

.NET Syllabus

›Introduction To .Net

- What is .net
- .net platform independent or not
- .net framework
 - CLS
 - CTS
- Framework Class Libraries (FCL)
- Base Class Libraries (BCL)
- Common Language Runtime (CLR)
- Just In Time (JIT) Compilation and its types

›Introduction to C# .Net

- Features of C#.net
- Data Types of C#.net
- Conditional and Looping Control Statements
- Arrays
- Jagged Arrays
- One Dimensional Arrays
- Two Dimensional Arrays
- Members of Array Class
- Console Applications and Console Class
- Functions
- Pointers
- Structures
- Value types and Reference types



- Enumerations
- Boxing and Unboxing

›Object Oriented Programming Structure (OOPS)

- OOPS Features
 - Class
 - Data Encapsulation
 - Data Abstraction
 - Object and Instance
 - Inheritance and Polymorphism
- Access Modifiers
 - Public
 - Internal
 - Protected
 - Protected Internal
 - Private
- Creating Classes
- Creating in class
 - Fields
 - Properties
 - Methods
- Static Members Vs Instance Members
- Sealed Methods and Sealed Classes
- Constructor and Types of Constructors
- Garbage Collector and Memory Management By Garbage Collector
- Polymorphism
 - Compile Time
 - Runtime Polymorphism

- Inheritance
 - Keyword 'new' this and 'base'
 - Method Overloading
 - Method Overriding
 - Methods
 - Abstract Methods
 - Abstract Classes
 - Interfaces
 - Operator Overloading
 - Delegates
 - Destructor
-

There are various available :

1. OPT Jobs in Colorado
 2. OPT Jobs in Georgia
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›Steps to work with Delegate

- Creating a Delegate
- Instantiating a Delegate
- Invoking the Delegate

›Types of Delegates

- Single Cast Delegate
- Generics

- Generic Classes
- Generic Methods
- Partial Classes
- Types of Errors
- Multi Cast Delegate
- Multithreading
- Exception Handling
- Structured Exception Handling

›Windows Forms

- Introduction
- Properties
- Events
- Events and Delegates
- Methods
- Forms and Controls
- Advanced Controls-Image List, Tree View and List View
- Label , Basic Controls-Button, Textbox, Check Box, Radio Button, ListBox, Checked List Box, Combo Box, DateTimePicker, Picture Box, Timer and Progress bar
- Dialog Controls-Open File Dialog, Save File Dialog, Font Dialog and Color Dialog
- Container Controls-Group Box,Panel,TabContainer and Split Container
- Multiple document Interface (MDI) Applications
- Menus -Menu Strip, Context Menu Strip

›Class Libraries and Assemblies

- Create a Class Library



- Using a Class Library
- Assemblies
 - What is a assembly or assemblies?
 - Assembly types
- Satellite Assemblies
- Private Assemblies
- Global Assembly Cache (GAC)
- Shared Assemblies

›ADO.NET

- History of Database Technologies by Microsoft
- Architecture
- Connected Architecture
- Disconnected Architecture
- Examples with Disconnected and Connected Architecture
- Net Data Providers
 - SqlClient
 - OracleClient
 - OLEDB
 - ODBC
- Data Reader
- Creating Connection to various Data Sources
- Command
- Command Builder
- Calling Stored Sub Programs using ADO.Net
- Inserting,Deleting,Updating Rows
- Crystal Reports
- Data Set

- Data Adapter
- Data Table
- Data Column
- Data Row
- Stored Procedures
- XML Integration
- XML Basics
- Creating Tables
- XML Namespace
- Windows Service
- Deployment
- Transactions
- Role of XML in ADO.NET

>ASP.NET

Introduction to Web Applications

- HTML
- JavaScript
- CSS
- What is web server and its purpose
- IIS web server and Configuring IIS Web Server
- What is Virtual Directory and How to create it

>Introduction to ASP.Net

- What is ASP.Net
- Creating ASP.Net
- Request and Response objects



- How the Request for an ASP.Net page is Processed
- Page Submission Methods Post and Get
- Net Page Post-Back

›Creating ASP.Net Web Pages In visual studio .net

- Creating ASP.Net website in visual Studio.net in Page and Code Behind Techniques
- HTML Server Controls and Web Server Controls Standard Web Server Controls-TextBox, Button, Label, ListBox, DropDownList, CheckBox.RadioButton, CheckBoxList, RadioButtonList, Image Link Button, Image Button, HyperLink, view, Multi view, AdRotator, Calendar and File Upload
- Client Side and Server side controls

›Validations

- Validation types
 - Client-Side
 - Server-Side
- Validation Groups
- Validation Controls-Required Field Validator, Compare Validator, Range Validator, Custom Validator and Regular Expression Validator
- Validation Summary

›ADO.NET

›ADO.Net Data Providers

- SQL Client
- Oracle Client

- ODBC
- OLEDB

›ADO.NET Architecture

- Connected Architecture
- Disconnected Architecture
- Creating Connection to various Data Sources
- Examples with Disconnected and Connected Architecture
- Calling Stored Sub Programs using ADO.net
 - Data Bound Controls of Asp.net
 - Gridview
 - DataList
 - Repeater
 - Listview
 - FormView
 - DetailsView

›ASP.NET Worker Process and Page Life Cycle

- State Management
- What is State Management
- Client Side State Management Techniques
 - Cookies
 - Query String Parameters
 - View State
- Server Side State Management Techniques
 - Application
 - Session
 - Caching

›Security in ASP.NET

- What is Authentication and Authorization
- Types of Authentication
 - Forms
 - Windows
 - Passport

›Master Pages

- Introduction
- Dynamic Master Page
- Creating Content Pages
- Creating Master Pages
- Accesing Master Page content from Content Page

›Themes

- Introduction
- Dynamic Themes
- Creating themes and applying to pages

›ASP.NET AJAX

- Introduction to AJAX
- Advantages
- Components
- AJAX Control ToolKit
- AJAX Control ToolKit Controls
- AJAX Extensions