Build a Web Site

Microsoft®

Visual Web Developer 2005

Express Edition

立即构建网

Jim Buyens

na Edition

lished by Shanghai World Publishing Corporation

Microsoft[®]



图书在版编目(CIP)数据

Microsoft Visual Web Developer 2005 Express Edition: 立即构建网站:英文/(美)拜耶斯著.

一上海:上海世界图书出版公司,2007.6

ISBN 978 -7 -5062 -8329 -8

I. M··· Ⅱ. 拜··· Ⅲ. 主页制作 - 程序设计 - 英文 IV. TP393.092

中国版本图书馆 CIP 数据核字(2007)第 082321 号

© 2007 by Microsoft Corporation. All rights reserved.

Original English language edition © 2006 by Microsoft Corporation. All rights reserved. Published by arrangement with the original publisher, Microsoft Corporation, Redmond, Washington, U.S.A.

Microsoft Visual Web Developer 2005 Express Edition: 立即构建网站

[美]吉姆・拜耶斯 著

上海平的 * 4 版 * 5 重印发行 上海市尚文路 185 号 B 楼 邮政编码 200010 (公司电话:021 - 63783016 转发行部) 上海市印刷七厂印刷 如发现印装质量问题,请与印刷厂联系 (质检科电话:021 - 63113060) 各地新华书店经销

开本:960×787 1/16 印张:13 字数:375 000 2007 年 6 月第 1 版 2007 年 6 月第 1 次印刷 ISBN 978 -7 -5062 -8329 -8 /T・154 图字:09 -2007 -443 号 定价:80.00 元 http://www.wpcsh.com

Introduction

Congratulations on your interest in Microsoft Visual Web Developer 2005 Express Edition. This exciting new software brings two of Microsoft's most powerful technologies—ASP.NET 2.0 and Visual Studio 2005—within reach of anyone who creates Web sites.

Visual Web Developer is a fully functional subset of Visual Studio 2005 suitable for creating and maintaining a wide range of Web sites over time. It's certainly not a crippled or limited time demo version. Instead, it's a key Microsoft initiative for bringing the power of Visual Studio and ASP.NET not only to professional programmers, but to hobbyists and entrepreneurs as well.

Who Is This Book For?

This book is primarily for people who've already designed and deployed a Web site or two, but found the process or the tools limiting. For example, they may have found features such as these difficult to implement:

- Reliable, reusable, and active page templates and page segments.
- Easy-to-use dynamic menus, expandable tree views, or breadcrumbs.
- Fast, flexible, and easy ways of working with databases.
- Controlled access to portions of a site, with or without self-registration.

ASP.NET 2.0 has built-in controls that provide these features and yet, in many cases, require no program code at all.

dimerces

What's more, you can add and configure these controls entirely through Visual Web Developer's graphical interface. Visual Web Developer, like Visual Studio, has world class editors for graphical design and for working with code of all kinds. Its features for working with HTML, CSS, and XML are no less than its power for working with sophisticated program code.

If this is the kind of power you crave, or if you're ready to advance from legacy ASP to ASP.NET and need a place to get started, this is the book for you.

How This Book Is Organized

The book consists of sixteen chapters plus two bonus chapters on the companion Web site. (See "Bonus Material" below.) Although each chapter describes a specific technology or feature, the exercises do build on skills and results from earlier in the book. As a result, you should plan on reading the material sequentially.

Bonus Material

Two additional chapters, Chapter 17, Controlling Access to Your Site and Chapter 18, Displaying Web Parts, are provided on the companion Web site at http://www.microsoft.com/mspress/companion/0-7356-2212-4/.

Conventions and Features in This Book

This book presents information using conventions designed to make the information readable and easy to follow. Before you start the book, read the following list, which explains conventions you'll see throughout the book and points out helpful features in the book that you might want to use.

Conventions

- Each exercise is a series of tasks. Each task is presented as a series of numbered steps (1, 2, and so on). Each exercise is preceded by a procedural heading that lets you know what you will accomplish in the exercise.
- Notes labeled "Tip" provide additional information or alternative methods for completing a step successfully.
- Notes labeled "Caution" alert you to information you need to check before continuing.
- Text that you type or items you select or click appear in bold.
- Menu commands, dialog box titles, and other user interface elements appear with each word capitalized.
- A plus sign (+) between two key names means that you must press those keys at the same time. For example, "Press Alt+Tab" means that you hold down the Alt key while you press the Tab key.

Other Features

- Shaded sidebars throughout the book provide more in-depth information about the content. The sidebars might contain background information, design tips, or features related to the information being discussed.
- Each chapter ends with an In Summary... section that briefly reviews what you learned in the current chapter and previews what the next chapter will present.

System Requirements

You'll need the following hardware and software to complete the exercises in this book:

- Microsoft Windows XP with Service Pack 2, Microsoft Windows Server 2003 with Service Pack 1, or Microsoft Windows 2000 with Service Pack 4
- Microsoft Visual Web Developer 2005 Express Edition
- PC with a Pentium III-class processor, 600 MHz Recommended: 1 GHz
- 128 MB RAM (256 MB or more recommended)
- 16.4 MB hard disk space for sample files
- Video (800 x 600 or higher resolution) monitor with at least 256 colors (1024 x 768 High Color 16-bit recommended)
- CD-ROM or DVD-ROM drive
- Microsoft Mouse or compatible pointing device

You'll also need administrator access to your computer to configure SQL Server 2005 Express.

Obtaining the Sample Web Site

To obtain a sample Web site incorporating the examples, browse the book's companion content page at the following address:

http://www.microsoft.com/mspress/companion/0-7356-2212-4/

To download and install this site, follow the procedure titled, "To Obtain And Install the Sample Files For This Book," in Chapter 1.

Running the Exercises and Sample Web Site

ASP.NET is a technology that runs primarily on a Web sever. You'll need a Web server to test and run the examples in each chapter, and of course the completed sample Web site.

Fortunately, Visual Web Developer comes with its own integrated Development Web Server. Both the exercises and the completed sample Web site presume you'll be using this facility. Therefore, there's no need to install or access a full copy of Internet Information Server (IIS).

NOTE

The CD-ROM packaged in the back of this book contains the Visual Web Developer 2005 Express Edition software needed to complete the exercises in this book.

NOTE

Visual Web Developer's built-in Web server is accessible only from the local computer. Any server that delivers the finished Web site will need a full copy of IIS.

NOTE

Although you can develop Web sites using SQL Server 2005 Express Edition, you, your IT department, or your host will need a full copy of SQL Server for delivering the site to visitors.

The exercises in Chapters 13 through 16 (and Chapters 17 and 18 on the companion site) require that SQL Server 2005 Express Edition (or SQL Server 2005) be installed on the same computer as Visual Web Developer. If you install your software from the Companion CD, this will be the default. Because the exercises and sample Web site use a new SQL Server 2005 feature called *user instancing*, no special security configuration is necessary.

Removing the Sample Web Site

To remove the sample Web site from your computer, follow these steps:

- 1 In Control Panel, open Add Or Remove Programs.
- From the list of Currently Installed Programs, select Microsoft Visual Web Developer 2005 Express Edition: Build A Web Site Now!
- 3 Click Remove.
- 4 Follow any further instructions that appear.

Prerelease Software

This book was reviewed and tested against the August 2005 Community Technical Preview (CTP) of Visual Studio 2005. The August CTP was the last preview before the final release of Visual Studio 2005. This book is expected to be fully compatible with the final release of Visual Studio 2005. If there are any changes or corrections for this book, they'll be collected and added to a Microsoft Knowledge Base article. See the "Support for this Book" section in this Introduction for more information.

Technology Updates

As technologies related to this book are updated, links to additional information will be added to the Microsoft Press Technology Updates Web page. Visit this page periodically for updates on Visual Studio 2005 and other technologies.

http://www.microsoft.com/mspress/updates/

Support for This Book

Every effort has been made to ensure the accuracy of this book and the companion content. As corrections or changes are collected, they'll be added to a Microsoft Knowledge Base article. To view the list of known corrections for this book, visit the following article:

http://support.microsoft.com/kb/905041

Microsoft Press provides support for books and companion content at the following Web site:

http://www.microsoft.com/learning/support/books/

Questions and Comments

If you have comments, questions, or ideas regarding the book or the companion content, or questions that are not answered by visiting the sites above, please send them to Microsoft Press via e-mail to

mspinput@microsoft.com

or via postal mail to

Microsoft Press

Attn: Visual Web Developer 2005 Express Edition Build a Web Site Now Editor

One Microsoft Way

Redmond, WA 98052-6399

Please note that Microsoft offers no software product support through these addresses.

About the Author

Jim Buyens

Jim Buyens has been professionally involved with the World Wide Web since its inception, including roles as a server administrator, Web master, content developer, system developer, and system architect. He has many years of experience in the telecommunications industry, and is also an acclaimed Microsoft Most Valuable Professional (MVP) who contributes extensively to the Microsoft Online FrontPage Communities.

Jim received a Bachelor of Science degree in Computer Science from Purdue University in 1971 and a Master of Business Administration from Arizona State University in 1992. When not enhancing the Web or writing books, he enjoys traveling and attending professional sports events—especially NHL hockey. He resides with his family in Phoenix.

Other books by Jim Buyens include:

- Microsoft Windows SharePoint Services Inside Out, March, 2005, Microsoft Press
- Microsoft Office FrontPage Version 2003 Inside Out, August, 2003, Microsoft Press
- Faster Smarter Beginning Programming, November, 2002, Microsoft Press
- Web Database Development Step by Step .NET Edition, June, 2002, Microsoft Press

Troubleshooting Microsoft FrontPage 2002, May, 2002, Microsoft Press

dImades

- Microsoft FrontPage Version 2002 Inside Out, May, 2001, Microsoft Press
- Web Database Development Step by Step, June, 2000, Microsoft Press
- Running Microsoft FrontPage 2000, June, 1999, Microsoft Press
- Stupid Web Tricks, July, 1998, Microsoft Press
- Running Microsoft FrontPage 98, October, 1997, Microsoft Press
- Building Net Sites with Windows NT—An Internet Services Handbook, July 1996, Addison-Wesley Developers Press

Dedication

This book is dedicated to the homeless mentally-ill persons of America. Why do we lavish health care dollars on victims of other, less debilitating illnesses while condemning these unfortunates to the streets and gutters?

Contents

Introducing Microsoft Visual Web Developer			
2005 Express Edition	1		
What to Expect From This Book	2		
Deciding Whether Visual Web Developer is the	_		
Product for You	3		
What You'll Need for Testing	4		
Choosing a Provider for Your Public Web Site			
Dealing with ISO Image Files	7		
Approaching the User Interface	8		
Chapter 2 Presenting the ASP.NET 2.0 Programming			
Model	13		
Model Following a Web Page Through ASP.NET 2.0	13 14		
Following a Web Page Through ASP.NET 2.0	14		
Following a Web Page Through ASP.NET 2.0 A Hierarchy of Controls	14 16		

	Company and the same
Chapter 3	
Creating a New Web Site	23
Choosing Where to Put the Working Copy	
of Your Site	24
Creating an Empty Web Site	25
Creating a File System Web Site	25
Creating a Local IIS Web Site	27
Creating a Remote IIS Web Site	29
Creating an FTP-Accessible Web Site	31
Chapter 4	
Opening an Existing Web Site	35
Opening a Recently-Used Web Site	36
Opening an Arbitrary Web Site	37
Opening a File System Web Site	37
Opening a Local IIS Web Site	38
Opening an FTP-Accessible Web Site	39
Opening a Remote Web Site	40
Chapter 5	
Copying Your Web Site	45
Specifying the Source and Remote Web Sites	46
Selecting and Copying Files	47

What do you think of this book?
We want to hear from you!

Microsoft is interested in hearing your feedback about this publication so we can continually improve our books and learning resources for you. To participate in a brief online survey, please visit: www.microsoft.com/learning/booksurvey/

Chapter 6		Chapter 8	
Creating and Modifying Web Pages	51	Creating and Using Web User Controls	85
Working with Web Page Views	53	Creating and Designing Web User Controls	86
Adding Controls	54	Adding Web User Controls to a Page	88
Adding Controls from the Toolbox	54	Using Web User Controls Effectively	90
Adding Tables and Layers from the Menu Bar	57	Understanding Web User Control Tags	90
Adding Controls from Solution Explorer	57	Using CSS Styles in Web User Controls	91
Setting Control Properties	58	Adjusting Relative URLs	91
Setting Properties with the Properties Window	58	Coding Attributes for Web User Controls	92
Setting Properties with the Mouse	61		
Setting Properties with Smart Tags	63	Chapter 9	
Setting Properties with the Format Menu	63	Using Master Pages to Centralize	
Setting Properties with Toolbars	64	Page Layout	95
Adding or Modifying Hyperlinks	65	Creating a Master Page	96
		Applying Master Pages to Content Pages	100
Chapter 7		Using Master Pages Effectively	103
Working with Source Code	67	Looking Inside Master Pages	104
Using the Text Editor	68	Modifying Existing Pages to Use Master Pages	104
Using Outlining	69	Adjusting Relative URLs	106
Using Split View	71	Modifying Header Information	106
Using Go To, Bookmarks, and the Task List	72		
Making Sense of IntelliSense	73	Chapter 10	
Detecting Syntax Errors	76	Using Cascading Style Sheets	107
Finding and Replacing Text	77		
Formatting Source Code	80	Formatting Page Elements Individually	108
Locating More Editing Commands	82	Using Named Styles Across Several Pages	109
Storing, Compiling, and Publishing Program Code	82	Creating a New Style Sheet File	109
		Creating Style Sheet Rules	109
		Adding Properties to Style Sheet Rules	112
		Using Shared Styles in Your Web Pages	113

Chapter 11 Controlling Appearance with ASP.NET Themes Creating ASP.NET Themes Adding Skins to an ASP.NET Theme Adding CSS Style Sheets to an ASP.NET Theme Applying Themes to Pages and Sites	115 116 116 119 120	Chapter 15 Maintaining Database Information Using a GridView Control to Update and Delete Records Using a DetailsView Control to Add Records Chapter 16 Publishing Your Database	165 166 169
Chapter 12 Linking the Pages in Your Site Automatically Creating a Site Map for Your Web Site Creating Drop-Down and Fly-Out Menus Creating Tree View Menus Providing Breadcrumbs	125 126 131 133 134	Copying a SQL Server Database Understanding and Connecting to SQL Server Using Connection Strings Sharing a Single Copy of SQL Server Administering Shared SQL Servers Server Instances User Instances Attaching Database Files	174 175 177 182 182 182 183 184
Chapter 13 Creating and Connecting to Databases Administering Data Access Connecting to an Existing Database Creating a New Database Adding and Modifying Database Tables Viewing and Updating Database Table Content	137 138 138 142 143 146	Understanding Logins How Visual Web Developer Uses SQL Server	184 185
Chapter 14 Displaying Database Information Using Data Sources Configuring Data Sources Displaying Database Information Configuring a GridView Control	149 150 151 155 157		

Table of Contents

What to Expect from This Book, 2

Deciding Whether Visual Web Developer is the Product for You, 3

What You'll Need for Testing, 4

Choosing a Provider for Your Public Web Site, 5

Dealing with ISO Image Files, 7

Approaching the User Interface, 8

Congratulations on your interest in Microsoft Visual Web Developer Express Edition. This incredible software makes it very easy for hobbyists, enthusiasts, and non-professional Web developers to start using Microsoft ASP.NET 2.0, the world's premier technology for creating and running Web sites.

Does the idea of using ASP.NET scare you? Well, with the arrival of ASP. NET 2.0, it needn't. Although release 2.0 has many enhancements targeted primarily at professional programmers, it also provides simple and elegant ways of implementing some of the most challenging yet popular features on the Web—without requiring a single line of program code! For example, you can:

- Create dynamic drop-down or fly-out menus.
- Surround the variable content on each page with dynamic content from a so-called master page.
- Code a site map once and then use it to create menus and breadcrumb trails on each page.
- Query, create, update, and delete database records.
- Close portions of your site except to registered visitors.
- Let individual visitors customize the way they view your site. This includes not only the site's visual appearance but also—to the extent you want—the layout and content of specific pages.

Although none of this requires any program code, it does require adding some special XML tags to your Web pages. But even here, Microsoft keeps things simple. With Visual Web Developer you can implement many ASP.NET features (generally the most popular ones) in pure graphical design view. That means no looking at HTML, no looking at obscure XML tags, and certainly no looking at program code.

Of course, if you want to look at (or even write!) HTML code, XML code, or program code, Visual Web Developer provides great ways of doing just that. Because it's based on Microsoft Visual Studio [®] 2005—the premier environment for professional programmers—Visual Web Developer Express comes with the largest, most powerful, and easiest-to-use selection of code editors you're likely to find anywhere. And yes, if you start a project in Visual Web Developer, you can continue it in products like Microsoft Visual Basic [®] .NET Standard Edition, Microsoft C# Standard Edition, or any of the full Visual Studio products.

What to Expect From This Book

This book assumes you're already familiar with the basic workings of the World Wide Web and with some typical Windows applications such as Microsoft Office. For example, it assumes you know how to create ordinary ("flat") HTML pages and link them into a Web site.

Even though Visual Web Developer is a subset of Visual Studio 2005 (a sophisticated programming tool) the book also assumes that you *don't* want to write your own HTML, XML, or program code. Instead, the book explains how to get professional ASP.NET 2.0 results using only the graphical Web page editor.

If you do want to write your own code, rest assured that the book will show you how to view and modify the code that the graphical interface creates. The details of any code you write, however, will be up to you. If you want to learn about the Visual Basic .NET, C#, or J# programming languages, about ASP.NET, or about the .NET framework in general, you'll need to find a separate book on the topic you want, or explore the online information at http://msdn.microsoft.com.

Finally, the book will concentrate on using features new to ASP.NET 2.0. Presumably, these are the features that attracted you to Visual Web Developer in the first place. As to the older features, the procedures for using them are about the same as for the newer ones. Once you understand using the new features, using the older ones should be fairly intuitive.

Deciding Whether Visual Web Developer is the Product for You

Microsoft designed Visual Web Developer specifically for non-professional programmers who want to develop Web sites that use the features of ASP.NET 2.0. If this is your situation, Visual Web Developer is the product for you.

Of course, no one product can be best for all people, and in all situations. Here are some scenarios where other products might be a better choice:

- In theory, you could use Visual Web Developer to create Web sites that don't use any ASP.NET features. That is, you could use it strictly as an HTML editor. This, however, forgoes the strong points of the product. If all you want is an HTML editor, you might prefer a simpler product dedicated to that task.
- In theory, you could also use Visual Web Developer to create ASP.NET 1.1 Web sites. This, however, would be difficult because Visual Web Developer won't stop you from using the new features in ASP.NET 2.0. If you need to build Web sites that use ASP.NET 1.1, you'll probably find it easier to use Microsoft Visual Studio 2003 or Microsoft ASP.NET Web Matrix.
- Visual Web Developer can't create Windows desktop applications. If you need to create Windows applications, obtain the 2005 Express Edition of Visual Basic, C#, C++, or J#, graduate to the Standard version of those languages, or invest in a full version of Visual Studio.

Further Reading

To learn more about ASP.NET 2.0, C#, Visual Basic .NET, or SQL Server™ Express, consider these books from Microsoft Press®:

- Microsoft Visual C#® 2005 Express Edition: Build a Program Now!, by Patrice Pelland
- Microsoft ASP.NET 2.0 Programming Step By Step, by George Shepherd
- Microsoft Visual Basic 2005
 Step by Step, by Michael
 Halvorson
- Microsoft Visual C# 2005 Step by Step, by John Sharp
- Developing Database
 Applications with Microsoft
 SQL Server 2005 Express
 Step by Step, by Jackie
 Goldstein



Professional and expert programmers are likely to need the high-end tools and features that full versions of Visual Studio provide. For example, Microsoft Visual Studio 2005 Professional Edition can create many more kinds of software, and Microsoft Visual Studio 2005 Team System has special features that support teams of software developers working on the same project.

What You'll Need for Testing

Although it creates HTML, CSS, and JavaScript code that runs on the browser, ASP.NET is primarily a server-side technology. It:

- 1. Reads Web pages and other files from the Web server's file system.
- 2. Runs program code to access server-based resources and modify the current Web page.
- 3. Sends the modified Web page to the visitor.

As a result, to test an ASP.NET page you really need a Web server. If you have Microsoft Internet Information Server (IIS, Microsoft's premier Web server) and ASP.NET 2.0 installed on your PC, you can certainly use those resources for testing. But if you don't, Visual Web Developer will use its own built-in mini-Web server. Visual Web Developer starts this Web server the first time you browse or debug a page, and stops it when you quit Visual Web Developer.

Visual Web Developer fully supports one and only one type of database: Microsoft SQL Server. If the prospect of using SQL Server seems daunting, consider these facts:

- Visual Web Developer has full built-in graphical support for creating, viewing, modifying, and deleting SQL Server databases, tables, and fields. As a result, you can perform these tasks without using external programs such as Microsoft SQL Enterprise Manager or Microsoft Access.
- You don't need to buy a copy of SQL Server for your own PC. SQL Server 2005 Express Edition is perfectly sufficient for developing your Web site, and it's a free download.

■ Microsoft has made SQL Server databases as easy to upload as Access databases. The entire SQL Server database resides in one file (with a .dbf filename extension) that you can upload to your hosting provider. In many cases, simply browsing your Web site will then attach your database (that, is make it available) to the copy of SQL Server that services your site. Providers who don't support this feature can initially attach the database for you.

Choosing a Provider for Your Public Web Site

Although Visual Web Developer includes its own Web server, and although SQL Server 2005 Express is perfectly adequate for development and testing, your production Web site will need full copies of:

- Microsoft Windows® 2000 Server or Microsoft Windows Server™ 2003.
- IIS.
- ASP.NET 2.0.
- Microsoft SQL Server 2000 or Microsoft SQL Server 2005.

If your current hosting provider can't supply all these capabilities, you'll probably need to find a new provider. One place to look for a new provider is the Hosters Providing ASP.NET page at:

http://msdn.microsoft.com/asp.net/info/hosters/default.aspx

The following sites may also be useful when searching for an ASP.NET 2.0 hosting provider:

- Locate a Web Presence Provider (Microsoft FrontPage®)

 http://www.microsoft.com/office/frontpage/prodinfo/partner/wpp.asp
- Windows Host List (Automation Tools, LLC) http://www.windowshostlist.com/hostlist.aspx
- Web Hosting Resource and Directory (Affinity Internet Inc.) http://www.tophosts.com/



What about ASP.NET Web Matrix?

ASP.NET Web Matrix is an unsupported tool that Microsoft released to help evaluators, hobbyists, and enthusiasts get started building ASP.NET 1.0 and 1.1 applications. It has no direct relationship to any Visual Studio product.

Visual Web Developer, by contrast, is a direct member of the Visual Studio 2005 family. As a result, much of the support, attention, and advice you find for Visual Studio will apply to Visual Web Developer as well.

During development,
Microsoft integrated many of
the lessons learned, feedback,
and top features from ASP.NET
Web Matrix into Visual Web
Developer.

