

Contents

Introduction	xvii
Acknowledgments	xxv
Chapter 1: Introduction to ASP.NET 2.0	1
A Little Bit of History	2
The Goals of ASP.NET 2.0	2
Developer productivity	3
Administration and management	6
Performance and scalability	7
Device-specific code generation	8
Additional New Features of ASP.NET 2.0	9
New developer infrastructures	9
New compilation system	15
Additions to the page framework	15
New objects for accessing data	18
New server controls	18
A New IDE for Building ASP.NET 2.0 Pages	19
Summary	21
Chapter 2: Visual Studio 2005	23
The Document Window	23
Views in the Document Window	23
The tag navigator	25
Page tabs	25
Code change status notifications	26
Error notifications and assistance	27
The Toolbox	29
The Solution Explorer	31
The Server Explorer	33
The Properties Window	33
Lost Windows	34
Other Common Visual Studio Activities	34
Creating new projects	35
Making references to other objects	35

Contents

Using smart tags	37
Saving and importing Visual Studio settings	38
Summary	40
Chapter 3: Application and Page Frameworks	41
Application Location Options	41
Built-in Web server	41
IIS	43
FTP	44
Web site requiring FrontPage Extensions	45
The ASP.NET Page Structure Options	45
Inline coding	47
New code-behind model	49
New Page Directives	51
New attributes	51
New directives	52
New Page Events	53
Cross-Page Posting	54
New Application Folders	61
\Code folder	61
\Themes folder	66
\Resources folder	66
Compilation	69
Summary	73
Chapter 4: New Ways to Handle Data	75
The New Data Source Controls	75
The Data-Bound Server Controls	76
The SqlDataSource and GridView Controls	77
Reading data	77
Applying paging in the GridView	79
Sorting rows in the GridView control	82
Defining bound columns in the GridView control	83
Enabling the editing of rows in the GridView control	87
Deleting data from the GridView	92
Dealing with other column types in the GridView	93
The AccessDataSource and DetailsView Controls	96
Selecting which fields to display in the DetailsView control	101
Using the GridView and DetailsView together	103
Updating, inserting, and deleting rows	105

XmlDataSource Control	109
ObjectDataSource Control	114
SiteMapDataSource Control	116
DataSetDataSource Control	117
Visual Studio 2005	118
Connection Strings	123
Summary	124
Chapter 5: Site Navigation	127
<hr/>	
Site Maps	128
SiteMapPath Server Control	130
The PathSeparator property	132
The PathDirection property	134
The ParentLevelsDisplayed property	134
The ShowToolTips property	135
The SiteMapPath control's child elements	135
TreeView Server Control	136
Identifying the TreeView control's built-in styles	138
Examining the parts of the TreeView control	139
Binding the TreeView control to an XML file	140
Selecting multiple options in a TreeView	142
Specifying custom icons in the TreeView control	145
Specifying lines used to connect nodes	147
Working with the TreeView control programmatically	150
Menu Server Control	156
Applying different styles to the Menu control	157
Menu Events	163
Binding the Menu control to an XML file	163
SiteMap Data Provider	165
SiteMapViewType	165
StartingNodeType	166
SiteMap API	168
Summary	171
Chapter 6: Working with Master Pages	173
<hr/>	
Why Do You Need Master Pages?	173
The Basics of Master Pages	176
Coding a Master Page	177
Coding a Content Page	180
Mixing page types and languages	184
Specifying which master page to use	186

Contents

Working with the page title	186
Working with controls and properties from the master page	187
Specifying Default Content in the Master Page	194
Nesting Master Pages	196
Container-Specific Master Pages	199
Event Ordering	200
Caching with Master Pages	201
Summary	201
Chapter 7: Themes and Skins	203
Using ASP.NET 2.0 Packaged Themes	203
Applying a theme to a single ASP.NET page	204
Applying a theme to an entire application	205
Applying a theme to all applications on a server	206
Removing themes from server controls	206
Removing themes from Web pages	207
Removing themes from applications	208
Creating Your Own Themes	208
Creating the proper folder structure	208
Creating a skin	209
Including CSS files in your themes	211
Having your themes include images	214
Defining Multiple Skin Options	218
Programmatically Working with Themes	220
Assigning the page's theme programmatically	220
Assigning a control's SkinID programmatically	220
Themes and Custom Controls	221
Summary	223
Chapter 8: Membership and Role Management	225
Authentication	226
Authorization	226
ASP.NET 2.0 Authentication	226
Setting up your Web site for membership	226
Adding users	229
Asking for credentials	236
Working with authenticated users	240
Showing the number of users online	242
Dealing with passwords	244

ASP.NET 2.0 Authorization	247
Using the LoginView server control	248
Setting up your Web site for role management	249
Adding and retrieving application roles	252
Deleting roles	255
Adding users to roles	256
Getting all the users of a particular role	256
Getting all the roles of a particular user	258
Removing users from roles	259
Checking users in roles	259
Using the Web Site Administration Tool	261
Summary	262
Chapter 9: Personalization	263
The Personalization Model	263
Creating Personalization Properties	264
Adding a simple personalization property	265
Using personalization properties	266
Adding a group of personalization properties	270
Using grouped personalization properties	271
Defining types for personalization properties	271
Using custom types	272
Providing default values	275
Making personalization properties read-only	275
Anonymous Personalization	275
Enabling anonymous identification of the end user	275
Working with anonymous identification events	278
Anonymous options for personalization properties	279
Migrating Anonymous Users	279
Personalization Providers	281
Working with the Access personalization provider	281
Working with the SQL Server personalization provider	282
Using multiple providers	289
Summary	290
Chapter 10: Portal Frameworks and Web Parts	291
Introducing Web Parts	291
Building Dynamic and Modular Web Sites	293
Introducing the WebPartManager control	293
Working with zone layouts	294

Contents

Understanding the WebPartZone control	298
Explaining the WebPartPageMenu control	301
Modifying zones	310
Working with Classes in the Portal Framework	317
Summary	322
<hr/> Chapter 11: SQL Cache Invalidation	<hr/> 323
Caching in ASP.NET 1.0/1.1	323
Output caching	323
Partial page caching	324
Data caching using the Cache object	324
Cache dependencies	324
ASP.NET 2.0 unseals the CacheDependency class	325
Using the SQL Server Cache Dependency	325
Enabling databases for SQL Server cache invalidation	326
Enabling tables for SQL Server cache invalidation	327
Looking at SQL Server	327
Looking at the tables that are enabled	329
Disabling a table for SQL Server cache invalidation	329
Disabling a database for SQL Server cache invalidation	330
Configuring your ASP.NET Application	331
Testing SQL Server Cache Invalidation	332
Adding more than one table to a page	334
Attaching SQL Server cache dependencies to the Request object	334
Attaching SQL Server cache dependencies to the Cache object	335
Summary	339
<hr/> Chapter 12: Additional New Controls	<hr/> 341
BulletedList Server Control	341
HiddenField Server Control	346
FileUpload Server Control	348
MultiView and View Server Controls	351
Wizard Server Control	355
Customizing the side navigation	357
Examining the AllowReturn attribute	357
Working with the StepType attribute	357
Adding a header to the Wizard control	358
Working with the Wizard's navigation system	359
Utilizing Wizard control events	360

DynamicImage Server Control	361
Working with images from disk	361
Resizing images	363
Displaying images from streams	364
ImageMap Server Control	366
Summary	368
Chapter 13: Changes to ASP.NET 1.0 Controls	369
<hr/>	
Label Server Control	369
Button, LinkButton, and ImageButtonServer Controls	371
DropDownList, ListBox, CheckBoxList, and RadioButtonList Server Controls	372
Image Server Control	374
Table Server Control	374
Literal Server Control	376
AdRotator Server Control	376
Panel Server Control	380
Validation Server Controls	382
Summary	386
Chapter 14: Administration and Management	387
<hr/>	
The MMC ASP.NET Snap-In	387
General	389
Custom Errors	390
Authorization	391
Authentication	393
Application	394
State Management	395
Advanced	397
ASP.NET Web Site Administration Tool	399
Home	401
Security	402
Profile	403
Application	404
Provider	405
Managing the Site Counter System	407
Summary	410
Chapter 15: Visual Basic 8.0 and C# 2.0 Language Enhancements	413
<hr/>	
Overview of Changes	413
Generics	414

Contents

Iterators	419
Anonymous Methods	421
Operator Overloading	422
Partial Classes	422
Visual Basic XML Documentation	425
New Visual Basic Keywords	426
Continue	426
Using	428
My	428
Global	429
Summary	429
Index	431