10232: Designing and Developing Microsoft ® SharePoint ® Server 2010 Applications

Duration: 5 Days
Method: Instructor-Led Training (ILT) | Live Online Training

Course Description

In this course, participants learn the skills and best practices that are required to help organizations design and develop effective SharePoint applications.

Target Audience

This course is intended for:

- IT professionals who will be responsible for designing custom code for projects that are deployed to SharePoint 2010 servers.
- Microsoft SharePoint Development Professionals who are responsible for leading projects, designing solutions, and identifying problems.

Prerequisites

To attend this course, candidates must have:

- Understanding of the problem-solving techniques that apply to the Software Development Life Cycle (SDLC), including the versioning of software and the management of configuration and content in a software system.
- Basic knowledge of Web application architecture.
- Experience in developing in a team environment.
- Working knowledge of ASP.NET and Visual Studio®.
- Experience in SharePoint infrastructure including servers and services.
- At least two years' experience in SharePoint development including the APIs and XML schemas necessary to create web parts perform data access, and provision fields, lists, content types, etc.

Course Objectives

Upon successful completion of this course, attendees will be able to:

- Develop strategies for caching, session state, as well as design for high-performance sites by limiting page size and iteration.

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Course Objectives *Continued*

- Determine the most suitable presentation method, visual elements, programmatic objects, and multilingual strategy which meets the design objectives.
- Evaluate available data access and storage methods and determine the appropriate implementation for the application requirements.
- Identify the pros and cons of various data capture options and specify the most effective method or combination of methods for capturing user input.
- Evaluate the use and implementation of SharePoint artefacts and determine which artefacts best meet the needs of the application requirements.
- Design processing systems to get work done in the solution.
- Create an effective strategy for implementation and deployment of custom solutions in both development and production environments.
- Create a development strategy to allow multiple developers and administrators to work together.
- Devise a strategy for developing and deploying upgrades over time as the solution evolves.
- Develop an information architecture strategy that will support flexibility and growth and a navigation strategy that fits on top of this information architecture.
- Plan a comprehensive branding strategy and determine the necessary application elements required to support that strategy.
- Design and implement a security approach which supports both code access and end-user functionality.
- Design an effective strategy for optimizing page render times and data access methods within SharePoint 2010.
- Determine the appropriate use of unit and integration tests within SharePoint and design an effective strategy for ensuring maximum code reliability.

Course Topics

Module 1: ASP.NET Advanced Concepts for SharePoint
- Server Memory
- Server CPU
- Transfer and Client

Module 2: Designing for User Experience
- SharePoint Background
- Page Parts
- Pages
- Globalization and Localization
- Designing for Accessibility

Module 3: Designing for Data
- List and Library Fundamentals
- Large Data Strategies
- SharePoint Data Management

Module 4: Designing Data Capture and Integration
- Key Considerations for Data Capture
- Designing for Data Capture
- Designing for Integration

Course Topics *Continued*

Module 5: Designing Artifacts
- Customer Requirements
- Creating Sites

Module 6: Designing Processing Solutions
- Multi-Server Configurations
- In and Out of the Sandbox
- Getting Work Done
- Working with Workflows

Module 7: Designing Packaging
- Understanding Packaging Life Cycle
- Establishing Design Principles

Module 8: Designing a Development Strategy
- Developing for the Enterprise
- The Role of Logging
- The Benefits of Application Configuration

Module 9: Developing Version and Deployment
- Application Life Cycle Management
- Source Control and Build
- Versioning Strategy
- Upgrading
- Deployment

Module 10: Designing Information Architecture and Navigation
- Understanding Information Architecture
- Planning for Software Boundaries
- Navigation

Module 11: Designing Branding and Customization Support
- Introduction to Branding
- Branding Options
- Branding Decisions
- Managing User Experience
- Planning for Customization

Module 12: Designing Security
- Security Within SharePoint
- Using an Alternate Identity Store
- Forms-Based Authentication
- Deeper Look at SharePoint Claims

Module 13: Designing for Page and Data Access Performance
- Optimizing SharePoint Page Performance
- Analysing Performance with the SharePoint Developer Dashboard
- Optimizing SharePoint Data Access Performance

Module 14: Designing a Testing Strategy
- Testing Concepts
- Unit Testing
- Integration Testing
- Performance Testing

LABS INCLUDED