

Course ID
TK2609

Course Duration
5 days

Course Title

Introduction to C# Programming with Microsoft .NET

Aimed At

Developers who want to build highly functional web applications using Microsoft Visual C# .NET and .NET Framework.

Group Size

5-15

Prerequisites

Familiarity and comfort with basic operating system functions such as file manipulation, basics of structured programming including concepts such as flow control, variables, parameters and function calls, and at least three months experience with developing applications in graphical or non-graphical environment or equivalent knowledge.

**Course
In a Nutshell**

Are you a less experienced programmer unfamiliar with object-oriented programming or graphical programming languages? This course can help you build highly functional web and Windows solutions and web services using the Microsoft Visual C# .NET and .NET Framework.

This comprehensive five-day course will show you how to configure and use Visual Studio .NET, program with C#, implement encapsulation, inheritance, and polymorphism, use C# within the .NET Framework, use ADO.NET to access and manipulate data in a database, create a web application by using web forms, use XML web services in a C# application, create feature rich Windows based applications, and experiment with the more advanced C# functionality.

Customize It!

Tailor this course to your background and job at little or no additional cost. Let us know we can customize this course to your company.

Learn How To

- Explain the .NET platform
- Configure and use Visual Studio .NET
- Program with C#
- Implement methods
- Implement encapsulation, inheritance and polymorphism in C#
- Use C# within the .NET Framework
- Use Microsoft ADO.NET to access and manipulate data in a database
- Create feature-rich Windows-based applications
- Create a web application using Web forms
- Use XML web services in a C# application
- Experiment with more advanced features of C#

**Course
Outline**

- Getting Started
 - Introduction to .NET and the .NET Framework
 - Exploring Visual Studio .NET
 - Creating a Windows application project
- Understanding C# Language Fundamentals
 - Understanding the fundamentals of a C# program
 - Using C# predefined types
 - Writing expressions
 - Creating conditional statements
 - Creating iteration statements
 - Exercise
- Creating Objects in C#
 - Definition of a class
 - Declaration of methods
 - Using constructors
 - Using static class members
 - Exercise
- Implementing Object-Oriented Techniques in C#
 - Designing objects
 - Using inheritance
 - Using polymorphism
 - Exercise
- Programming with C#
 - Using arrays
 - Using collections
 - Using interfaces
 - Using exception handling
 - Using delegates and events
 - Exercise
- Building .NET Based Applications with C#
 - Examining the .NET Framework class library
 - Overriding methods from System.Object
 - Formatting strings and numbers
 - Using streams and files
 - Exercise
- Using ADO.NET to Access Data
 - ADO.NET architecture
 - Creating an application that used ADO.NET to access data
 - Changing database records
 - Exercise
- Creating Windows-Based Applications
 - Creating main menu

- Creating and using common dialog boxes
- Creating and using custom dialog boxes
- Creating and using toolbars
- Creating the status bar
- Creating and using combo boxes
- Exercise
- Using XML Services In a C# Program
 - Consuming an XML web service
 - Building an XML web service
 - Exercise
- Creating a Web Application with Web Forms
 - Creating web forms applications
 - Accessing data by using a web forms application
 - Configuring ASP.NET application settings
 - Exercise
- Application Settings and Deployment
 - Working with application settings
 - Deploying applications
 - Exercise
- Exploring Future Learning
 - Exploring additional features of C#
 - Resources for continued development
- Wrap-up: Course Recap, Q/A, and Evaluations

How You Will Learn

- An experienced programmer and instructor will teach this class in a workshop setting.
- Hands-on exercises will help you solidify your understanding of each topic.
- We will use real-life examples, applications, and scenarios to help you master and apply the material on your job.
- We'll give you the dos and don'ts, tricks of the trade, and also the pitfalls.
- The participant handbook used in this class will serve as a lasting refresher and reference.

Revised

April 6, 2007