

Developing Microsoft ASP.NET 2.0 Web Applications (Course 3201)

COURSE OUTLINE:

Module 1: Creating an ASP.NET 2.0 Application

This chapter covers the entities that form the foundation of Web applications written with ASP.NET 2.0.

Lessons

Lesson: Evaluating the Features of the New Web Development Environment

Lesson: Building Shared Code

Lesson: Working with the Page Object Model

Lab: Creating an ASP.NET 2.0 Application

After completing this module, students will be able to:

Describe the features of the new Web development environment.

Use the Compile-on-Demand functionality.

Use the Page Object model to build a Web form.

Module 2: Working With Master Pages

In this module, students will learn how master pages allow developers to reuse code across pages.

Lessons

Lesson: The Advantages of Using Master Pages

Lesson: Authoring Master and Content Pages

Lesson: Writing Nested Master Pages

Lesson: Programming Master Pages

Lab: Writing Master Pages and Content Pages

After completing this module, students will be able to:

Describe the advantages of using master pages.

Write master pages and their corresponding content pages.

Create nested master pages.

Program master pages.

Module 3: Manipulating Data in ASP.NET 2.0

This module describes the new ASP.NET 2.0 data source model, the data-binding mechanism, and the process of connecting a Web control to a data source element. Students will learn to use the new data access features.

Lessons

Lesson: Using Data Binding

Lesson: Using Data Providers

Lesson: Using Data Source Components

Lesson: Using Data Source Controls to Expose Standard Data Operations

Lesson: Working with Data-Bound Controls

Lesson: Working with Composite Data-Bound Controls

Lab: Manipulating Data

After completing this module, students will be able to:

Use data binding enhancements.

Use .NET data providers.

Use data source components to support the declarative model of binding.

Describe the ASP.NET 2.0 data binding enhancements.

Describe the ASP.NET 2.0 data provider enhancements.

Describe Data Source Components.

Describe the different Data Source controls.

Describe the different Data-Bound controls.

Module 4: Working with ASP.NET 2.0 Wizards and Site Navigation

In this module, students will look in more depth at wizards and site navigation functions.

Lessons

Lesson: Creating a Wizard Control

Lesson: Implementing Site Navigation

Lab: Using the CreateWizard Control

After completing this module, students will be able to:

Create a Wizard control.

Implement the site navigation control

Module 5 Working with ASP.NET 2.0 State Management

In this module, students will learn how ASP.NET 2.0 goes beyond the ASP.NET 1.x Cache object and ASP Application and Session objects. ASP.NET 2.0 introduces control state for custom ASP.NET controls, custom session-state management options, and a mechanism for handling custom cache dependencies, including SQL Server database dependencies.

Lessons

Lesson: Comparing the View State and the Control State

Lesson: Customizing the Session State Mechanism

Lesson: Improving Performance with Caching

Lab: State Management

After completing this module, students will be able to:

Use the Control State in ASP.NET 2.0 and avoid the common problems associated with information persisting across postbacks.

Extend the Session State Mechanism.

Work with the ASP.NET Cache Object.

Module 6: Managing Web Parts

In this module, students will learn how the Web Parts framework provides a simple and familiar way for ASP.NET developers to create modular Web applications that support end-user personalization.

Lessons

Lesson: Introduction to Developing Web Parts

Lesson: Building Pages with Web Parts

Lesson: Editing and Listing Web Parts

Lesson: Connecting Web Parts

Lab: Developing Web Parts

After completing this module, students will be able to:

Build pages with Web part server controls.

Create user editable Web parts.

Enable Web part connectivity.

Module 7: Customizing Web Sites with User Profiles and Themes

In this module, students will learn how to build an effective personalization layer into a Web application by employing user profiles and themes.

Lessons

Lesson: Managing User Profiles

Lesson: Using Themes

Lesson: Using Themes

Lab: Personalizing Applications with User Profiles and Themes

After completing this module, students will be able to:

Customize Web applications by using user profiles and themes.

Module 8: Implementing ASP.NET 2.0 Security

In this module students will learn how forms-based authentication in ASP.NET 2.0, which is arguably the only viable approach to restricting access to real-world Web sites, is even easier and quicker to use.

Lessons

Lesson: Using Forms Authentication

Lesson: Using Security-Related Controls

Lesson: Managing Membership and Roles for Web Sites

Lab: Implementing ASP.NET 2.0 Security

After completing this module, students will be able to:

Use cookieless authentication for forms.

Implement ASP.NET 2.0 security controls.

Use the Membership class for authenticating users.

Module 9: Working with ASP.NET 2.0 Configuration and Instrumentation

In this module students will learn how to use the tools that ASP.NET 2.0 supplies to programmatically update the configuration files.

Lessons

Lesson: Changes to the Configuration Schema for ASP.NET 2.0

Lesson: Using the Configuration API

Lesson: The Health Monitoring API

Lab: ASP.NET Configuration and Instrumentation

After completing this module, students will be able to:

Describe schema changes to the configuration files.

Use the ASP.NET Administrative Tool to change configuration settings.

Use the health monitoring API.