328

top-level navigation, 47–48

transaction

management, 78
 preservation, 383–384

TransactionDataRequest **method**, CompleteOrder **action**, 404–406

TransactionError.aspx **view**
 e-commerce views, 387
 order processing views, 452–454

transparent collection enumerator, 191–192

U

UI (user interface)

best practices for presentation layer, 80
 importance of appearance, 2
 JavaScript integration, 82–83
 layered design and, 65

presentation layer (UI) and, 79
 search engine optimization, 81–82
 views and, 80–81

unit testing

BLL and, 74
 options available during project creation, 21

updates, partial view updates for newsletters, 306–307

UpdateStatus **action**, newsletter controllers, 313

URL routes, controller and, 30–31

user interface. *See UI (user interface)*

user profiles

accessing, 106
 anonymous user support, 106–107
 defined, 86
 DeleteUser **action method**, 127
 EditUser **action method**, 127–129
 EditUser.aspx **view**, 145–147
 ManageUser.aspx **view**, 142–145
 ManageUsers **action method**, 126–127
 profiling user information, 104–106
 UserProfile **action method**, 124–126
 UserProfile.aspx **view**, 139–142
 UserInformation **class**
 designing models for managing user membership, 110
 implementing models for managing user membership, 117

username, database deployment an, 480–481

UserProfile **action method**, membership system **controllers**, 124–126

UserProfile.aspx **view**, 139–142

users. *See also membership system*

account box settings, 134
 communication features of content-based sites, 3
 managing user accounts, 86

user-to-user communication

importance of, 327
 uses of opinion polls, 255

V

ViewArticle **action**, news, articles, and blog **controllers**, 202–204

ViewArticle.aspx **view**, 170, 246–251

ViewData **property**, views, 28

ViewDepartment **action**, e-commerce controllers, 398–399

ViewDepartment.aspx **view**, 386, 440–441

ViewForum **action**, forum controllers, 337–338

ViewForum.aspx **view**, 331, 361–365

ViewMasterPage, 27–28

ViewPage, 27–28

ViewPost **action**, forum controllers, 338–339

ViewPost.aspx **view**, 331, 365–370

ViewProduct **action**, e-commerce controllers, 399

ViewProduct.aspx **view**, 386, 441–443

views

- in Atwood's example, 9
- author's definition, 9
- creating localized, 474–475
- default view during project creation, 22
- HTML and AJAX extension methods and, 29
- jQuery for partial view updates, 306–307
- overview of, 26
- Reenskaug's definition of, 8
- TempData property, 28–29
- user interface, 80–81
- view engines, 26–27
- ViewData property, 28
- ViewMasterPage, ViewPage, and ViewUserControl, 27–28

views, e-commerce store

- CompleteOrder.aspx view, 451
- CreateDepartment.aspx view, 424–426
- CreateProduct.aspx view, 429–433
- designing, 386–387
- implementing, 421
- Index.aspx view, 438–439
- ManageDepartment.aspx view, 427–429
- ManageOrder.aspx view, 455–456
- ManageProducts.aspx view, 433–436
- ManageShipping.aspx view, 436–438
- ManageStore.aspx view, 422–424
- order management views, 455
- order processing views, 446–451
- OrderDetail.aspx view, 456–459
- storefront administration views, 421–422
- storefront views, 438
- TransactionError.aspx view, 452–454
- ViewDepartment.aspx views, 440–441
- ViewProduct.aspx views, 441–443
- ViewShoppingCart.aspx views, 443–446

views, forums

- AdminSidebar.ascx control, 350–351
- CreateForum.aspx view, 356–359
- CreatePost.aspx view, 370–372
- designing, 331–332
- implementing, 350
- Index.aspx view, 360–361
- ManageForums.aspx view, 351–352
- ManagePosts.aspx view, 352–356
- RemoveForum.aspx view, 359–360
- ViewForum.aspx view, 361–365
- ViewPost.aspx view, 365–370

views, membership system

- account box settings, 134
- ChangePassword.aspx view, 138–139
- designing, 110–111
- EditUser.aspx view, 145–147
- ForgotPassword.aspx view, 136–138
- implementing, 130

- Login.aspx view, 134–136
- ManageRole.aspx view, 147–149
- ManageUser.aspx view, 142–145
- Register.aspx view, 130–134
- UserProfile.aspx view, 139–142

views, news, articles, and blogs

- AdminSidebar.ascx control, 222
- ArticleItem.ascx control, 231–233
- Atom syndication view, 251–253
- CategoryIndex.aspx view, 246
- CategoryItem.ascx control, 220–222
- CommentItem.ascx control, 242–243
- CreateArticles.aspx view, 235–241
- CreateCategory.aspx view, 225–229
- designing, 170–171
- implementing, 220
- Index.aspx view, 246
- ManageArticles.aspx view, 233–235
- ManageCategories.aspx view, 222–225
- ManageComments.aspx view, 243–246
- RemoveArticles.aspx view, 241–242
- RemoveCategory.aspx view, 229–231
- ViewArticle.aspx view, 246–251

views, newsletters

- CreateNewsletter.aspx view, 320–323
- designing, 309
- implementing, 317
- Index.aspx view, 323–324
- ManageNewsletter.aspx view, 317–319
- NewsletterStatus.ascx control, 319–320

views, opinion polls

- AdminSidebar.ascx control, 280
- CreatePoll.aspx view, 284–289
- current poll, 292–293
- designing, 261–262
- implementing, 276
- Index.aspx view, 291–292
- ManagePolls.aspx view, 280–284
- PollItem.ascx control, 278–280
- PollResultItem.ascx control, 276–278
- RemovePoll.aspx view, 289–290

ViewShoppingCart action, e-commerce controllers, 399–400

ViewShoppingCart.aspx view, 386, 443–446

ViewUserControl, 27–28

Virtual Terminals, PayPal and, 380

visual site design. *See site design*

Visual Studio 2008

- LINQ-to-SQL designer in, 71–72
- localization support in, 464
- opening first ASP.NET MVC project, 19–25
- Server Explorer, 262–263
- tools for creating login and administration pages, 89

Visual Web Developer 2008 Express, 13–15

Vote action

forum controllers, 340–341
 opinion poll controllers, 267–268

votes, handling multiple votes in opinion polling, 258–259

W

W3C

RSS and, 151
 XHTML and, 48

WCAG (Web Content Accessibility Guidelines), 48

Web browsers

best practices for presentation layer, 80
 search engine optimization and, 81
 site design and browser compatibility, 34

Web Content Accessibility Guidelines (WCAG), 48

Web Forms. See ASP.NET Web Forms

Web sites

best practices for speeding up, 57
 companion site for this book, xxv
 deploying. *See site deployment*
 designing. *See site design*

list of features in content-based sites, 2–3
 revenue options, 375
 statistics services, 256
 uses of opinion polls on, 255

web.config file

configuring, 310–311
 configuring membership providers, 95
 environment resources saved in, 78–79
 modifying when deploying MVC web applications, 480

WebFormViewEngine, 26–27

WebKit Project, 34

Website Payments Standard option, PayPal, 381

Windows authentication, 88

Windows Server 2008, as hosting server, 478

WYSIWYG editors, 171–172

X

XHTML, 48

XML

data store options, 66
 newsfeeds, 151