

**Web Programming Introduction**

- Understanding role of Web Server and Web Browser.
- Brief about HTTP Protocol.
- HTTP Request structure.
- Form Tag and comparison between Get and Post methods.
- HTTP Response Structure

**HTML and JavaScript**

- Understanding HTML Form Tag and elements within it.
- Javascript using Sample Programs. Traditional ASP Basics
- Introduction to ASP.

Traditional ASP Basics

**Introduction to ASP**

- How ASP Works.
- ASP Objects.
- Installing IIS on Windows 10.
- Sample Programs.
- Importance's of Form tag and how it works.

**ASP.NET Introduction & Controls**

- ASP.NET Introduction
- First ASP.NET Application.
- Auto Postback Property.
- Event Handler Parameters.
- Dynamically initializing Controls
- IsPostBack property of Page class

- ListControls
- Comparison between HtmlControls and WebControls
- Control Properties and Methods
- FileUpload Control

#### **ASP.NET Architecture**

- What is AppDomain?
- Life Cycle of ASP.NET Page
- How Control Manages its State
- What is EnableViewState
- How Control raises events
- Event handling in Web Forms
- Writing Custom Classes in WebApplication

#### **CSS & Themes**

- Work with CSS
- Use Themes to Customize a Site
- Name Skins within a Theme
- Do server-side Styles using Themes
- Add contents of a Theme and Skin
- Apply themes and Profiles .

#### **Redirecting User to Another Page**

- Redirecting Options
- Response.Redirect
- Server.Transfer
- Cross Page Postback

- Determine how the pages was invoked
- Passing values between pages

**Master Pages**

- Introduction to MasterPage
- ContentPlaceHolder and Content tags
- Accessing controls of MasterPage in ContentPage
- URL's in MasterPages
- UniqueID and ClientID

**Working with User Control**

- Overview of User Controls
- Creating a User Control
- Adding Properties to User Control
- Adding Events to User Control
- Using User Control in Web Form
- Rendering Clients Scripts Using Page.ClientScript methods

**Validation Controls**

- Base Validator
- Required Field Validator
- Compare Validator
- Range Validator
- Regular Expression Validator
- Custom Validator
- Causes Validation Property
- Grouping - Validation Group Property

- Page.Validators and Page.IsValid

### **ASP.NET State Management**

- Static Members
- View State
- Hidden Field in Form
- Query String
- HttpContext
- Cookies-HttpCookie
- Sessions-HttpSessionState
- Application-HttpApplicationState
- Summary of All Features

### **WebConfiguration File and Global.asax**

- Introduction to Configuration files
- Page setting in web.config
- Custom Errors
- URL Re-Writing
- Tracing
- Using ConfigSource Attribute
- Using Location Section
- HttpApplication class-Global.asax

### **Authentication & Authorization**

- What is Authentication and Authorization
- Types of Authentication

- Forms Authentication
- Role based Authentication
- Windows and Basic Authentication
- What is ASP.NET Impersonation
- Using location section in web.config

#### **Application Service Providers**

- ASP.NET Providers Introduction
- Membership Providers
- Role Providers
- Writing Custom Providers
- Profile Providers
- Web Parts Personalization Providers

#### **Data Bound Controls**

- Databinding traditional way
- SqlDataSource
- GridView
- DetailsView
- FormView
- DataList
- Repeater
- ListView
- DataPager

#### **Web Caching**

- Why Caching

- Types of Caching
  - i. Output Caching
  - ii. Fragment Caching
  - iii. Substitution Caching
  - iv. Data Caching
- SQL Cache Invalidation

### **Globalization and Localization**

- Definitions
- Creating Resource files for different cultures
- Designing the WebForm & linking controls to keys in Resource files
- Alternatives to initialize culture settings of the page.

### **AJAX.NET**

- What is AJAX
- What is AJAX.NET
- Script Manager
- Update Panel
- Update Progress
- Timer
- AJAX Control Toolkit

### **Routing**

- What is Routing?
- Mapping Route to Physical file
- Reading Route Parameters
- Route Expression
- Generate URL using Markup

**Understanding & Publishing Web Application**

- Introduction to ASP.NET Web Application
- Advantages of IIS Applications
- Creating web application in IIS
- Converting File System application to IIS Application
- Using Virtual Directory
- Publishing ASP.NET Website
- Culture specific formatting

**Develop an Online Website**

- Creating master pages
- Design content pages
- Create CSS ,Use proper Validation
- Apply ajax control like calendar etc
- Integrate ASP.NET Webform with SQL SERVER DATABASE.
- CRUD Application