

UNIT**I**

Overview to .Net Framework– Web Architecture (**Overview of ASP.NET Architecture**) – Client Server Architecture – Application Web Servers – Installation of IIS server – **Introduction to Visual Studio** – Types of Files in Asp.NET – Types of controls in Asp.NET – Page Architecture, Adding Controls to a Webpage – The Page Class – WebForm – **Using standard controls** (Buttons, Textbox, Checkbox, Label, Panel, Listbox, Dropdownlist etc.) **and Rich web Controls (calendar, fileupload etc.)**.

UNIT II

What is Validation? – Client Side Validation – Server Side Validation – **Validation Controls** (RequiredField Validator, Range Validator, CompareField Validator, RegularExpression Validator, Custom Validator, ValidationSummary Control) – **Master Page** – Designing Website with Master Page, Theme and CSS – **Navigation Controls** – Introduction of Exceptions and Errors, try/catch blocks, finally block.

UNIT III

What is State? – Why is it required in Asp.Net? – Client Side State Management – Server Side State Management – **State management (viewstate, session, application, cache, Query String, Cookie)** – Introduction to Web.Config (using various sections like connectionstrings, appsettings, customerrors, Authentication and Authorization) & global.asax file.

UNIT IV

Overview of ADO.NET– Architecture of ADO.NET – Connected Architecture – Disconnected Architecture – Database Programming with ADO.NET(Connection, Command, DataReader, DataAdapter, Dataset, DataColumn, DataRow, DataConstraints, DataView etc.) – **Using Data Access Control** (GridView Control, Repeater Control etc.) – Binding Data to DataBound Controls – Displaying Data in a webpage using SQLDataSource Control – Data Binding Expressions – Caching Application Pages And Data – Introduction to LINQ – **Introduction to ASP.NET with AJAX or jQuery and its tool kit.**

UNIT V

Introduction to XML – Reading Datasets From XML – Writing Datasets With XML – WebServices (Introduction, HTTP, SOAP, UDDI, XML, Creating a Web Service, Consuming a Web Service) – **Introduction to MVC.**

Practical

1. Installing Visual Studio and IIS.
2. Practice of Standard Controls.
3. Practice of Standard Controls.
4. Practice of Validation Controls.
5. Practice of Master Page.
6. Using Theme and CSS in website.
7. Practice of Navigation Controls.
8. Using try/catch block.
9. Understanding & Practice of Query String ,Viewstate
10. Understanding & Practice of Session, Application
11. Importance and use of web.config file.
12. Use of global.asax file.
13. Database programming with ADO.NET (Connection, Command, DataReader).
14. Database programming with ADO.NET (DataAdapter, Dataset, DataColumn, DataRow, DataConstraints, DataView etc.).
15. Practice of Data Access Controls (GridView Control, Repeater Control etc.).
16. Practice of Data Binding Expressions
17. Practice of Displaying Data in a webpage using SQLDataSource Control

18. Practice of Caching Application Pages And Data
19. Practice of using LINQ instead of SQL commands.
20. Practice of AJAX or jQuery controls.
21. Practice of sending emails.
22. Practice of Writing Datasets to XML file and Reading Datasets From XML.
23. Practice of creating and using web services.
24. Overview of MVC

Reference Books

1. ASP.NET UNLEASHED – BY Stephen Walther, Kevin Hoffman , Nate Dudek **SAMS**
2. Beginning ASP.NET 4 in C# and VB – By Imar Spaanjaars **Wrox**
3. Beginning ASP.NET 4 in C# 2010 – By Matthew MacDonald Apress
4. C# 4.0 The Complete Reference – By Herbert Schildt – McGraw-Hill Prof Med/Tech
5. C# in a Nutshell – By Peter Drayton, Ben Albahari, Ted Neward – **O'Reilly Media, Inc.**
6. Professional C# 4.0 and .NET 4 – By Christian Nagel, Bill Evjen, Jay Glynn, Karli Watson, Morgan Skinner – **WORX**