

DOT NET Training



Course Description:

This course provides students with hands on experience using Visual Studio to create dynamic web sites with ASP.NET Web Forms and the .NET 4.5 Framework using C#. The class provides a thorough introduction to the C# programming language, including coverage of the essentials of the C# programming language, built in data types, operators, control structures, classes and methods, collections and exception handling. Students then learn how to leverage the power of the .NET Framework to build web user interfaces. Students learn how to build ASP.NET Web Form applications and work with a variety of ASP.NET controls, including validation controls and user controls. Students explore why state management is difficult within web sites and learn different ASP.NET techniques for managing state, including working with application, session and view state objects. Students also learn how to use ADO.NET to interact with databases and XML files. Students learn how ASP.NET uses data binding to display data in controls such as the GridView and ListView. Students also learn how to build and interact with simple WCF SOAP Web Services. Other topics include: using a Web.config file to control application configuration; using master pages to provide a consistent look and feel to a web site; working with cookies; reading and writing files; and deploying ASP.NET applications. Comprehensive labs provide the students with extensive experience creating and deploying dynamic ASP.NET Web Form sites. This course provides thorough coverage of the use of Web Forms for web sites.



Course Prerequisites:

Basic programming skills in a structured language. Knowledge and experience with Object-Oriented Design (OOD) is helpful, but not required.

Target Audience:

This course is specially designed for the B.Tech /B.E(CSE/IT/EEE/ECE/Mech) and all other IT related Graduates and Post Graduate students. Mission Professionalism has conquered the job scenario and companies seek for well qualified, professional and skilled manpower. Quality Education and Performance Oriented Training is our motto.

What Student/Professionals Will Learn?

- Using Visual Studio to create C# applications
- Working with .NET data types
- Creating variables with the proper scope and using operators to build complex expressions
- Designing and using classes
- Using control structures such as if, while and for
- Using procedures to build complex applications
- Throwing and trapping exceptions using the try and catchstatements
- Using single and multi-dimensional arrays
- Working with .NET collections
- Using LINQ to make queries
- Defining and implementing interfaces
- Working with enumerations
- Creating ASP.NET form-based applications
- Using HTML server controls, Web controls and validation controls on a Web page
- Building and using user controls
- Creating and attaching CSS files using Visual Studio



- Creating event handlers to respond to control events
- Building master pages
- Managing state in a Web application
- Accessing databases using ADO.NET and displaying data on Web pages
- Using DataSet to work with XML data
- Implementing authentication and authorization on ASP.NET pages
- Deploying a Web application

COURSE-CONTENT

Module 1:- Introduction to .NET Framework

- .NET Framework
- Overview
- CLR,CLS
- MSIL
- Assemblies
- Namespaces
- .NET Languages
- Dll's(Vs)Exe's

Module 2:- Basics

- Getting Started
- Using Variables and Arrays
- Methods and Parameters
- Decision Structures and Loops
- Handling Errors and Exceptions

Module 3:- OBJECT ORIENTED PROGRAMMING

- Classes, structures and enums
- Constructors
- Destructors
- Properties



- Inheritance
 - -Shadowing(new methods)
 - -Overriding
- Method Overloading
- this and base Keyword
- Sealed classes
- Interfaces, Abstract Classes
- Working with Delegates
- Designing and Implementing Events
- Generics
- Sealed classes and Partial classes
- C#.NET Application Architecture
- Solution, Projects
- Compiling, Debugging and Running in IDE

Module 4:- INTRODUCTION TO GUI PROGRAMMING

- System.Windows.Forms Assembly
- System.Drawing
- The Form Class
- Win Forms
- Visual Inheritance
- Programming with Controls
- User Controls

Module 5:- WORKING WITH COLLECTIONS, IO

- System.IO
- Readers and Writers
- Streams
- System.Collections
- Hashtable
- ArrayList
- SERIALIZATION
 - **Formatters**
- Binary Serialization
- Formatters, Binary Formatter
- SOAP Serialization
- XML Serialization



Module 6:- ADO.NET I

- Introduction
- Architecture
- System.Data.Dll
- System.Data.Oledb
- System.Data.SqlClient
- Data Readers
- Command Object
- Procedure Execution (PL/SQL)

Module 7:- ADO.NET II: Data Adapters and DataSets

- Data Tables
- Data Relations
- Data Views

Module 8:- ASSEMBLIES

- Strong Names
- GAC
- Private and Shared Assemblies
- SFA
- MFA

Module 9:- MULTITHREADING

- Threading Introduction
- System.Thrading NameSpaces
- Thread Members
- Thread States

Module 10:- ASP.NET

- Basics
- Web Programming
- HTML, DHTML
- JavaScript



- IIS
- ASP

Module 11:- ASP.NET INTRODUCTION

- Difference Between ASP and ASP.NET
- Architecture
- Inline Technique & Code-Behind Technique
- Code Render Blocks
- Server Controls
- Page Basics, Page lifecycle
- Post back Request
- View State, Directives

Module 12:- PROGRAMMING WITH SERVER CONTROLS

- Html Server Controls
- Web Server Controls
- Basic Web Controls
- List Controls, Data Controls
- Adv Controls, User Controls

CUSTOM CONTROL Development

THEMES AND SKINS

MASTERPAGES AND SITE NAVIGATION

Module 13:- ADO.NET PROGRAMMING

- Architecture
- DataReaders and DataSets
- Command Object
- Transaction Programming
- Procedure Execution
- Data Adapter and Data Set
- Data Tables
- Data Relation
- Data Views
- Updating Dataset



Module 14:- ADO.NET AND ASP.NET

- Working with Data Controls
- GridView
 - -Inserting, Updating, Deleting
 - -Sorting in Data Grid
 - -Paging in Data Grid
- DataSource Controls
- Dataset
- DetailsView
- FormView
- Data List
- Repeater Control
- Crystal Reports

Module 15:- XML PROGRAMMING

- DTDs & XSDs
- Parsers
- SAX Model
- DOM Model
- XML Programming in .Net
- XML Readers
- XML Serialization

Module 16:- STATE MANAGEMENT WITH ASP.NET

- Context
- View State
- Cookie State
- Session State
- Session Tracking
- Application Object
- Session and Application Events

Module 17:- ASP .NET APPLICATION TUNING

- Machine.Config & Web.Config.
- App Setting
- Compilation Settings



- Custom Error Settings
- Session State Settings
- InProcess & OutProcess Sesstion States
- State Server & SQL Server
- Cookieless Session State
- Application and Global.ASAX

Module 18:- CACHING

- Introduction to Caching
- Types of Caching
- Page Caching
- Diff. between Webuser Controls & Custom Controls
- Page fragmentation Caching
- Data Caching
- Data Caching Application Object

Module 19:- TRACING

- Page Level
- Application Level

Module 20:- SECURITY

- Authentication & Authorization
- Windows Authentications
- Forms Authentications
- Passport Authentications
- Memberships

Module 21:- WEB SERVICES

- Architecture
- WSDL, SOAP, UDDI
- Publishing and Consuming Web Services
- Web Client
- Windows Client
- Caching Web Services
- Security in Web Services



Module 22:- WEBPARTS

- Webpart Manager
- Zone Types

Module 23:- Overview of Advanced .NET Technologies

- ASP.NET-AJAX
- WPF
- WCF
- Silverlight

INTEGER Innovation will provide:

- Training Slides taught during training by trainers
- Programmatic Examples
- Assignments of each topic in a module
- Demos executed during training session.
- Software's and installation guide (for future help)
- E-books for further reading in depth
- Reference links
- 24X7 online support for any queries or doubts.