

COURSE CONTENT FOR C#.NET

- ❖ **Title**
- ❖ **Introduction of OOP and .net Framework**
- ❖ **Introduction to >Net Framework**
- ❖ **CLR**
- ❖ **CTS**
- ❖ **CLS**
- ❖ **CIL**
- ❖ **Why .net**
- ❖ **C# LANGUAGE BASICS AND ADVANCED:**
- ❖ **Module 1:**
 - CTS:**
 - Value type and reference type Const, readonly, Checked / unchecked, out/ref
 - Constructs :**
 - Conditional constructs -- if...else, switch...case
 - Iterative constructs -- while, do..while, for...loop
 - struct, enumeration access specifier, namespace classes, properties, read only, write only, read write boxing, unboxing
- ❖ **Module 2:**
 - **OOP concepts**
 - Abstraction, inheritance, encapsulation, polymorphism
 - **Binding:** static binding, dynamic binding
 - Function overloading, function overriding, virtual, new keyword
 - Abstract class and methods
 - Destructor-- finalize, Dispose()
 - Interface, sealed class
 - Arrays—single dimension, double dimension
- ❖ **Module 3:**
 - **Delegate:** single cast and multicast
 - Events
 - Exception handling
 - File handling
- ❖ **Module 4:**
 - **Collections :** Arraylist, hashtable, stack, queue Static class, static method, static property, static constructor static data member
- ❖ **Module 5:**
 - Single file assembly
 - Private assembly
 - Public / shared assembly

COURSE CONTENT FOR SQL SERVER 2008

❖ **Introduction to Databases:**

- Introduction to database management systems
- Functions of database
- Database tables
- Database keys
- Primary key
- Foreign key
- Types of databases
- Database architecture
- Hierarchical
- Object oriented and relational
- Hybrid
- Relational database properties
- E R Modelling
- Database normalization

❖ **Working With Sql Server 2008 -- Language Basics and Concepts of Relational Data:**

❖ **Module 1:**

- Introduction to database (RDBMS, SQL)
- DDL, DML- insert, delete, update, select
- Simple query
- Datatypes, user defined data types
- Single row function and group functions

❖ **Module 2:**

- Join, subquery
- Procedures and functions
- Triggers
- Transactions
- Exception handling

COURSE CONTENT FOR ADO.NET

❖ **Accessing data through ADO.Net – Basics:**

- Brief History of Data Access at Microsoft
 - The early years
 - ODBC and RDO
 - OLEDB and ADO
- Managed Providers
- Vendor neutral providers (ODBC and OLEDB)
- Vendor specific providers (SQL Server, Oracle, etc.)
- Introduction to providers specific objects (Connections, -Commands, DataReaders and DataAdapters)
- Introduction to a provider neutral object (DataSet)
- Comparative Architecture of DAO/RDO/ADO and ADO.NET
- Connected/Disconnected Architecture in ADO.NET
- Various DB Library in ADO.NET (SQL, ORACLE & OLEDB)
- Disconnected Architecture
- Connection Object, Data Adapter Dataset
- Active connection (Connection Object, Command Object, Data Reader), Dataset, Data View, versions

COURSE COCONTENT FOR ASP.NET 4.0

- ❖ **Asp.Net - Basics, Accessing Data In Connected Architecture, Disconnected Architecture:**
 - ASP.Net architecture
 - Difference between ASP and ASP.Net
 - How aspx pages are getting processed,aspnet_isap.dll and aspnet_wp.exe
 - Brief introduction to HTML, CSS, XML, XSL,XSD
 - Role of HTTP- Handlers and Modules, Request Processing Life-cycle in ASP.Net, Separation of code from presentation- Code behind model, Dynamic Compilation

- ❖ **Creating a Microsoft ASP.NET Web Form:**
 - Creating Web Forms
 - Types of Web Form Controls
 - Using HTML Controls
 - Using Server Controls
 - Using HTML Server Controls

- ❖ **Adding Code to a Microsoft ASP.NET Web Form:**
 - Using Code-Behind Pages
 - Adding Event Procedures to Web Server Controls
 - Using Page Events
 - Submitting Forms and Processing Form **Controls using:** The ASP.NET 2.0 PostBack Model
 - Understand how the PostBack model of ASP.NET 4.0 works.
 - Write code that interacts with the PostBack model of

- ❖ **ASP.NET:**
 - The Cross Page Postback model in ASP.NET 4.0
 - Posting Data to another page
 - Accessing Previous page properties

- ❖ **ASP.NET Validation Controls:**
 - Using Server controls, validating input using Validation controls
 - Using custom validator, writing client side validation scripts
 - Validation groups
 - Creating User Controls in Web Applications
 - Creating User Controls
 - Adding User Controls to an ASP.NET Web Form

- ❖ **Server controls and Data Binding:**
 - Using templated controls like GridView, Data Repeater, DataList
 - Understanding DataBinding in AsP.NET
 - Visual Aids for ADO.NET Programmers
 - Server Explorer
 - Query Designer (Menu-> Data -T -SQL Editor)

- ❖ **Objects:**
 - Connection, Command Text, Command Type, Transaction, Parameters, Execute Non Query, Execute Reader, Execute Scalar, Managing Transactions, Handling Exceptions, Constraints, Data Relation.
 - Working with GridView and FormView, DataList, Details View and Form View.
 - Customizing their output by defining user defined templates.
 - Implementing Paging, Sorting using GridView.

- Editing data using gridview control
 - Simplified Data Binding
 - **Data Source Controls:**- SqlDataSource,- Object DataSource,- XML DataSource
 - **Data Controls:** GridView and Details View Controls
- Passing parameters:**
- Using Control parameter
 - Using Query String parameter

❖ **ASP.NET Configuration Section:**

- Using Navigation Controls
- XML SiteMaps,- Navigation Controls - Treeview, Menu controls
- Sitemap path

❖ **Managing Look and Feel:**

- Creating a Common Layout using Master Pages in ASP.NET 4.0
- Describe the concept of a Master Page, Content Page, nested Master Pages
- Themes and Skins:-local theme vs global theme
- State Management in an ASP.NET Application
- Application and Session Variables
 - Cookie, Querystring, Viewstate, outproc

COURSE CONTENT FOR JAVASCRIPT

❖ **Introduction to Javascript**

❖ **Javascript operators and expressions**

❖ **Javascript objects**

❖ **Arrays**

❖ **Creating and invoking a function**

COURSE CONTENT FOR HTML

❖ **Introduction to HTML**

❖ **Different types of formatting tags**

❖ **HTML forms**

❖ **Image, hyperlink**

❖ **Creating a table**

❖ **Color codes**