

# ASP.NET Using Visual Basic 2005: Additional Topics

## Table of Contents

INTRODUCTION .....	INTRO-1
Prerequisites .....	INTRO-2
Installing the Practice Files .....	INTRO-3
Software Requirements .....	INTRO-3
Installation .....	INTRO-3
The Chapter Files .....	INTRO-3
Sample Database .....	INTRO-3
Mobile Emulators .....	INTRO-4
Security .....	INTRO-5
About the Authors .....	INTRO-6
READING AND WRITING XML USING THE XML DOM .....	17-1
Getting Started.....	17-2
Introducing the XML Document Object Model .....	17-3
Investigating the Sample File.....	17-5
Reading XML Data .....	17-8
Load XML Data .....	17-8
Work with a Node's Children.....	17-10
Iterate through All Nodes .....	17-12
Retrieve Element Nodes .....	17-15
Retrieve Just Text Nodes.....	17-18
Working with Nodes .....	17-20
Retrieve Nodes Matching a Criterion .....	17-20
Searching with XML Namespaces .....	17-23
Retrieve a Reference to a Particular Node .....	17-26
Navigate to Related Nodes .....	17-27
Retrieve Attributes of a Node.....	17-28
Creating and Modifying XML .....	17-32
Create XML Programmatically .....	17-32
Add or Delete Elements .....	17-36
Remove All Nodes and Attributes .....	17-39
Add or Delete Attributes.....	17-39
Modify the Value of an Element .....	17-41
Modify the Value of an Attribute.....	17-42
Dealing with Errors .....	17-44
Determine if XML Isn't Well Formed .....	17-44

Handle XML Loading Errors.....	17-45
LAB 17: READING AND WRITING XML USING THE XML DOM .....	17-51
Lab 17 Overview.....	17-52
Read Data from an XML File .....	17-54
Modify and Save XML Data .....	17-58
DEBUGGING.....	18-1
Using the Visual Debugger .....	18-2
New Debugging Features .....	18-2
Configuring Debugging .....	18-3
Setting Breakpoints.....	18-5
Stepping Through Code.....	18-6
Debugging Exceptions and Handling Errors.....	18-21
The Exception Assistant .....	18-21
Redirecting Users .....	18-22
Debugging Client-Side Scripts.....	18-25
Configuring Script Debugging.....	18-25
Debugging Script in Resource Files.....	18-28
Debugging Stored Procedures .....	18-30
Creating a Database Project.....	18-30
Working with Data Connections.....	18-32
Debugging Stored Procedures.....	18-32
LAB 18: DEBUGGING.....	18-39
Lab 18 Overview .....	18-40
Debugging Code.....	18-41
Redirecting Users .....	18-43
ASP.NET PROFILE FEATURES.....	19-1
Introducing Profiles .....	19-2
Profile's Strongly Typed Access .....	19-4
Storing Profile Data.....	19-5
Considering Profiles.....	19-6
Configuring Profiles .....	19-8
Setting Up Web.config .....	19-8
Using Custom Types.....	19-11
Using SQL Server for Profile Storage .....	19-12
Modifying Provider Behavior .....	19-14
Investigating the Sample Site .....	19-17

Working with Anonymous Profiles .....	19-29
Enabling Anonymous Profiles .....	19-29
Identifying Anonymous Users .....	19-30
Enabling Specific Properties for Anonymous Users .....	19-32
Migrating Anonymous Users .....	19-33
Creating a Custom Profile Provider .....	19-37
Examining the Custom Profile Provider .....	19-40
Comparing Profiles and Session State .....	19-47
LAB 19: ASP.NET PROFILE FEATURES .....	19-51
Lab 19 Overview .....	19-52
Add Profile Properties .....	19-53
Add Anonymous Profile Support .....	19-60
Migrate Anonymous Profile Information .....	19-63
TRACING .....	20-1
ASP.NET Trace .....	20-2
Page-Level Tracing .....	20-2
Application-Level Tracing .....	20-6
Instrumenting with Trace Listeners .....	20-11
The WebPageTraceListener .....	20-21
Health Monitoring with Web Events .....	20-26
Working with the TraceFinished Event .....	20-26
Sending Web Event Data to SQL Server .....	20-28
Using the SqlWebEventProvider .....	20-31
Providers, Rules, and Event Mappings .....	20-31
Viewing Event Data .....	20-32
LAB 20: TRACING .....	20-39
Lab 20 Overview .....	20-40
Implement Page-Level Tracing .....	20-41
Work with Programmatic Tracing .....	20-43
Configure Application-Level Tracing .....	20-44
CREATING NEW CONTROLS .....	21-1
Two Kinds of User-Defined Controls .....	21-2
Creating a User Control .....	21-3
A More Complex User Control .....	21-6
Investigating the User Control .....	21-7

Providing States Data .....	21-7
User Control Properties .....	21-8
User Control Events .....	21-10
Testing the User Control .....	21-11
Why Not Stop Here? .....	21-13
Creating a Custom Control .....	21-14
Investigating the StateDropDownList Control .....	21-19
Rendering the Control .....	21-20
Control Properties .....	21-28
Managing Property Behavior Using Attributes .....	21-30
Working with Postback Data .....	21-32
Specifying a Toolbox Icon .....	21-38
Finishing Touches .....	21-39
What's Next? .....	21-41
LAB 21: CREATING NEW CONTROLS .....	21-45
Lab 21 Overview .....	21-46
Render the Control's HTML .....	21-48
Add Control Properties .....	21-52
Add Postback and Event Support .....	21-56
Add the Final Touches (Optional) .....	21-60
EMPOWERING USERS WITH WEB PARTS .....	22-1
The Evolution of Web Parts .....	22-2
Web Parts in Action .....	22-3
Personalization in Browse Mode .....	22-3
Design and Edit Modes .....	22-6
Catalog Mode .....	22-7
Connect Mode .....	22-9
Custom Properties and Menus .....	22-11
Web Part Server Controls .....	22-14
WebPartManager .....	22-14
ProxyWebPartManager .....	22-15
WebPartZone .....	22-15
CatalogZone .....	22-16
EditorZone .....	22-17
ConnectionsZone .....	22-18
Coding Web Parts .....	22-19
Controlling a Page's Display Mode .....	22-19
Controlling Personalization Scope .....	22-22

Resetting Personalization Data.....	22-24
Coding Connections.....	22-26
User Controls as Web Parts .....	22-28
Custom Controls as Web Parts.....	22-31
LAB 22: EMPOWERING USERS WITH WEB PARTS.....	22-39
Lab 22 Overview .....	22-40
Enabling a Page to Support Web Parts .....	22-41
Adding Web Part Properties to a User Control .....	22-45
CREATING MOBILE WEB APPLICATIONS .....	23-1
A Big Problem, and a Solution.....	23-2
Introducing ASP.NET Mobile Controls.....	23-3
Testing Mobile Pages .....	23-3
How Do the ASP.NET Mobile Controls Work? .....	23-6
Looking at the Code.....	23-20
Investigating the ASP.NET Mobile Controls .....	23-22
Container Controls .....	23-22
Transfer Controls .....	23-23
Text Display Controls.....	23-27
List and Selection Controls .....	23-29
Validation Controls.....	23-40
Image Display Controls.....	23-43
Miscellaneous Controls.....	23-43
LAB 23: CREATING MOBILE WEB APPLICATIONS .....	23-51
Lab 23 Overview .....	23-52
Create the Mobile Web Page.....	23-53
Add ObjectList Data Handling.....	23-57
Add a Custom Command .....	23-61
ADVANCED CACHING TECHNIQUES .....	24-1
ASP.NET Caching Review .....	24-2
Declarative Output Caching .....	24-2
New Caching Features in 2.0.....	24-4
Testing Caching in Visual Studio 2005 .....	24-5
Programmatic Page Caching.....	24-6
The Caching Object Model .....	24-6
Caching Static Pages Programmatically .....	24-7
Caching Data .....	24-9

Using Cache.Add and Cache.Insert.....	24-9
Controlling Expiration.....	24-9
Caching Data with Dependencies.....	24-10
Expiring a Cached Item when Data Changes.....	24-14
Polling for Changes to a Table.....	24-14
Polling for Changes to Query Results.....	24-21
Using SQL Server 2005 Query Notifications for Caching .....	24-23
LAB 24: ADVANCED CACHING TECHNIQUES.....	24-31
Lab 24 Overview.....	24-32
Configure Output Caching with Code .....	24-33
Configure Polling-Based Caching.....	24-34
Configure a Data Source Control to Cache Data with Query Notifications .....	24-37
INDEX.....	INDEX-1