

.NET COURSE CONTENT

C# Language

- Characteristics of Object Oriented language
- Introduction to .Net Framework
- Components of .Net Framework
- Advantages of the .Net Framework
- Using Visual Studio IDE
- Introduction to C#
- Keywords
- Data types
- Variables
- Control statements
- Classes& Objects
- Access Specifiers in C#
- Types of Parameters
- Arrays in C#
- Collections in C#
- Polymorphism
 - Compile time polymorphism
 - Runtime polymorphism
- Exception Handling
- File Streams in C#
- Multi Threading
- Delegates & Events
- Assemblies in C#
 - Private Assemblies
 - Shared Assemblies

SQL Server

- Connecting to SQL Server
 - Windows Authenticationvs SQL Server Authentication
 - Creating a Database in SQL Server
 - Types of Languages in SQL
 - DDL, DML, DQL, DCL, TCL
 - Data types in SQL Server
 - Creating a Table
 - Working with DDL commands
 - Create command
 - Alter command
 - Truncate command
 - Drop command
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- Working with DML commands
 - Insert command
 - Update command
 - Delete command
- Working with DQL command
 - Select command usage
 - Where clause
 - Aggregate functions in SQL
 - Group by clause
- Creating Stored procedures in SQL Server
 - Procedures without parameters
 - Procedures with parameters
 - Executing procedures

ADO .NET

- Intro to ADO .Net
- Connecting to Different RDBMS like SQL Server, Oracle, Access etc
- Connected and Dis-Connected Architectures
- Working with ADO .Net Objects
- SqlCommand Object
- SqlDataReader Object
- SqlDataAdapter Object
- DataSet
- DataView
- DataTable
- DataRow and DataColumn
- CRUD operations using ADO .Net
- Calling Stored Procedures from SQL Server
- Creating a Mini Project using C# and SQL Server

ASP .Net

- Client side vs Server side Scripting
 - Introduction to Web Server & Deployment
 - Static Web App vs Dynamic WebApp
 - Introduction to ASP .Net
 - Creating WebForms in ASP .Net
 - Working with Controls (Server side and Client side)
 - Creating controls from Source View (HTML view)
 - Server-side Validations in ASP .Net
 - Validation Controls in ASP .Net
 - Working with JavaScript in ASP .Net
 - Client-side Validations in ASP .Net
 - State Management in ASP .Net
 - Client side and Server side State Management
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- ViewState, QueryString, Hidden Field, Cookies etc.
- Caching, Sessions and Application Objects.
- Working with Web Services in ASP .Net
- ADO .Net in ASP .Net
 - Data binding in ASP .Net
 - ADO .Net Objects Revisited
 - Bound Controls in ASP .Net
 1. GridView
 2. DataList
 3. Repeater etc.
- Introduction to XML
- Creating XML file
- Viewing XML contents in Gridview
- Creating a Dynamic WebApplication using ASP .NET with SQL Server Back-end

ASP .Net MVC

- Introduction to ASP .NET MVC Architecture
 - Folder Structure
 - Routing
 - HTML Helpers
 - Model
 - Controller
 - ActionMethods
 - ActionResult
 - Views
 - Razor syntax
 - Loosely type views
 - Strongly typed views
 - Layout Pages
 - Partial Views
 - Data Annotations in MVC
 - ADO .Net Recap
 - CRUD Operations using ADO .NET
 - Entity Framework
 - Database First Approach
 - Code First Approach
 - CRUD Operations using Entity Framework
 - Filters in MVC
 - Security in ASP .NET MVC
 - Authentication
 - Authorization
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