

ASP.Net Programming Plan

Course Duration : 90 Days

Topics & Details

Introduction to Web Development and ASP.NET:

- ★ Understanding the basics of web development: HTML, CSS, and JavaScript.
- ★ Introduction to ASP.NET and its role in web application development.
- ★ Setting up the development environment: Visual Studio and .NET SDK.

Introduction to C#:

- ★ Basics of C# programming language: variables, data types, operators.
- ★ Control structures: if statements, loops (for and while).

Introduction to ASP.NET Web Forms:

- ★ Creating a simple ASP.NET Web Forms project.
- ★ Understanding server controls: textboxes, buttons, labels.
- ★ Handling user input and events.

ASP.NET Validation Controls:

- ★ Using validation controls for form validation.
- ★ Customizing error messages and styles.

Working with Databases (ADO.NET):

- ★ Connecting to a database using ADO.NET.



- ★ Executing SQL queries: SELECT, INSERT, UPDATE, DELETE.
- ★ Displaying data in ASP.NET applications.

State Management in ASP.NET:

- ★ Understanding different state management techniques: ViewState, Session, Cookies.
- ★ Using these techniques to maintain state across pages and user sessions.

ASP.NET Master Pages:

- ★ Creating consistent layouts using master pages.
- ★ Implementing a common structure for the website.

ASP.NET User Controls:

- ★ Creating and using user controls for modular and reusable components.
- ★ Implementing user controls in ASP.NET pages.

ASP.NET Security:

- ★ Implementing authentication and authorization.
- ★ Protecting against common security threats: SQL injection, XSS attacks.

ASP.NET AJAX:

- ★ Introduction to AJAX and asynchronous web development.
- ★ Using UpdatePanel and ScriptManager for partial page updates.

ASP.NET Web Services:

- ★ Creating and consuming web services in ASP.NET applications.



ASP.NET MVC:

- ★ Basic understanding of the Model-View-Controller (MVC) architecture.
- ★ Creating a simple ASP.NET MVC application.

ASP.NET Core:

- ★ Introduction to ASP.NET Core and its advantages.
- ★ Creating a basic ASP.NET Core application.

Debugging and Error Handling:

- ★ Debugging techniques in Visual Studio.
- ★ Handling errors and exceptions in ASP.NET applications.

Deployment and Hosting:

- ★ Deploying ASP.NET applications to web servers.
- ★ Understanding web hosting options.

Project Work:

- ★ Guided project: Developing a small interactive web application using ASP.NET.
- ★ Applying learned concepts to a practical project.

Best Practices and Code Quality:

- ★ Understanding best practices for clean and maintainable ASP.NET code.
- ★ Code readability, proper indentation, and naming conventions.

Examination & Certification:

- ★ At the last step appear in the final examination and get final certificate.

