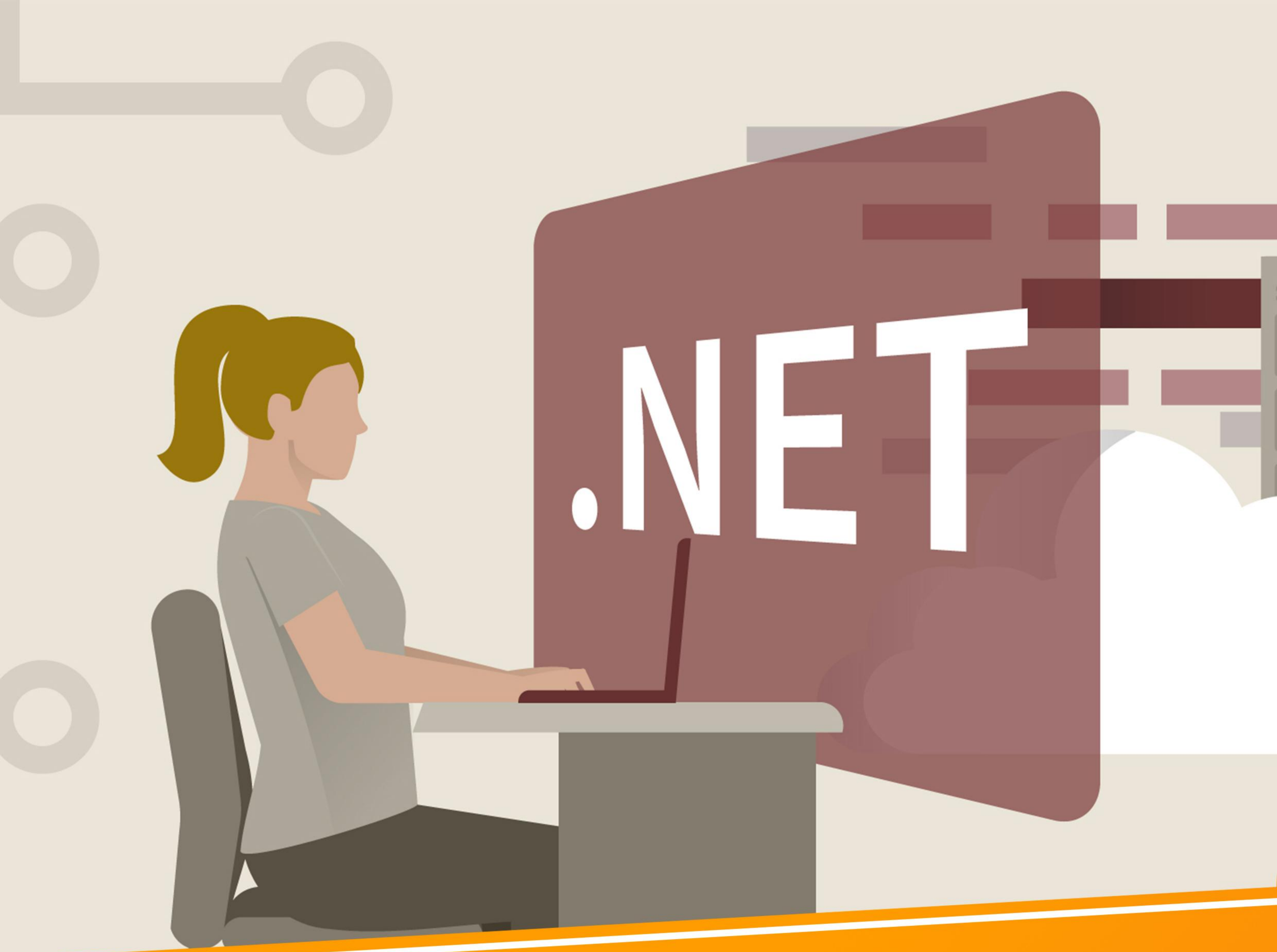




.NET



About Course

.NET (pronounced as "dot net"; previously named .NET Core) is a free and open-source, managed computer software framework for Windows, Linux, and macOS operating systems. It is a cross-platform successor to .NET Framework.

.NET certification course is a comprehensive introduction to the .NET space and .NET coding using C#. This course lays the foundation for the major aspects of .NET development, including the Visual Studio Environment, data connections, the C# language, and WinForms and WebForms projects.

.NET

CURRICULUM

① An Introduction to C#

What is .NET?

What is the CLR?

The FCL

Primitive Types

Namespaces

Statements and Expressions

Operators

② Classes and Objects

Constructors

Reference Types

Object Oriented Programming

Inheritance

Access Modifiers

Abstract Classes

Virtual Members

Static Classes

Sealed Classes

Partial Classes

3 C# - Types

Reference Types

Value Types

The struct

Testing Reference Types

Testing Value Types

Passing Parameters

Strings

Boxing

The enum

Defining Types

Interfaces

Arrays

Assemblies

4 C# - Events, Properties, and Methods

Methods

Method Overloading

Fields

Properties

Events

Events - Delegates

Events - Subscribing

Events - Publishing

5

C# - Flow Control and Exceptions

Branching

Switching

Looping

Using foreach

Jumping

Returning and Yielding

Throwing Exceptions

Built-in Exceptions

Handling Exceptions

Chaining Catch Blocks

Finally

Re-throwing Exceptions

Custom Exceptions

6

C# and the CLR

Garbage Collection

Threads

Async

Parallel

Reflection

Attributes

Custom Attributes

COM Interop

PlInvoke

7 C# and Generics

Why Generics?

Building Collections Without Generics

Generic Collections

Generic Parameters

Generic Constraints

Generic Methods

The default Keyword

Generic Interfaces

Generic Delegates

Variance

8 C# and LINQ

Extension Methods

Extensions and Lambdas

Lambdas and Funcs

Funcs and Expressions

9 C# and the DLR

Why Dynamic?

Using Dynamic Types

Excel Automation

The DLR

ExpandoObject

DynamicObject
Calling Ruby

10 Object Oriented Programming with C#

Primitive Procedural Preoccupations
The Big Encapsulation
Little Abstractions
The Inheritance Check
A Clean Interface
Directional Dependencies

11 Functional Programming with C#

Prime Abstraction
A Higher Calling
Lazy Code
Timing and Retries
Partial Application and Currying
Asynch and Parallel
Multithreading

12 Exploring the .NET Framework

File I/O
Resource management with try/finally/using
Using XML serialization



Introducing assembly resolution
Deploying dependent assembly probing
Using a config file to control probing
ArrayList
Hashtable
SortedList
Stack and Queue

13 Windows Form

Introduction to Windows Form
Form Controls
User Define Controls

14 ADD.NET

Connected Architecture
Disconnected Architecture
Working with Transaction

15 Windows Presentation Foundation(WPF)

Windows Application using WPF
Data Binding
Data Template
Styles
Commands

16

ASP.NET

Web Application using ASP.NET

ASP.NET Architecture

Control-based Programming

User Interface Elements

Deployment

Web Sites, Applications, and Virtual Directories in IIS

ASP.NET Diagnostics and Health Monitoring

17

ASP.NET Working With Data

Data Binding

State Management

Validation

Caching

18

ASP.NET 3.5 Security

IIS 6 & IIS7 URL Authorization

Forms authentication

Role-based authorization

Trimming site maps with roles

Config file encryption

ASP.NET Membership

Resources and Internationalization

19

ASP.NET 3.5 Advanced Topics

HTTP Pipeline

Custom Controls

Web Parts

Web Services

20

ASP.NET AJAX

ASP.NET Ajax Introduction

ASP.NET Ajax Server Controls

ASP.NET Ajax Server Data

ASP.NET Ajax Client-side Library

ASP.NET Ajax Control Toolkit

21

ASP.NET MVC

Web Application using MVC Pattern

Razor View

Controller

Model

22

Entity Framework

Introducing the Entity Framework

Code First Approach



23

Windows Communication Foundation(WCF)

WCF Configuration

Hosting WCF Services in Windows Services

Hosting WCF Services in IIS

Building RESTful services with WCF

24

Windows Workflow Foundation(WF)

Introducing Windows Workflow Foundation

Programming workflows in WF


Writing custom activities in WF



 www.softcrayons.com

 info@softcrayons.com

 (+91) 854 501 2345

 693, Sector 14-A, Vasundhara, Ghaziabad (U.P.), 201012

   @softcrayons