

ASP.NET with C#

Description

Our .NET Course is designed for students and professionals who want to be a .NET Developer. This course will cover ASP.NET, C#.NET and concepts like ADO.NET etc. We will also teach how these tools help in developing a robust .NET Application.

Expectations and Goals

After the completion of .NET Course at Ardent, you should be able to:

Learn Web programming language like HTML, CSS to develop a web page

Understand .NET framework and various C# data types, conditions, loops and arrays.

Gain insight of object-oriented programming concepts through C# using Classes, Objects and Constructors and destructors.

Create Abstract class, interface, assemblies and namespaces in C#.

Develop and deploy a simple web application using ASP.NET and IIS.

Apply master pages and validations to web pages.

Use ADO.NET classes to communicate with Database.

Manage Session, Cookies and Application variables.

Prerequisites

Candidates should have prior programming knowledge and be familiar with basic concepts such as data-types, variables, control statements, structure and functions. Prior experience to object-oriented programming concepts are not required, but definitely beneficial.

Course Schedule

Module	Topic
Module 1	Introduction to .NET platform Understanding .NET Framework and its Benefits. Building blocks of .NET Platform (BCL, CLR, CTS and CLS). MSIL and JIT Compilation. Assemblies and Platform Independent Nature of .NET. Sample Application using .NET Programming Language. Setup of .NET platform and Visual Studio IDE.
Module 2	Programming Using Visual C#.Net C#.Net Program Design. Variables and types. Value types and reference types (CTS). Strings and arrays. The Console-class. String formatting. Statements and flows. Command-line arguments. VS.NET to Create C#.NET Apps.
Module 3	Introduction to C# Programming Language Classes and objects. Constructors and destructors. Method overloading & Method Hiding. Abstract & override methods. Creating and using your own classes Data members and member methods Instantiate an object. 'this' keyword.

	<p>Properties – Read Only Write Only. Assemblies and Namespaces. Access Modifiers – public, private, protected, internal and protected internal. Overview of Exception Handling. Lab Session – Overload constructors and method within a structure and Override methods in a class.</p>
Module 4	<p>Introduction to Web Programming Understanding role of web browser and web server. Client Server architecture. Web Application and HTTP Protocol. Basics of HTML tags and controls. CSS selectors and text effects. Lab Session – Designing a Simple form using HTML and CSS.</p>
Module 5	<p>Introduction to ASP.NET and IIS Developing Web Applications using standard web controls and Event Handling. Response.Redirect() and Server.Transfer() differences. Consumption of Custom class in web application Life cycle of an ASP.NET page. Publishing Web Application in IIS using virtual directory. Lab Session – Publish your own website in IIS.</p>
Module 6	<p>Master Page and Validation Controls Concept of Master Page. Creating a consistent looking web site using master page. Validating a web form using validation controls. Validation group property. Page.Validators and Page.IsValid properties. Lab Session – Create a registration web form and validate it using validation controls.</p>
Module 7	<p>Introduction to ADO.NET Overview of ADO.NET architecture. Using Connection and Command Classes. Managing SqlDataReader, SqlDataAdapter and DataSet Classes. ExecuteNonQuery, ExecuteReader and ExecuteScalar methods. Use of GridView, ListView and FormView controls. Lab Session – Create a registration web form using ExecuteNonQuery() method.</p>
Module 8	<p>State Management in ASP.NET Overview of state management Viewstate and Hiddenfield in a web form Transferring data through URL using Querystring Managing Cookies at Client Side Managing session and Application variables at Server Side Lab Session – Create a login web form using cookies and session variables</p>
Module 9	Project work and documentation