MS20483 - Programming in C#

Microsoft - Visual Studio - Sviluppo

Durata:	Lingue:	Certificazione:
5 Giorni	**Italiano**	**MCSA Web Applications**

Descrizione del corso

This training course teaches developers the programming skills that are required for developers to create Windows applications using the Visual C# language. During their five days in the classroom students review the basics of Visual C# program structure, language syntax, and implementation details, and then consolidate their knowledge throughout the week as they build an application that incorporates several features of the .NET Framework 4.7.

Programma

1. Review of C# Syntax
    - Overview of Writing Applications using C#
    - Datatypes, Operators, and Expressions
    - C# Programming Language Constructs
2. Creating Methods, Handling Exceptions, and Monitoring Applications
    - Creating and Invoking Methods
    - Creating Overloaded Methods and Using Optional and Output Parameters
    - Handling Exceptions
    - Monitoring Applications
3. Developing the Code for a Graphical Application
    - Implementing Structs and Enums
    - Organizing Data into Collections
    - Handling Events
4. Creating Classes and Implementing Type-safe Collections
    - Creating Classes

- Defining and Implementing Interfaces
- Implementing Type-safe Collections

5. Creating a Class Hierarchy by Using Inheritance
   - Creating Class Hierarchies
   - Extending .NET Framework Classes
   - Creating Generic Types
6. Reading and Writing Local Data
   - Reading and Writing Files
   - Serializing and Deserializing Data
   - Performing I/O Using Streams
7. Accessing a Database
   - Creating and Using Entity Data Models
   - Querying Data by Using LINQ
   - Updating Data by Using LINQ
8. Accessing Remote Data
   - Accessing Data Across the Web
   - Accessing Data in the Cloud
9. Designing the User Interface for a Graphical Application
   - Using XAML to Design a User Interface
   - Binding Controls to Data
   - Styling a User Interface
10. Improving Application Performance and Responsiveness
    - Implementing Multitasking by using Tasks and Lambda Expressions
    - Performing Operations Asynchronously
    - Synchronizing Concurrent Access to Data
11. Integrating with Unmanaged Code
    - Creating and Using Dynamic Objects
    - Managing the Lifetime of Objects and Controlling Unmanaged Resources
12. Creating Reusable Types and Assemblies
    - Examining Object Metadata
    - Creating and Using Custom Attributes
    - Generating Managed Code
    - Versioning, Signing and Deploying Assemblies
13. Encrypting and Decrypting Data
    - Implementing Symmetric Encryption

- Implementing Asymmetric Encryption