

Creating Simple C# Programs

Lesson Introduction
Create a Simple C# Console Application
Use a Namespace
Comment Code
Create a Simple Class Library
Test a Simple Class Library
Create a Simple C# Windows GUI Application

Working with Classes

Lesson Introduction
Define and Use a Class
Use Access Modifiers
Define Namespaces
Declare an Abstract Class
Derive a Concrete Class from an Abstract Class
Use an Abstract Class and its Concrete Derived Class

Working with Methods

Lesson Introduction
Implement Constructors
Implement a Destructor
Override a Method
Overload a Method
Overload an Operator
Pass Parameters

Programming with Forms and Controls

Lesson Introduction
Create a Graphical Program Using Standard Built-in Controls
Create a Custom Control
Use Custom Controls on a Form

Writing Statements that Control Program Flow

Lesson Introduction
Write Conditional Statements
Write Loop Statements
Write Jump Statements

Using Types in C#

Lesson Introduction
Use Predefined Data Types
Differentiate Between Reference and Value Types
Use Casting
Define and Use a Struct Type
Define and Use an Enum Type

Programming with Exceptions

Lesson Introduction
Catch Exceptions
Define Custom Exceptions
Throw Exceptions
Utilize the finally Keyword

Working with Interfaces

Lesson Introduction
Define an Interface
Implement Interfaces in Derived Classes
Invoke Interface Methods

Working with Arrays and Collections

Lesson Introduction
Define a Rectangular or Higher-dimensional Array
Use a Rectangular Array
Define a Jagged Array
Use a Jagged Array
Choose and/or Create a Collection Type
Use A Collection Type

Working with Properties and Indexers

Lesson Introduction
Expose Properties
Expose Indexers

Events and Delegates**Collections and Generics****Object and Collection Initializers****Building and Deploying Assemblies**

Lesson Introduction

Create an Assembly with the C# Command Line Compiler

Deploy an Assembly Locally

Create and Deploy a Shared Assembly

Interoperating with Legacy Code

Lesson Introduction

Write Code that Interoperates with Win32

Expose Legacy COM Components to C# Clients

Expose C# Components to Legacy COM Clients

Windows Applications

Standard Controls

Rich Controls

User Controls

Data Controls

Working with..

File System and XML