

Programming C#: Advance

Modality: On Demand

Duration: 8 Hours

About this course:

This is a third course, Programming C# 6: Advanced in the full series of courses on the C# programming language. This course further expands on the ideas instructed in the Fundamentals of C# and the courses of C# Intermediate and covers the technically complex points, for example, methods, objects, interfaces, inheritance, and arrays.

This course of a programming language will find out a portion of the further developed features of the C# language. Students will have the option to figure out how to program systematically in C# and tackle complex genuine issues of programming. The course completely readies the understudies to work in requesting conditions with full efficiency and confidence.

Course Objective:

- Explain the way to work with objects
- Understand use interfaces in the framework of .NET
- Retrieve and save information in a program of C#.
- Study about methods and properties.
- Comprehend the concept of inheritance, derived classes, and abstract classes
- Understand the usage and concept of arrays
- Implement nested and partial classes

Audience:

- Experienced developers of software hoping to improve their insight into MS Visual Studio, C#, and .NET structure
- Applicants with a comprehension of C++, Java, MS Visual Basic and Objective-C
- Applicants with a solid object-oriented programming concept.

Prerequisite:

- This course is very advanced-level that requires the understudies to have total control of the basics of C#.
- Ideally, the applicants ought to enlist for the courses of C# Fundamentals and C# Intermediate before selecting to enlist for this course.
- Moreover, the applicants ought to also have at least two years of hands-on experience of programming with any language of programming ideally C#.

Course Outline:

Chapter 01 - Working With Objects

- **Topic A: Value and Reference Types - Part 1**
- Value and Reference Types - Part 2
- Value and Reference Types - Part 3
- **Topic B: Deterministic Object Lifetimes - Part 1**
- Deterministic Object Lifetimes - Part 2
- Deterministic Object Lifetimes - Part 3
- **Topic C: Instance and Static Members - Part 1**
- Instance and Static Members - Part 2
- Instance and Static Members - Part 3
- **Topic D: Working with Objects - Part 1**
- Working with Objects - Part 2
- Working with Objects - Part 3

Chapter 02 - Methods

- **Topic A: Properties - Part 1**
- Properties - Part 2
- Properties - Part 3
- **Topic B: Automatic Properties - Part 1**
- Automatic Properties - Part 2
- Automatic Properties - Part 3
- **Topic C: Methods - Part 1**
- Methods - Part 2
- Methods - Part 3
- **Topic D: Optional Param and Caller Info - Part 1**
- Optional Param and Caller Info - Part 2
- Optional Param and Caller Info - Part 3

Chapter 03 - Methods in Classes

- **Topic A: Methods in Classes - Part 1**
- Methods in Classes - Part 2
- Methods in Classes - Part 3
- **Topic B: Save and Retrieve Info - Part 1**
- Save and Retrieve Info - Part 2
- Save and Retrieve Info - Part 3
- **Topic C: Return and Pass Arrays - Part 1**
- Return and Pass Arrays - Part 2
- Return and Pass Arrays - Part 3
- **Topic D: Instance and Static Members - Part 1**
- Instance and Static Members - Part 2
- Instance and Static Members - Part 3
- **Topic E: Expression Bodied Methods - Part 1**
- Expression Bodied Methods - Part 2
- Expression Bodied Methods - Part 3

Chapter 04 - Inheritance

- **Topic A: Inheritance - Part 1**
- Inheritance - Part 2
- Inheritance - Part 3
- **Topic B: Derived Classes - Part 1**
- Derived Classes - Part 2
- Derived Classes - Part 3
- **Topic C: Override and Overload Members - Part 1**
- Override and Overload Members - Part 2
- Override and Overload Members - Part 3
- **Topic D: Abstract Classes and Members - Part 1**
- Abstract Classes and Members - Part 2
- Abstract Classes and Members - Part 3

Chapter 05 - Interfaces

- **Topic A: Sealed Classes and Members - Part 1**
- Sealed Classes and Members - Part 2
- Sealed Classes and Members - Part 3
- **Topic B: Interfaces - Part 1**
- Interfaces - Part 2
- Interfaces - Part 3
- **Topic C: Interfaces in .NET Framework - Part 1**
- Interfaces in .NET Framework - Part 2
- Interfaces in .NET Framework - Part 3
- **Topic D: Partial and Nested Classes - Part 1**
- Partial and Nested Classes - Part 2
- Partial and Nested Classes - Part 3
- **Topic E: Namespaces - Part 1**
- Namespaces - Part 2
- Namespaces - Part 3

Chapter 06 - Arrays

- **Topic A: Arrays - Part 1**
- Arrays - Part 2
- Arrays - Part 3
- **Topic B: Initialize Array, Retrieve Data - Part 1**
- Initialize Array, Retrieve Data - Part 2
- Initialize Array, Retrieve Data - Part 3
- **Topic C: Arrays as Method Parameters - Part 1**
- Arrays as Method Parameters - Part 2
- Arrays as Method Parameters - Part 3
- **Topic D: Arrays in the .NET Framework - Part 1**
- Arrays in the .NET Framework - Part 2
- Arrays in the .NET Framework - Part 3
- **Topic E: Manipulating Arrays - Part 1**

- Manipulating Arrays - Part 2
- Manipulating Arrays - Part 3
- **Topic F: Allowing Flexible Sorting - Part 1**
- Allowing Flexible Sorting - Part 2
- Allowing Flexible Sorting - Part 3
- **Topic G: Advanced Sorting - Part 1**
- Advanced Sorting - Part 2
- Advanced Sorting - Part 3
- **Topic H: Searching Arrays - Part 1**
- Searching Arrays - Part 2
- Searching Arrays - Part 3
- **Topic I: Creating Indexers - Part 1**
- Creating Indexers - Part 2
- Creating Indexers - Part 3