



Noble Software Consulting, IT Training

.NET/C#/ASP.NET COURSE OVERVIEW

In this course you will learn the key fundamentals of the C# language, plus see how to build windows, web, and database driven ADO.NET applications. You will learn how to apply these technologies to solve common business problems. At the end you are ready to showcase practical skills with C#, Visual Studio .NET, & ADO.NET.

.NET/C#/ASP.NET COURSE – 50 HRS

Introduction to .NET Framework

- Overview of .NET Framework
- Features of .NET Framework
- Namespaces and assemblies
- Assembly and Metadata

C#

- Introduction to C#
- Programming fundamentals
- Object Primer
- File Handling
- Exception Handling
- Events and Delegates
- Extension Methods
- Anonymous Types
- Implicit Local Variables
- Object & Collections Initializers
- Lambda Expressions
- Collections
- Graphics
- Summary

Introduction to LINQ – This is one module in itself

- Introduction to Linq
- Fundamentals
- Linq to ADO.net
- Linq to XML

SQL Server

- Introduction
- Basic Queries
- CRUD
- SubQueries/Nested queries
- Stored Procedures

ASP.net

- Overview of ASP.net 3.5
- Features of ASP.net
- ASP.net Architecture
- Http Handlers & Modules
- Provider Model
- Configuration and Administration
- Web Forms and Server Controls
- Post Backs and Round Trips
- Web Form Code Model
- Web Form Life Cycle
- Basic elements of asp.net web page
- HTML Server Controls Vs. Web Server Controls
- Using Standard Web Server Controls
- Working with Look and Feel of Web Controls
- Validation Controls
- JavaScript with Server Controls
- Setting Default Button and Initial Focus
- Maintaining State
- Handling Application and Session Events
- Summary

Database Programming with ADO.net

- ADO.net architecture
- Connected data access
- Executing SQL queries and stored procedures
- Working with DataSet and DataAdapter
- Transactions

Data Source Controls

- Types
- SqlDataSource Control
- AccessDataSource Control

XmlDataSource Control
ObjectDataSource Control
LINQ Data Source Controls
Linq to SQL.

Data Bound Controls

Overview
List Controls
GridView
DetailsView and FormView Controls
Repeater and DataList Controls
ListView and DataPager Controls
Data Binding Syntax

Master Pages and Site Navigation

Master Pages
TreeView Controls
Menu Control
Site Maps
SiteMapPath Control
SiteMap API
SiteMapDataSource Control
Summary

Themes

Introduction to Themes and Skins
Working with Themes Programmatically
Summary

Profiles

Profile Properties
Profiles and Authentication
Profile Providers
Summary

Developing Personalized Portals using Web Parts

Creating Web Parts Page
Display Modes
Formatting Web Parts
Web Parts Communication
Web Parts Providers
Summary

Web User Controls

Introduction
Examples
Summary

Caching

Introduction
Output Caching
Data Caching
Cache Dependencies
Summary

Web Services

Introduction
Creating a Web Service
Creating Proxy for a Web Service
Create a Client
WCF - Introduction
Summary

Securing Web Applications and Managing Users

Authentication and Authorization
Security Schemes
Implementing Windows Based Security
Implementing Forms Based Security
Membership Features
Working with Roles
Using Login Web Controls
Summary

ASP.NET AJAX and Client Side Programming

Introduction
Advantages of using ASP.net AJAX
Architecture of ASP.net AJAX
JavaScript Extensions
Examples
Summary

ASP.NET AJAX and Server Side Programming

AJAX Server Controls
UpdatePanel Control
UpdateProgress Control
Timer Control
Handling Errors
Consuming a Web Service from Client Side Script
Consuming Application Services

Summary

Application Design

Real-Life Project Design

Best Practices