

ASP.NET

ASP.NET overview

ASP.NET is a free web framework for building great websites and web applications using HTML, CSS, and JavaScript. You can also create Web APIs and use real-time technologies like Web Sockets.

Course outline

1. Introduction to ASP.NET

- From ASP to ASP.NET
- Web Forms
- Web Services
- ASP.NET Features

2. Web Forms Architecture

- Page Class
- Web Forms Life Cycle
- Web Forms Event Model
- Code-Behind

3. ASP.NET and HTTP

- Request/Response Programming
- HttpRequest Class
- HTTP Collections
- HttpResponse Class
- Redirection
- HttpUtility Class

4. Web Applications Using Visual Studio

- Using Visual Web Developer
- Visual Studio Forms Designer
- Using Components
- Shadow Copying
- Using the Global.asax File
- Data Binding

5. State Management and Web Applications

- Session State
- Application State
- Multithreading Issues
- Cookies

6. Server Controls

- HTML Server Controls
- Web Forms Server Controls
- Rich Controls
- Validation Controls
- User Controls

7. Caching in ASP.NET

- What Is Caching
- Page-Level Caching

- Page Fragment Caching
- Optimizing Your ASP.NET Application
- Application Caching

8. ASP.NET Configuration and Security Fundamentals

- Configuration Overview
- Authentication and Authorization
- Forms Authentication
- Windows Authentication
- Security and ASP.NET

9. Debugging, Diagnostics and Error Handling

- Debugging
- Application Tracing
- Page Tracing
- Error Handling

10. More Server Controls

- Most recent ASP.NET Controls
- Menus
- Master Pages

11. ADO.NET and LINQ

- ADO.NET Overview
- .NET Data Providers
- Connections
- Commands
- DataReaders and Connected Access
- Data Sets and Disconnected Access
- Language Integrated Query

12. Data Access in ASP.NET

- Data Source Controls
- Connection String Storage
- GridView
- DetailsView
- FormView
- Object Data Sources
- ListView
- DataPager
- LinqDataSource

13. Personalization and Security

- Configuration Overview
- Themes
- Skins
- Security in ASP.NET
- Membership and Roles
- Login Controls
- User Profiles

14. Introduction to ASP.NET AJAX

- Rich Client Applications
- AJAX
- ScriptManager
- UpdatePanel
- AJAX Client Library
- Remote Method Calls
- AJAX Control Toolkit

15. HTTP Pipeline

- Pipeline Architecture
- Context
- Applications
- Handlers
- Modules