



Welcome to the Visual Basic[®] 2008 programming language and the world of Microsoft[®] Windows[®], and Internet and web programming with Microsoft's .NET 3.5 platform! At Deitel & Associates, we write programming language textbooks and professional books for Prentice Hall, deliver corporate training courses worldwide and develop Web 2.0 Internet businesses. This book, which is part of our *Simply* series, has been updated based on Visual Studio 2008 and .NET 3.5. Our goal was to write a book that focuses on core concepts and features while keeping the discussion as simple as possible. The book is intended for readers using Windows Vista[®] or Windows[®] XP.

To achieve this goal, we implemented an innovative teaching methodology. We present the core concepts of leading-edge computing technologies using the tutorial-based, APPLICATION-DRIVEN approach, combined with the DEITEL[®] signature LIVE-CODE approach of teaching programming using complete, working, real-world applications. We merged the notion of a lab manual with that of a conventional textbook, creating a book that works well in a traditional classroom setting or with students sitting at computers and building each example application as they read the tutorials. The book is also appropriate for online distance learning courses.

As students work through the tutorials, they learn about visual programming, graphical-user-interface (GUI) components, file processing, database processing and web-based applications development. Most sections are followed by self-review questions with answers, so that students receive immediate feedback.

All of this has been carefully reviewed by distinguished academics, industry developers and Microsoft Visual Basic team members who worked with us on *Simply Visual Basic 2008[®], Third Edition*.

We believe that this book and its support materials provide students and professionals with an informative, interesting, challenging and entertaining Visual Basic educational experience. We provide a suite of ancillary materials that help instructors maximize their students' learning experience.

As you read the book, if you have questions, send an e-mail to

deitel@deitel.com

and we'll respond promptly. For updates on this book and its supporting Visual Basic software, visit

www.deitel.com/books/SimplyVB2008/

Sign up for the free DEITEL[®] BUZZ ONLINE e-mail newsletter at

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and check out our growing list of Visual Basic and related Resource Centers at

www.deitel.com/ResourceCenters.html

Each week we announce our latest Resource Centers in the newsletter.

New and Updated Features in Simply Visual Basic 2008, Third Edition

Here are some of our key updates to the third edition of *Simply Visual Basic 2008*:

- **LINQ.** Many Microsoft technical evangelists say that LINQ (Language-Integrated Query) is the single most important new feature in Visual Basic 2008 and Visual C# 2008. LINQ provides a uniform syntax for querying data, and it enables insert, update and delete operations. Strong typing enables Visual Studio to provide *IntelliSense* support for LINQ operations and results. LINQ can be used on different types of data sources, including collections (LINQ to Objects, Tutorials 20, 21 and 23), databases (LINQ to SQL, Tutorials 24 and 30) and XML (LINQ to XML, Tutorial 32). Many of the new Visual Basic language features we cover were introduced to support LINQ.
- **Databases.** We use real-world applications to teach the fundamentals of database programming using the free Microsoft SQL Server Express Edition. Tutorials 24 and 30 discuss database and LINQ to SQL fundamentals, presented in the context of an address-book desktop application and a web-based bookstore application, respectively. Tutorial 24 also demonstrates using the Visual Studio tools to build a GUI that uses LINQ to SQL to access the database.
- **Windows Presentation Foundation (WPF) GUI and Graphics.** Graphics make applications fun to create and use. In our introduction to graphics, Tutorial 26, we discuss Graphical Device Interface (GDI+)—the Windows service that provides the graphical features used by Windows Forms applications in Visual Studio 2008—to teach students to print a personalized bank check. We extend our coverage of GUI and graphics (in Tutorial 27) with an introduction to Windows Presentation Foundation (WPF)—Microsoft’s new framework that integrates GUI, graphics and multimedia capabilities. We present a WPF-based painting application to demonstrate WPF GUI and graphics capabilities.
- **ASP.NET 3.5 and ASP.NET AJAX Case Study.** We present a sequence of four tutorials in which the student builds a web-based bookstore application, complete with AJAX functionality. Tutorial 28 discusses the ASP.NET Development Server (which enables you to test your web applications on your local computer), multitier architecture and simple web transactions. Tutorials 29–31 use ASP.NET 3.5 and LINQ to build an application that retrieves information from a database and displays it in a web page. We use the new `LinqDataSource` from a web application to manipulate a database. We use ASP.NET AJAX controls to add AJAX functionality to web applications to improve their responsiveness—in particular, we use the `UpdatePanel` control to perform partial page updates.
- **Silverlight.** In Tutorial 32, we introduce Silverlight, Microsoft’s technology for building Rich Internet Applications (RIA). Silverlight, a competitor to Adobe’s Flash and Flex technologies, allows programmers to create visually stunning user interfaces for web applications using .NET languages such as Visual Basic. Silverlight is a subset of WPF that runs in a web browser using a plug-in. Many large media companies have begun to use Silverlight because it can stream high-definition video.
- **XML Axis Properties.** Visual Basic 2008 has many new features that integrate XML with the language. In Tutorial 32, we use so-called XML axis properties to manipulate the XML returned from a web service.
- **Conditional If Expressions.** Visual Basic provides a new conditional If expression (introduced in Tutorial 7), which consists of a condition, a true expression and a false expression. It tests its condition, then evaluates to its

true or false expression based on the truth or falsity of the condition. This can be used as shorthand notation for some If...Then...Else statements.

- **Local Type Inference.** When you initialize a local variable in its declaration, you can now omit the variable's type—the compiler infers it from the variable's initializer value (introduced in Tutorial 11).
- **Optional Parameters.** You can specify method parameters with default values—if a corresponding method argument is not provided in the method call, the compiler inserts the optional parameter's default value in the call (introduced in Tutorial 13).
- **Object Initializers.** When creating a new object, you can use the new object initializer syntax to assign values to the new object's properties (introduced in Tutorial 23).
- **“Quick Fix” Window.** The IDE now provides an **Error Correction Options** window that enables you to quickly fix certain common programming errors (introduced in Tutorial 5).

Pedagogic Features in Simply Visual Basic 2008, Third Edition

This book is loaded with pedagogic features, including:

- **APPLICATION-DRIVEN Tutorial Approach.** Each tutorial uses a contemporary, real-world application to teach programming concepts. The examples and exercises are up-to-the-minute with common desktop, Internet and web applications. An alphabetical list of these applications appears in Fig. 1. Most examples have a business, home or personal focus. At the beginning of each tutorial, students “test-drive” the completed application so they can see how it works. Then they build the application by following detailed, step-by-step instructions. The book concentrates on the principles of good software engineering and stresses program clarity.
- **LIVE-CODE Approach.** This book emphasises LIVE-CODE examples. Each tutorial ends with the complete, working program code, and the students can run the application that they just created. We call this method of teaching and writing the **LIVE-CODE Approach**.
- **Real-World Technologies.** This text incorporates contemporary technologies to develop useful applications. For example, we use the Unified Modeling Language™ (UML) to replace flowcharts—an older standard. The UML has become the preferred graphical modeling language for designing object-oriented applications. In *Simply Visual Basic 2008, 3/e* we use the UML to show the flow of control for several control statements, so students gain practice reading the type of diagrams that are used in industry.
- **Visual Programming and Graphical User Interfaces (GUIs).** From the first tutorial, we immerse students in visual programming techniques, which students use to create and modify GUI-based programs quickly and easily. The early tutorials provide students with a foundation for designing GUIs—concepts that they'll apply throughout the book as we teach core programming concepts. Many tutorials contain GUI Design Tips that are summarized at the end of the tutorial for easy reference. Appendix C compiles all the GUI Design Tips.
- **Windows Forms vs. Windows Presentation Foundation (WPF).** Microsoft recommends that developers use Windows Forms rather than WPF for line-of-business applications, which is the primary market for students and professionals reading this book. We implement most of our GUIs with Windows Forms, but we also introduce WPF, which Microsoft recommends for more advanced GUI, graphics and multimedia applications.

Applications in *Simply Visual Basic 2008*

Account Information	Dvorak Keyboard	Photo Album
Address Book	Encryption	Pig Latin
Address Book GUI	Enhanced Dental Payment	Present Value Calculator
Advanced Painter	Factorial	Prime Numbers
Airline Reservation	Fee Calculator	Quiz Average
Alarm	File Scrape	Radio GUI
Alarm Clock GUI	Flag Quiz	Restaurant Bill
Anagram Game	Food Survey	Road Sign Test
Arithmetic Calculator	Form Painter	Salary Survey
Average Three Numbers	Fund Raiser	Sales Commission
Birthday Saver	Fuzzy Dice Order Form	Sales Report
Bookstore	Gas Pump	Savings Calculator
Bouncing Ball Game	Grade Calculator	Schedule Book
Cafeteria Survey	Guess the Number	Screen Saver
Calculator GUI	Income Tax Calculator	Screen Scraping
Car Payment Calculator	Interest Calculator	Security Panel
Car Reservation	Inventory	Shipping Hub
Cash Register	Inventory Enhancement	Shipping Time
“Cat and Mouse” Painter	Length/Distance Converter	Sibling Survey
Cell Phone GUI	Letterhead Designer	Simple Calculator
Check Writer	Line Length	Simple Encryption
Circle Painter	Lottery Picker	Stock Portfolio
Class Average	Maximum	Student Grades
Company Logo Designer	Microwave Oven	Supply Cost Calculator
Compound Interest	Microwave Oven GUI	Task List
Counter	Miles Per Gallon	Temperature Converter
Craps Game	Monitor Invoice GUI	Ticket Information
Currency Converter	Mortgage Calculator	To-Do List
Charge Account Analyzer	Multiplication Teacher	Typing Tutor
Dental Payment	Odd Numbers	US State Facts
Dice Simulator	Office Supplies	Vending Machine GUI
Digit Extraction	Password GUI	Wage Calculator
Discount Calculator	Pay Raise Calculator	Weather Viewer
Display Square	Phone Book	Welcome

Figure 1 Applications in *Simply Visual Basic 2008*.

- **Full-Color Presentation.** This book is in full color so that students can see sample outputs as they would appear on a screen. Key terms are presented in **bold blue**. Also, we syntax color the Visual Basic code, similar to the way Visual Studio 2008 colors the code in its editor window, so students can match what they see in the book with what they see on their screens. Our syntax-coloring conventions are as follows:

comments appear in green
 keywords appear in dark blue
 literal values appear in light blue
 text, class, method, variable and property names appear in black
 errors and scripting delimiters appear in red

- **Object-Oriented Programming.** Object-oriented programming is the most widely employed technique for developing robust, reusable software, and Visual Basic 2008 offers substantial object-oriented programming features. This book introduces students to defining classes and using objects, laying a foundation for more advanced programming courses.
- **Visual Studio 2008 Debugger.** Debuggers are software tools that help programmers find and correct logic errors in program code. Visual Studio 2008 contains a powerful debugger that allows programmers to analyze their programs line-by-line as they execute. Throughout the book, we teach the Visual Studio 2008 Debugger; we explain how to use its key features and offer many debugging exercises.

To the Instructor *Focus of the Book*

Simply Visual Basic 2008, 3/e is intended for introductory-level courses and course sequences in computer programming for students with little or no programming experience. This book teaches computer programming principles and the Visual Basic 2008 language, including data types, control statements, object-oriented programming, .NET Framework Class Library classes, GUI concepts, event-driven programming, database and web applications development, and more. After mastering the material in this book, students will be able to program in Visual Basic 2008 and to employ many key capabilities of the .NET 3.5 platform.

The book is up-to-date with Microsoft's latest release of Visual Studio—Visual Studio 2008, which includes Visual Basic 2008. We rebuilt every application in the book using the 2008 software. All applications and solutions have been fully tested and run on this new platform.

A Note Regarding Software for the Book

We use Microsoft Visual Studio 2008 development tools, including the free Visual Basic® 2008 Express Edition and the free Visual Web Developer™ 2008 Express Edition. Per Microsoft's website, Microsoft Express Editions are "lightweight, easy-to-use and easy-to-learn tools for the hobbyist, novice and student developer." The Express Editions provide rich functionality and can be used to build robust .NET applications. They are appropriate for academic courses and for professionals who do not have access to a complete version of Visual Studio 2008.

You may use the Express Editions to compile and execute all the example programs and solve all the exercises in the book (with the exception of Tutorial 32, whose software requirements are presented below in the *Other Software Requirements* section). You may also use the full Visual Studio product to build and run the examples and exercises. All of the features supported by the Express Editions are also available in the complete Visual Studio 2008 editions.

This book includes the Microsoft® Visual Studio® 2008 Express Editions All-in-One DVD, which contains Visual Basic 2008 Express Edition, Visual Web Developer 2008 Express Edition and SQL Server 2005 Express Edition. (SQL Server 2008 Express Edition was not available at the time of this writing.) You can also download these from:

www.microsoft.com/express/

When you install the software (discussed in the Before You Begin section that follows this Preface), you also should install the help documentation and SQL Server 2005 Express. Microsoft provides a dedicated forum for help using the Express Editions at:

forums.microsoft.com/msdn/ShowForum.aspx?siteid=1&ForumID=24

When SQL Server 2008 Express Edition becomes available, we'll add information on using it with this book at www.deitel.com/books/SimplyVB2008.

Windows Vista vs. Windows XP

Readers of this book can use either Windows Vista or Windows XP. We used Windows Vista while developing this book, but the steps in Windows XP should be identical. When they're not, we point out the Windows XP-specific steps in the text. Throughout the book, we use the Windows Vista Segoe UI font in the graphical user interfaces. If any Windows XP-specific issues arise after the book is published, we'll post them with appropriate instructions at www.deitel.com/books/SimplyVB2008. If you encounter any problems, write to us at deitel@deitel.com, and we'll respond promptly.

Other Software Requirements

For Tutorial 24 and for the case study in Tutorials 28–31, you'll need the SQL Server 2005 Express Edition. Tutorials 28–31 require Visual Web Developer 2008 Express (or a full Visual Studio 2008 edition).

We present Microsoft Silverlight in Tutorial 32. At the time of this writing Silverlight 2 was in beta and the tools for developing Silverlight applications were available only for Visual Studio 2008 (not Express Editions); tools for developing Silverlight applications with the Express Editions will be available soon. When the final tools become available, we'll post updates at www.deitel.com/books/SimplyVB2008.

For updates on the software used in this book, subscribe to our free e-mail newsletter at www.deitel.com/newsletter/subscribe.html and visit the book's website at www.deitel.com/books/SimplyVB2008/. Also, be sure to visit our Visual Basic 2008 resource center (www.deitel.com/VisualBasic2008/) frequently for new Visual Basic 2008 resources.

A Note Regarding Terminology Used in the Book

In Tutorial 13, we discuss methods as Sub procedures (sometimes called subroutines) and Function procedures (sometimes called functions). We use this terminology for two reasons. First, the keywords Sub and Function are used in procedure and method definitions, so this naming is logical for students. Second, Visual Basic professionals have used this terminology for years and will continue to do so. We also use the term “function” at certain points in this text to refer to Visual Basic 6 Function procedures that remain in Visual Basic 2008 (such as Val and Pmt). When we introduce object-oriented programming concepts in Tutorial 19, we discuss the difference between procedures and methods and indicate that the procedures defined throughout the text are, in fact, methods.

Objectives

Each tutorial begins with objectives that inform students of what to expect and give them an opportunity, after reading the tutorial, to determine whether they have met the intended goals.

Outline

The tutorial outline enables students to approach the material in top-down fashion. Along with the tutorial objectives, the outline helps students anticipate topics and set an appropriate learning pace.

Example Applications (with Outputs)

We present Visual Basic 2008 features in the context of complete, working programs. We call this our LIVE-CODE approach. All examples are available as downloads from:

www.deitel.com/books/SimplyVB2008

Illustrations/Figures/“ACE” Tables

Abundant charts, line drawings and application outputs are included. The control-statements discussion, for example, features carefully drawn UML activity diagrams. [Note: We do not teach UML diagramming as an application-development tool, but we do use UML diagrams to explain the precise operation Visual Basic 2008’s control statements.] Most tutorials include our “ACE” tables that list the actions, controls and events that are crucial to implementing the tutorial applications.

Programming Tips

Hundreds of programming tips help students focus on important aspects of application development. These tips and practices represent the best the authors have gleaned from a combined seven decades of programming and teaching experience.



Good Programming Practice

Good Programming Practices call attention to techniques that will help you produce programs that are clearer, more understandable and more maintainable.



Common Programming Error

Students tend to make certain errors frequently. Pointing out these *Common Programming Errors* reduces the likelihood that you’ll make the same mistakes.



Error-Prevention Tip

These tips contain suggestions for exposing bugs and removing them from your programs; many describe aspects of Visual Basic 2008 that prevent bugs from getting into programs in the first place.



Portability Tip

We include *Portability Tips* to help you write code that will run on a variety of platforms and to explain how Visual Basic 2008 achieves its high degree of portability among .NET 3.5 platforms.



Software Design Tip

The *Software Design Tips* highlight architectural and design issues that affect the construction of software systems.



GUI Design Tip

The *GUI Design Tips* highlight graphical-user-interface conventions to help students design attractive, intuitive, user-friendly GUIs. Appendix C compiles the *GUI Design Tips*.

Skills Summary

Each tutorial includes a bullet-list-style summary of the new programming concepts presented. This reinforces key actions taken to build the application in each tutorial.

Key Terms

Each tutorial includes a list of important terms defined in the tutorial. These terms and definitions also appear in the index and in a bookwide glossary, so the student can locate terms and their definitions quickly.

Self-Review Questions and Answers

Self-review multiple-choice questions and answers are included after most sections to build students' confidence with the material and prepare them for the regular exercises. Students should be encouraged to attempt all the self-review exercises and check their answers.

Exercises (Solutions in Instructor Solutions Manual)

Each tutorial concludes with exercises. Typical exercise sections include 10 multiple-choice questions, a “What does this code do?” exercise, a “What’s wrong with this code?” exercise, three programming exercises and a programming challenge. [Note: In the “What does this code do?” and “What’s wrong with this code?” exercises, we show only portions of the code in the text.]

The questions involve simple recall of important terminology and concepts, writing individual Visual Basic 2008 statements, writing small portions of Visual Basic 2008 applications and writing complete Visual Basic 2008 methods, classes and applications. Every programming exercise uses a step-by-step methodology to suggest how to solve the problems. The solutions for the exercises are *available only to instructors* through their Prentice-Hall representatives.

[NOTE: Please do not write to us requesting access to the Prentice Hall Instructor’s Resource Center, which contains the exercise solutions and the book’s ancillaries. Access is limited strictly to college instructors teaching from the book. Instructors may obtain access only through their Prentice Hall representatives.]

GUI Design Guidelines

Consistent and proper graphical-user-interface design is crucial to visual programming. In each tutorial, we summarize the GUI design guidelines that were introduced. Appendix C presents a cumulative list of these GUI design guidelines for easy reference.

Controls, Events, Properties & Methods Summaries

Each tutorial includes a summary of the controls, events, properties and methods covered in the tutorial. The summary includes a picture of each control, shows the control “in action” and lists the control’s properties, events and methods that were discussed up to and including that tutorial.

Thousands of Index Entries

We have included an extensive index which is especially useful when you use the book as a reference.

“Double Indexing” of Visual Basic 2008 Code Examples

For every source-code program in the book, we index the figure caption both alphabetically and as a subindex item under “Examples.” This makes it easier to find examples using particular features.

**Microsoft Developer
Network Academic
Alliance (MSDNAA) and
Microsoft DreamSpark**

**Microsoft Developer Network Academic Alliance (MSDNAA)—
Free Microsoft Software for Academic and Research Purposes**

The MSDNAA provides free software for academic and research purposes. For software direct to faculty, visit www.microsoft.com/faculty. For software for your department, visit www.msdnaa.com.

**Microsoft DreamSpark—
Professional Developer and Designer Tools for Students**

Microsoft provides many of its developer tools to students for free via a program called DreamSpark (downloads.channel8.msdn.com/). At the time of this writing, the DreamSpark website states that students in 11 countries (United States, the

United Kingdom, Canada, China, Germany, France, Finland, Spain, Sweden, Switzerland and Belgium) can obtain this software after being verified as a student.

Instructor Resources for Simply Visual Basic 2008, Third Edition

Simply Visual Basic 2008, 3/e has extensive instructor resources. The Prentice Hall *Instructor's Resource Center* contains the *Instructor Solutions Manual* with solutions to the end-of-chapter exercises, a *Test Item File* of multiple-choice questions (approximately two per section) and PowerPoint® slides containing the code and figures in the text, plus bulleted summaries of key points in the text. Instructors can customize the slides. If you are not already a registered faculty member, contact your Prentice Hall representative or visit vig.prenhall.com/relocator/.

[NOTE: Please do not write to us requesting access to the Prentice Hall Instructor's Resource Center, which contains the exercise solutions and the book's ancillaries. Access is limited strictly to college instructors teaching from the book. Instructors may obtain access only through their Prentice Hall representatives.]

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Each week, the *DEITEL® BUZZ ONLINE* newsletter announces our latest Resource Center(s) and includes commentary on industry trends and developments, links to free articles and resources from our published books and upcoming publications, product-release schedules, errata, challenges, anecdotes, information on our corporate instructor-led training courses and more. It's also a good way for you to keep posted about issues related to *Simply Visual Basic 2008, 3/e*. To subscribe, visit

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The Deitel Online Resource Centers

Our website www.deitel.com provides more than 100 Resource Centers on various topics including programming languages, software, Web 2.0, Internet business and open source projects—see the complete list of Resource Centers in the first few pages of this book. The Resource Centers evolved out of the research we've done to support our books and business endeavors. We've found many exceptional resources online, including tutorials, documentation, software downloads, articles, blogs, podcasts, videos, code samples, books, e-books and more—most of them are free. Each week we announce our latest Resource Centers in our newsletter, the *DEITEL® BUZZ ONLINE* (www.deitel.com/newsletter/subscribe.html). The following Resource Centers may be of interest to you as you study *Simply Visual Basic 2008, 3/e*:

- ADO.NET
- ASP.NET 3.5
- ASP.NET AJAX
- LINQ
- Microsoft Popfly
- .NET 3.5
- Silverlight 2.0
- SQL Server 2008
- Visual Basic 2008
- Visual Studio Team System
- Windows Communication Foundation
- Windows Presentation Foundation
- Windows Workflow Foundation
- Windows Vista

Acknowledgments

It's a pleasure to acknowledge the efforts of people whose names do not appear on the cover, but whose hard work, cooperation, friendship and understanding were crucial to the book's production. Many people at Deitel & Associates, Inc. devoted long hours to this project—thanks especially to Abbey Deitel and Barbara Deitel.

We are fortunate to have worked on this project with the talented and dedicated team of publishing professionals at Prentice Hall. We appreciate the extraordinary efforts of Marcia Horton, Editorial Director of Prentice Hall's Engineering and Computer Science Division. Carole Snyder and Dolores Mars did an extraordinary job recruiting the book's review team and managing the review process. Fran-

cesco Santalucia (an independent artist) and Kristine Carney of Prentice Hall did a wonderful job designing the book's cover—we provided the concept, and they made it happen. Scott Disanno, Robert Engelhardt and Marta Samsel did a marvelous job managing the book's production. Our marketing manager Chris Kelly and his boss Margaret Waples did a great job marketing the book through academic channels.

Simply Visual Basic 2008, Third Edition Reviewers

We wish to acknowledge the efforts of our reviewers. Adhering to a tight time schedule, they scrutinized the text and the programs, providing countless suggestions for improving the accuracy and completeness of the presentation.

Microsoft reviewers: Adrian “Spotty” Bowles (Microsoft Corporation), Marcelo Guerra Hahn (Microsoft Corporation), Huanhui Hu (Microsoft Corporation), Timothy Ng (Microsoft Corporation), Akira Onishi (Microsoft Corporation), April Reagan (Microsoft Corporation), Steve Stein (Microsoft Corporation) and Scott Wisniewski (Microsoft Corporation). **Academic reviewers:** Douglas B. Bock (Southern Illinois University Edwardsville), Edward Hunter (Chapman University College), Christopher J. Olson (Dakota State University) and Josh Pauli (Dakota State University). **Industry reviewers:** Jeff Certain (Colorado CustomWare, Inc.), Matthew Kleinwaks (Abby Rating Systems, Inc.; Microsoft Visual Basic MVP), Éric Moreau (Moer, Inc.; Microsoft Visual Basic MVP), José Antonio González Seco (Parliament of Andalusia), Rod Stephens (President, Rocky Mountain Computer Consulting, Inc.) and Chris Williams (Magenic; Microsoft Visual Basic MVP).

Well, there you have it! Visual Basic 2008 is a powerful programming language that will help you write programs quickly and effectively. It scales nicely into the realm of enterprise systems development to help organizations build their business-critical and mission-critical information systems. As you read the book, we would sincerely appreciate your comments, criticisms, corrections and suggestions for improvement. Please address all correspondence to:

deitel@deitel.com

We'll respond promptly, and we'll post corrections and clarifications on the book's website:

www.deitel.com/books/SimplyVB2008/

We hope you enjoy reading *Simply Visual Basic 2008, Third Edition* as much as we enjoyed writing it!

Paul J. Deitel

Dr. Harvey M. Deitel

Greg J. Ayer

About the Authors

Paul J. Deitel, CEO and Chief Technical Officer of Deitel & Associates, Inc., is a graduate of MIT's Sloan School of Management, where he studied Information Technology. He holds the Java Certified Programmer and Java Certified Developer certifications, and has been designated by Sun Microsystems as a Java Champion. Through Deitel & Associates, Inc., he has delivered Visual Basic, C#, C++, C and Java courses to industry clients, including Cisco, IBM, Sun Microsystems, Dell, Lucent Technologies, Fidelity, NASA at the Kennedy Space Center, White Sands Missile Range, the National Severe Storm Laboratory, Rogue Wave Software, Boeing, Stratus, Hyperion Software, Adra Systems, Entergy, CableData Systems, Nortel Networks, Puma, iRobot, Invensys and many more. He has also lectured on Java and C++ for the Boston Chapter of the Association for Computing Machinery. He and his father, Dr. Harvey M. Deitel, are the world's best-selling programming language textbook authors.

Dr. Harvey M. Deitel, Chairman and Chief Strategy Officer of Deitel & Associates, Inc., has 47 years of experience in the computer field. Dr. Deitel earned B.S. and M.S. degrees from MIT and a Ph.D. from Boston University. He has extensive college teaching experience, including earning tenure and serving as the Chairman of the Computer Science Department at Boston College before founding Deitel & Associates, Inc., with his son, Paul J. Deitel. He and Paul are the co-authors of several dozen books and multimedia packages and they are writing many more. The Deitels' texts have earned international recognition with translations published in Japanese, German, Russian, Spanish, Traditional Chinese, Simplified Chinese, Korean, French, Polish, Italian, Portuguese, Greek, Urdu and Turkish. Dr. Deitel has delivered hundreds of professional seminars to major corporations, academic institutions, government organizations and the military.

Greg Ayer is a junior at Northeastern University completing a B.S. in Computer Science. His industry experience includes freelance web development, game programming, consulting and technical writing. Through the Northeastern Co-Op program, he worked at Deitel & Associates for two six-month co-ops. He continues consulting with Deitel & Associates. His course work includes database development, computational theory, operating systems, networking and a variety of programming languages.

About Deitel & Associates, Inc.

Deitel & Associates, Inc., is an internationally recognized corporate training and content-creation organization specializing in computer programming languages, Internet and web software technology, object technology education and Internet business development through its Web 2.0 Internet Business Initiative. The company provides instructor-led courses on major programming languages and platforms, such as Visual Basic, C#, Visual C++, C++, Java, C, XML, Perl, object technology, Internet and web programming, and a growing list of additional programming and software-development related courses. The founders of Deitel & Associates, Inc., are Paul J. Deitel and Dr. Harvey M. Deitel. The company's clients include many of the world's largest companies, government agencies, branches of the military, and academic institutions. Through its 32-year publishing partnership with Prentice Hall, Deitel & Associates, Inc. publishes leading-edge programming textbooks, professional books, interactive multimedia *Cyber Classrooms*, *LiveLessons* DVD-based and web-based video courses, and e-content for popular course management systems. Deitel & Associates, Inc., and the authors can be reached via e-mail at:

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