

Introduction to C# Programming for the Microsoft® .NET Platform (Prerelease)

Workbook

Course Number: 2124A

This course is based on the prerelease Beta 1 version of Microsoft® Visual Studio .NET. Content in the final release of the course may be different from the content included in this prerelease version. All labs in the course are to be completed with the Beta 1 version of Visual Studio .NET.

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About This Course

This section provides you with a brief description of the course, audience, suggested prerequisites, and course objectives.

Description

This five-day instructor-led course provides students with the knowledge and skills needed to develop C# applications for the Microsoft® .NET platform. The course focuses on C# program structure, language syntax, and implementation details.

Audience

This course is intended for experienced developers who already have programming experience in C, C++, Microsoft Visual Basic®, or Java. These developers will be likely to develop enterprise business solutions.

Student Prerequisites

This course requires that students meet the following prerequisites:

- Experience programming in C, C++, Visual Basic, Java, or another programming language
- Familiarity with Microsoft's .NET strategy as described on Microsoft's .NET Web site: <http://www.microsoft.com/net/>
- Familiarity with the .NET Framework as described in Microsoft MSDN® Magazine:
<http://msdn.microsoft.com/msdnmag/issues/0900/Framework/Framework.asp>
and
<http://msdn.microsoft.com/msdnmag/issues/1000/Framework2/Framework2.asp>

Course Objectives

After completing this course, the student will be able to:

- List the major elements of the .NET Framework and explain how C# fits into the .NET platform.
- Analyze the basic structure of a C# application and be able to debug, compile, and run a simple application.
- Create, name, and assign values to variables.
- Use common statements to implement flow control, looping, and exception handling.
- Create methods (functions and subroutines) that can return values and take parameters.
- Create, initialize, and use arrays.
- Explain the basic concepts and terminology of object-oriented programming.
- Use common objects and references types.
- Create, initialize, and destroy objects in a C# application.
- Build new C# classes from existing classes.
- Create self-contained classes and frameworks in a C# application.
- Define operators and add event specifications.
- Implement properties and indexers.
- Use predefined and custom attributes.

Student Materials Compact Disc Contents

The Student Materials compact disc contains the following files and folders:

- *Autorun.exe*. When the CD is inserted into the CD-ROM drive, or when you double-click the autorun.exe file, this file opens the CD and allows you to browse the Student Materials CD or install Internet Explorer.
- *Default.htm*. This file opens the Student Materials Web page. It provides you with resources pertaining to this course, including additional reading, review and lab answers, lab files, multimedia presentations, and course-related Web sites.
- *Readme.txt*. This file contains a description of the compact disc contents and setup instructions in ASCII format (non-Microsoft Word document).
- *2124a_sg.doc*. This file is the Classroom Setup Guide. It contains a description of classroom requirements, classroom setup instructions, and the classroom configuration.
- *AddRead*. This folder contains additional reading pertaining to this course. If there are no additional reading files, this folder does not appear.
- *Appendix*. This folder contains appendix files for this course. If there are no appendix files, this folder does not appear.
- *Democode*. This folder contains demonstration code. If there is no demonstration code, the Democode folder does not appear.
- *Fonts*. This folder contains fonts that are required to view the PowerPoint presentation and Web-based materials.
- *Ie5*. This folder contains Microsoft Internet Explorer 5.5.
- *Labs*. This folder contains files that are used in the hands-on labs. These files may be used to prepare the student computers for the hands-on labs.
- *Media*. This folder contains files that are used in multimedia presentations for this course. If this course does not include any multimedia presentations, this folder does not appear.
- *Menu*. This folder contains elements for autorun.exe.
- *Mplayer*. This folder contains files that are required to install Windows Media Player.
- *Practices*. This folder contains files that are used in the hands-on practices. If there are no practices, the Practices folder does not appear.
- *Sampapps*. This folder contains the sample applications associated with this course. If there are no associated sample applications, the Sampapps folder does not appear.
- *SamPCODE*. This folder contains sample code that is accessible through the Web pages on the Student Materials CD. If there is no sample code, the SamPCODE folder does not appear.
- *Sampsite*. This folder contains files that create the sample site associated with this course. If there is no sample site, the Sampsite folder does not appear.
- *Setup*. This folder contains additional files that may be required for lab setup. If no additional files are required, the Setup folder does not appear.

- *Webfiles*. This folder contains the files that are required to view the course Web page. To open the Web page, open Windows Explorer, and in the root directory of the compact disc, double-click **Default.htm** or **Autorun.exe**.
- *Wordview*. This folder contains the Word Viewer that is used to view any Word document (.doc) files that are included on the compact disc. If no Word documents are included, this folder does not appear.

Document Conventions

The following conventions are used in course materials to distinguish elements of the text.

Convention	Use
◆	Indicates an introductory page. This symbol appears next to a topic heading when additional information on the topic is covered on the page or pages that follow it.
bold	Represents commands, command options, and syntax that must be typed exactly as shown. It also indicates commands on menus and buttons, dialog box titles and options, and icon and menu names.
<i>italic</i>	In syntax statements or descriptive text, indicates argument names or placeholders for variable information.
Title Capitals	Indicate domain names, user names, computer names, directory names, and folder and file names, except when specifically referring to case-sensitive names. Unless otherwise indicated, you can use lowercase letters when you type a directory name or file name in a dialog box or at a command prompt.
ALL CAPITALS	Indicate the names of keys, key sequences, and key combinations—for example, ALT+SPACEBAR.
monospace	Represents code samples or examples of screen text.
[]	In syntax statements, enclose optional items. For example, <i>[filename]</i> in command syntax indicates that you can choose to type a file name with the command. Type only the information within the brackets, not the brackets themselves.
{ }	In syntax statements, enclose required items. Type only the information within the braces, not the braces themselves.
	In syntax statements, separates an either/or choice.
↙	Indicates a procedure with sequential steps.
...	In syntax statements, specifies that the preceding item may be repeated.
.	Represents an omitted portion of a code sample.
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