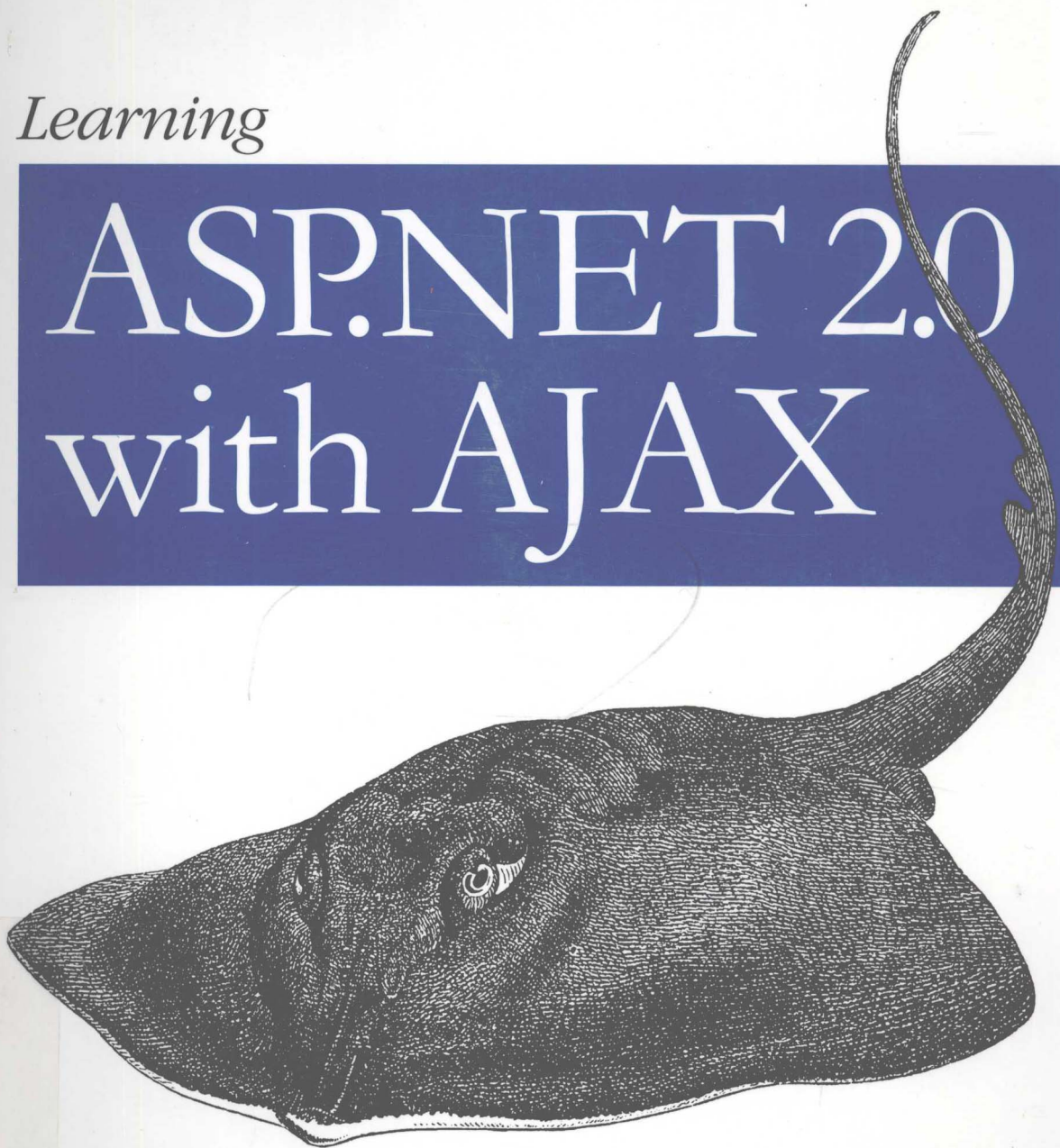


学习ASP.NET 2.0与AJAX (影印版)

Learning

ASP.NET 2.0 with AJAX



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*Jesse Liberty, Dan Hurwitz
& Brian MacDonald 著*

学习 ASP.NET 2.0 与 Ajax (影印版)

Learning ASP.NET 2.0 with AJAX

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Jesse Liberty, Dan Hewitt &
Brian MacDonald

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Preface

ASP.NET 2.0 with AJAX is arguably the fastest, most efficient, most reliable and best supported way to create interactive web applications available today. Combined with the development tools available from Microsoft, both free and commercial, it is incredibly easy to create web sites that look great and perform well. Best of all, most of the “plumbing” (security, data access, layout, and so on) is taken care of for you by the .NET Framework.

About This Book

This book will teach you how to build professional quality, interactive, robust data-driven web applications using Visual Basic 2005. In addition, your applications will be highly interactive and data driven—must-have features in today’s feature-rich web world.

ASP.NET is not difficult. All of the concepts are straightforward, and the Visual Studio and Visual Web Developer environments simplify the process of building powerful web applications. The difficulty in ASP.NET is only that it is so complete and flexible that there are many pieces that must be woven together to build a robust, scalable, and efficient application. This book cuts to the heart of the matter, showing in clear, easy-to-follow steps, how to understand and build a web site.

Because there are three authors’ names on this book, you might be concerned that the tone will be uneven. Every possible measure has been taken to avoid this. Although each chapter was originally written by one author, they were edited by all three. Every chapter was then extensively edited and rewritten by me, Jesse Liberty, to give the book a single voice. If that weren’t enough, the chapters were subsequently edited by O’Reilly editors as well as independent tech editors, and once more by the authors. The bottom line is that while three individuals wrote this book, you should find it reads as if written by just one. This system has worked well with my previous books. If not, please be sure to let me know by dropping a note in my support forum (<http://forums.delphiforums.com/JesseLiberty>).

About This Series

O'Reilly Learning books are written and designed for anyone who wants to build new skills and who prefers a structured approach to studying. Each title in this series makes use of learning principles that we (with your help) have found to be best at equipping you with the knowledge you need for joining that new project, for coping with that unexpected assignment from your manager, or for learning a new language in a hurry.

To get the most out of any book in the Learning series, we recommend you work your way through each chapter in sequence. You'll find that you can get a quick grasp of a chapter's content by reading the instructional captions we've written for its examples and figures. You can also use the chapter Summary to preview its key takeaways and to review what you have learned. Most chapters feature a sample application, and, if you learn best by reading code, you can turn to the complete source listing that appears just before the Summary. To bridge any gaps in your knowledge, check out the Cheat Sheets. Finally, to help you test your mastery of the material in each chapter, we conclude with a Brain Builder section, which includes a short quiz and some hands-on exercises.

Learning books work with you as you learn—much as you would expect from a trusted colleague or instructor—and we strive to make your learning experience enjoyable. Tell us how we've done by sending us praise, brickbats, or suggestions for improvements to learning@oreilly.com.

Learning or Programming?

We have written two ASP.NET books: the one you are currently reading and another named *Programming ASP.NET 2.0*. This book, *Learning ASP.NET 2.0 with AJAX* is intended for beginning ASP.NET developers, and answers the question: "What is the quickest way for me to build real web applications with the least handcoding?"

Our other book, *Programming ASP.NET* is for developers who are saying: "Help me learn—in depth; show how everything works, and then help me put it to work in web applications." The key difference is this book is aimed to make you productive quickly, while the second book is designed to explore the technology in detail. They complement each other, but if you are starting out and want to get to work fast, *this* is the one for you.

Learning ASP.NET 2.0 with Ajax assumes you know some HTML and have either some familiarity with Visual Basic 2005 (VB) or C#, or can pick up what you need along the way. (Or you're willing to run right out and buy *Programming Visual Basic 2005* by Jesse Liberty, although for what you'll be doing here, you won't really need it). To help with this, we have included VB Cheat Sheets throughout the book to explain and clarify some of the VB topics for newbies.

VB Versus C#

A quick note on Visual Basic versus C#: Some people choose a .NET book based on what language the examples are given in. That's a natural reaction, but it's really not necessary, and here's why: There is very little actual VB or C# code in any given ASP.NET program, and what there is, you can easily translate from one to the other "on inspection." Besides, the two languages are strikingly similar. If you know one, it's quite simple to learn the other. In fact, there are software tools that can convert one language to the other with amazing accuracy. Finally, ASP.NET programmers benefit terrifically by being "bilingual"—that is, having the ability to read VB and write C# (or vice versa).

How This Book Is Organized

Chapter 1, *Getting Started*, walks you through creating your first web site, *HelloWorld*.

Chapter 2, *Building Web Applications*, goes over the fundamentals of web sites and covers the basic controls available to you in ASP.NET.

Chapter 3, *Snappier Web Sites with AJAX*, shows you how to integrate this powerful client-side technology into your pages.

Chapter 4, *Saving and Retrieving Data*, shows you how to make your site interact with data stored in a database. You have controls to retrieve data, allow your users to interact with that data, and then save it back to the database.

Chapter 5 looks at *Validation*. ASP.NET provides extensive support for data validation, including ensuring that a choice has been made, checking that values are within a range, and matching regular expressions.

Chapter 6, *Style Sheets, Master Pages, and Navigation*, shows you how to make web sites that are professional quality, good looking, consistent, and easy to navigate.

Chapter 7 examines *State and Life Cycle* in ASP.NET. Understanding how, and in what order, a page and its controls are created on the server and rendered to the browser is crucial for building successful interactive web sites. State is the current value of everything associated with the page. This is mostly handled automatically, but this chapter shows you how useful it can be to the developer.

Poop happens. Chapter 8, *Errors, Exceptions, and Bugs, Oh My!*, shows you how to deal with unexpected problems, and also how to debug your application.

Chapter 9, *Security and Personalization*, shows how you can protect your web site from malicious users. A related topic is personalization, which allows your end users to customize the look and feel of the web site according to their personal preferences. You will see how to use themes and skins to accomplish this.

Chapter 10, *Putting It All Together*, is a single, large example that integrates everything you have learned throughout the book.

Appendix A, *Installing the Applications*, tells you what hardware and software is required to run the examples in this book, and helps you set up your environment.

Appendix B, *Copying a Web Site*, describes the process of copying a web site to a new web site. This is a technique used often throughout this book when building up examples.

Appendix C, *Answers to Quizzes and Exercises*, presents detailed solutions to all the quiz questions and practice exercises found at the end of each chapter.

Conventions Used in This Book

The following font conventions are used in this book:

Italic

Used for pathnames, filenames, program names, Internet addresses, such as domain names and URLs, and new terms where they are defined.

Constant Width

Used for command lines and options that should be typed verbatim, and names and keywords in program examples. Also used for parameters, attributes, expressions, statements, and values.

Constant Width Italic

Used for replaceable items, such as variables or optional elements, within syntax lines or code.

Constant Width Bold

Used for emphasis within program code examples.

Pay special attention to notes set apart from the text with the following icons:



This is a tip. It contains useful supplementary information about the topic at hand.



This is a warning. It helps you solve and avoid annoying problems.

Support: A Note from Jesse Liberty

I provide ongoing support for my books through my web site. You can obtain the source code for all of the examples in *Learning ASP.NET* at:

<http://www.LibertyAssociates.com>

There, you'll also find access to a book support discussion group that has a section set aside for questions about *Learning ASP.NET*. Before you post a question, however, please check my web site to see if there is a Frequently Asked Questions (FAQ) list or an errata file. If you check these files and still have a question, then please go ahead and post it to the discussion center. The most effective way to get help is to ask a precise question or to create a small program that illustrates your area of concern or confusion, and be sure to mention which edition of the book you have (this is the first edition).

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From Jesse Liberty

I am particularly grateful to John Osborn who has shepherded all my work through O'Reilly as well as the editors and production folk at O'Reilly who (as always) made this book so much more than what we originally created.

From Dan Hurwitz

In addition to the people mentioned by Jesse, as always I especially want to thank my wife for being so supportive of this project. It sounds trite and repetitious, but it would not be possible without her help.

From Brian MacDonald

My thanks, first and foremost, go to Jesse and Dan for inviting me to be a part of this project. My deepest appreciation goes to John Osborn for getting me involved with O'Reilly in the first place, many years ago now. Thanks as well to Dan Maharry for his technical feedback, especially on the exercises. Finally, thanks to my wife, Carole, who provided technical as well as emotional support, and to my son, Alex. You both put up with a lot of my absences while I worked on this book, and I thank you for it.

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Colophon

The animal on the cover of *Learning ASP.NET 2.0 with AJAX* is a pelagic stingray (*Pteroplatygon violacea*). The pelagic stingray is found worldwide in temperate to tropical seas, in both open bays and deep ocean waters. While many other varieties of rays live near the sandy ocean floor, the pelagic stingray primarily swims in open water. It has many small sharp teeth and is sometimes seen feeding upside-down or using its pectoral fins to push food into its mouth. It eats crustaceans, jellyfish, octopus, squid, and small fish such as mackerel and herring.

Pelagic stingrays can grow up to five feet long and almost three feet wide. This is small relative to other rays, which can be as long as 14 feet, yet is substantial enough that its only predators are large marine creature, such as hammerhead and oceanic whitetip sharks. Its coloring, dark purple or gray on top with a paler underside, serves to camouflage the stingray from predators above. The pelagic stingray wards off these predators with serrated, venomous spines, which protrude about one-third of the way down its tail.

Pups, or baby stingrays, are born in small litters after a two- to four-month gestational period. At birth, they are between 6 and 10 inches long, and they are able to feed and take care of themselves. Though pelagic stingrays are often caught unintentionally in fishing nets, they are not currently endangered, and some scientists have noted a recent increase in pelagic stingray populations.

The cover image is from Dover's *Animals*. The cover font is Adobe ITC Garamond. The text font is Linotype Birka; the heading font is Adobe Myriad Condensed; and the code font is LucasFont's TheSans Mono Condensed.

Table of Contents

Cheat Sheets	xiii
Preface	xv
1. Getting Started	1
Hello World	2
Creating a New Web Site	2
Creating HelloWorld	6
Making the HelloWorld Web Site Interactive	8
What You Just Did	13
Summary	13
Brain Builder	15
2. Building Web Applications	17
Mastering Web Site Fundamentals	17
The Page	17
Controls	19
Code-Behind Files	22
Events and Postbacks	22
Synchronous and Asynchronous Postbacks	23
The Page Load event and synchronous postback	26
Adding asynchronous postbacks	29
Controls	31
Organizing the Properties Window	32
Finding properties with IntelliSense	32
Basic Controls	33

Creating Tables	36
Setting Properties	39
Selection Controls	40
Panels	41
Selection Controls	41
Adding controls with the Item editor	42
Adding items in Source View	43
More Selection Controls	46
Displaying Text	48
Images	51
Links	52
LinkButtons	53
Source Code	54
Summary	59
Brain Builder	61
3. Snappier Web Sites with AJAX	65
Take a Walk on the Client Side	65
ScriptManager	67
Extending Controls with the Control Toolkit	72
TextBoxWaterMarkExtender	72
PopupControlExtender	76
CollapsiblePanelExtender	82
Source Code Listing	87
Summary	92
Brain Builder	93
4. Saving and Retrieving Data	96
Getting Data from a Database	97
Binding Data Controls	97
Create a Sample Web Page	99
Using a DataSource Control	99
“Pay No Attention to That Man Behind the Curtain”	105
Using the GridView Control	107
Auto-Generated Code	109
Adding Insert, Update, and Delete Statements	112

Displaying and Updating the Data	116
Take It for a Spin	118
Modifying the Grid Based on Events	119
Selecting Data from the GridView	123
Passing Parameters to the SELECT Query	125
Source Code Listings	128
Summary	136
Brain Builder	137
5. Validation	142
Validation Controls	143
The RequiredFieldValidator	144
The Summary Control	152
The Compare Validator	154
Checking the Input Type	156
Comparing to Another Control	157
Range Checking	159
Regular Expressions	160
Custom Validation	162
Summary	164
Brain Builder	166
6. Style Sheets, Master Pages, and Navigation	170
Styles and Style Sheets	170
Cascading Style Sheets	171
Inline Styles	171
Pros and cons	173
Document-Level Styles	173
Pros and cons	174
External Style Sheets	175
Master Pages	180
Creating a Master Page	182
Adding Content Pages	184
Using Nested Master Pages	187
Changing the Master Page at Runtime	191

Navigation	196
Buttons and HyperLinks	196
Menus and Bread Crumbs	200
Site Maps	203
Using Sitemaps	206
TreeView	206
Customizing the look and feel of the TreeView	207
Replacing the TreeView with a menu control	208
Accessing site map nodes programmatically	209
Bread Crumbs	212
Summary	214
Brain Builder	217
7. State and Life Cycle	221
Page Life Cycle	221
State	227
View State	228
Session State	238
Application State	244
Summary	245
Brain Builder	247
8. Errors, Exceptions, and Bugs, Oh My!	250
Creating the Sample Application	250
Tracing	253
Page-Level Tracing	254
Inserting into the Trace Log	256
Debugging	259
The Debug Toolbar	260
Breakpoints	261
Setting a breakpoint	261
Breakpoint window	261
Breakpoint properties	262
Breakpoint icons	265
Stepping Through Code	266
Examining Variables and Objects	268
Debug Windows	268