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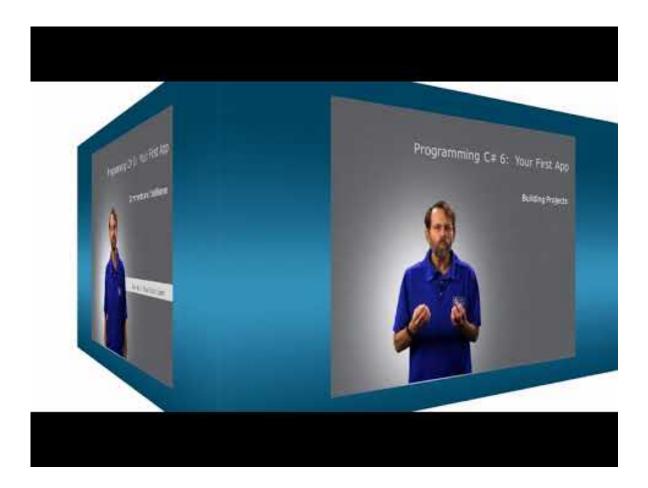
Learning Style: On Demand

Technology:

Difficulty: Beginner

**Course Duration: 7 Hours** 

# **Programming C#: Fundamental**



### About this course:

The Programming C# 6: Fundamentals course covers everything to enable the students to get started with C# and Visual Studio. The course begins with basic compiling of a console application and moves on to the fundamentals of working with strings and numeric values. The course gives the students basic understanding

to execute functionality provided in 3rd party libraries as well as to create their own methods. Classes, including class methods and properties are also introduced in this course. The course also provides an opportunity to learn about handling the exceptions and class libraries.

This course teaches the students to develop the essential programming skills that are required for developers to create Windows applications using the C# language. During this course, the students learn the basics of C# program structure, language syntax, and implementation details, and then consolidate their knowledge as they build a real-world application.

# **Course Objective:**

- Compile their first program using C#
- Learn the format strings for output
- Correctly display numeric values
- Call code in other assemblies
- Write and call methods
- · Organize the code in classes
- Handle exceptions
- Create a class library

#### Audience:

 Aspiring or beginner software developers looking to enhance their knowledge of C# and Microsoft Visual Studio.

# **Prerequisite:**

- This beginner level course requires the students to have a basic understanding of computer language along with the ability to install files and software on a computer.
- The course contents are designed in such a way to be comprehendible to the students with little to no experience of computer programming.

#### **Course Outline:**

#### Chapter 01 - Getting Started with .NET

- Topic A: Getting Started with .NET Part 1
- Getting Started with .NET Part 2
- Getting Started with .NET Part 3
- Topic B: .NET Architecture Part 1
- .NET Architecture Part 2
- .NET Architecture Part 3
- Topic C: Building a .NET Application Part 1
- Building a .NET Application Part 2
- Building a .NET Application Part 3
- Topic D: Intermediate Language Part 1

- Intermediate Language Part 2
- Intermediate Language Part 3
- Topic E: C# Language Part 1
- C# Language Part 2
- C# Language Part 3

# Chapter 02 - Your First App

- Topic A: Using Visual Studio Part 1
- Using Visual Studio Part 2
- Using Visual Studio Part 3
- Topic B: Building Console App Part 1
- Building Console App Part 2
- Building Console App Part 3
- Topic C: Solution Explorer Part 1
- Solution Explorer Part 2
- Solution Explorer Part 3
- Topic D: Comments and Intellisense Part 1
- Comments and Intellisense Part 2
- Comments and Intellisense Part 3
- Topic E: Building Projects Part 1
- Building Projects Part 2
- Building Projects Part 3

### Chapter 03 - Debugging and Errors

- Topic A: Debugging Code Part 1
- Debugging Code Part 2
- Debugging Code Part 3
- Topic B: Breakpoints Part 1
- Breakpoints Part 2
- Breakpoints Part 3
- Topic C: Runtime and Logic Errors Part 1
- Runtime and Logic Errors Part 2
- Runtime and Logic Errors Part 3

#### Chapter 04 - Projects and Syntax

- Topic A: Anatomy of a C# Program Part 1
- Anatomy of a C# Program Part 2
- Anatomy of a C# Program Part 3
- Topic B: Project Folders and Files Part 1
- Project Folders and Files Part 2
- Project Folders and Files Part 3
- Topic C: Statements and Expressions Part 1
- Statements and Expressions Part 2
- Statements and Expressions Part 3
- Topic D: Language Syntax Part 1
- Language Syntax Part 2
- Language Syntax Part 3

- Topic E: Preprocessing Directives Part 1
- Preprocessing Directives Part 2
- Preprocessing Directives Part 3

## **Chapter 05 - Variables and Data Types**

- Topic A: Variables Part 1
- Variables Part 2
- Variables Part 3
- Topic B: Data Types Part 1
- Data Types Part 2
- Data Types Part 3

## Chapter 06 - A Closer Look at Data Types

- Topic A: Floating Point Data Part 1
- Floating Point Data Part 2
- Floating Point Data Part 3
- Topic B: Characters Part 1
- Characters Part 2
- Characters Part 3
- Topic C: Constants and Enums Part 1
- Constants and Enums Part 2
- Constants and Enums Part 3