



Core C# Programming with Visual Studio 2008

Five Days – Instructor Led

Overview

This five-day course focuses on core syntax and software development using Microsoft C# with emphasis on building maintainable, adaptable, real-world code.

Audience

This course is intended for programmers who are new to .NET programming and the C# language. Some software development experience is helpful but not required.

Course Highlights

- .NET Framework Overview
- Using Variables
- Decision Structures
- Looping
- Interacting with the User
- Working with Variables
- Creating Procedures
- Types in .NET
- Creating Properties, Methods and Events
- Overloading Methods
- Inheritance and Polymorphism
- Debugging
- Structured Exception Handling
- Introduction to Language Integrated Query (LINQ)
- Introduction to ADO.NET
- Creating Windows Forms Applications
- Creating Windows Presentation Framework (WPF) Applications
- Creating ASP.NET Applications
- Creating Service Applications with Windows Communication Framework (WCF)
- Deploying .NET Applications



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Outline

0 - Introduction / Overview

- Student and Instructor Introductions
- Course Outline

1 - Part 1: Programming in Microsoft .NET

- .NET Framework Overview
- Programming in a Managed Execution Environment
- CLR (Common Language Runtime)
- CIL (Common Intermediate Language)
- CTS (Common Type System)
- Benefits of Managed Execution
- What is the Framework
- Coding in .NET
- Introduction to Object Oriented Programming
- Classes
- Properties
- Methods
- Events
- Layered Architecture
- Writing Basic Code
- Using Variables
- Making Decisions
- Looping
- Interacting with the User
- Creating Types in .NET
- Common Type System
- Value Types
- Reference Types
- Creating Types
- Fields
- Properties
- Methods
- Events/Delegates
- Advanced Object Oriented Programming
- Inheritance
- Polymorphism
- Error Handling
- Syntax Errors
- Debugging
- Structured Exception Handling



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2 - Part 2: Applying .NET Programming Overview

- Using Data in your Applications
- Introduction to LINQ
- LINQ to Objects
- LINQ to XML
- LINQ to SQL
- Introduction to ADO.NET
- ADO.NET Object Model
- Connected Data
- Disconnected Data
- Creating Windows Forms Applications
- Common Controls
- Settings
- Multi-Form Applications
- Validating Input
- Menus / Toolbars
- Using Data in Windows Forms Applications
- Creating Windows Presentation Framework (WPF) Applications
- Overview of XAML Based Applications
- Basic Data Binding with XAML
- Creating ASP.NET Applications
- Creating a Web Form
- Post Back Model
- Validating Input
- Session State
- Using Data in ASP.NET
- Creating Service Applications with Windows Communication Framework (WCF)
- Creating a simple web service
- Consuming a service

3 - Deploying .NET Applications

- Deploying Web-Based Applications
- Deploying Windows Based Applications
- Click-Once Deployment
- Creating an Installer