Microsoft Certified Solutions Expert: SharePoint Applications

Classroom, Instructor Led, including all official course material

Course 20488B: Developing Microsoft SharePoint® Server 2013 Core Solutions

About this course

In this course, students learn core skills that are common to almost all SharePoint development activities. These include working with the server-side and client-side object models, developing and deploying features, solutions, and apps, managing identity and permissions, querying and updating list data, managing taxonomy, using workflow to manage business processes, and customizing the user interface.

Who should attend

The course is intended for professional developers who develop solutions for SharePoint products and technologies in a team-based, medium-sized to large development environment. While some familiarity with SharePoint solution development is required, candidates are not expected to have prior experience with the new features in SharePoint Server 2013.

The ideal candidate is a technical lead with at least four years of SharePoint and web development experience. The candidate is responsible for designing custom code for projects that are deployed to or interact with SharePoint environments. This includes:

- Selecting an appropriate approach and building customizations in SharePoint.
- Creating and implementing a strategy for solution packaging, deployment, and upgrading.
- Identifying SharePoint data and content structures for customizations.
- Performing diagnostics and debugging.
- Planning and designing applications for scalability and performance.

- Identifying and mitigating performance issues of customizations.
- Understanding authentication and authorization.
- Experience with Windows PowerShell.
- Broad familiarity with SharePoint capabilities.
- Familiarity with Online Services such as Azure and SharePoint Online.

At course completion
After completing this course, students will be able to:

- Design and manage features and solutions.
- Develop code for custom server-side components.
- Manage and customize authentication and authorization.
- Create custom sites and lists and manage the site lifecycle.
- Explain the capabilities and design choices for SharePoint apps.
- Use the client-side object model and the REST API.
- Develop provider-hosted and auto-hosted SharePoint apps.
- Distribute and deploy SharePoint apps.
- Create custom workflows to automate business processes.
- Use fields and content types to manage taxonomy.
- Customize the appearance and behavior of user interface elements.
- Customize navigation and site branding.

Prerequisites
Before attending this course, students must have:

- A working knowledge of using Visual Studio 2010 or Visual Studio 2012 to develop solutions.
- A basic working knowledge of SharePoint solution development, either in SharePoint 2013 or in earlier versions of SharePoint.
- A working knowledge of Visual C# and the .NET Framework 4.5.
- A basic understanding of ASP.NET and server-side web development technologies, including request/response and the page lifecycle.
- A basic understanding of AJAX and asynchronous programming techniques.
- A basic working knowledge of client-side web technologies including HTML, CSS, and JavaScript.
- Familiarity with approaches to authentication and authorization, including claims-based authentication.

Certification Exam
Exam 70-488
Credit toward certification: MCSD SharePoint Applications

Course 20489B: Developing Microsoft® SharePoint® Server 2013 Advanced Solutions

About this course

This course provides SharePoint developers the information needed to implement SharePoint solutions using Enterprise Search, Managed Metadata Service (MMS), Business Connectivity Services (BCS), Enterprise Content Management (ECM), Web Content Management (WCM), Social Computing features and SharePoint Apps.

Who should attend
The course is intended for professional developers who develop solutions for SharePoint products and technologies in a team-based, medium-sized to large development environment. The course is ideally suited to SharePoint developers who have gained some experience with SharePoint 2013 and who are looking to build on their existing skills.

At course completion
After completing this course, students will be able to:
- Describe the apps for SharePoint development platform.
- Use the client-side object models and the REST API to communicate with SharePoint.
- Configure security for apps for SharePoint.
- Optimize the performance of apps for SharePoint.
- Explain the capabilities and applications of managed metadata in SharePoint 2013.
- Automate the creation and configuration of managed metadata term sets.
- Interact with managed metadata term sets and fields from client-side and server-side code.
- Describe the SharePoint 2013 Search Architecture.
- Build simple and advanced KQL Queries.
- Describe the SharePoint Search Index.
- Describe and work with crawled and managed properties.
- Describe the levels and security of the SharePoint Search Schema.
- Create various types of result sources
- Create basic and complex query transforms
- Configure query rule conditions and actions to target query intent
- Create and modify result types
- Create and modify display templates
- Utilize display templates with various search web parts
- Add managed properties as refiners with counts
- Utilize entity extraction in your crawls
- Extend content processing with Content Enrichment
- Describe how to utilize the Publishing API to access publishing settings and content.
- Describe how to use and customize page content controls in publishing sites.
- Configure website structure and navigation.
- Describe the difference between structured and metadata navigation.
- Utilize basic publishing features of SharePoint.
- Use the new cross-site publishing features of SharePoint 2013.

- Configure and implement variations for multilingual sites.
- Configure search engine optimization settings.
- Add SEO Properties to publishing pages and Managed Navigation terms.
- Configure caching to improve site rendering performance.
- Optimize site assets and resources to maximize performance.
- Describe the key components of Business Connectivity Services in SharePoint Server 2013.
- Create and configure BDC models by using SharePoint Designer.
- Create and configure BDC models by using Visual Studio 2012.
- Describe BCS Connector Framework scenarios.
- Design and Develop BCS Connector stereotyped operations.
- Design and Configure BDC model security.
- Optimize Search Connector crawl performance.
- Use Visual Studio to build BDC Models for Search.
- Deploy BDC Search connectors.
- Debug and troubleshoot your search connectors.
- Design and deploy BDC event subscriber methods.
- Describe how to format event notification messages.
- Configure alerts and event receivers on external lists.
- Explain how user profile data is used in SharePoint.
- Describe the options and restrictions for accessing user profile data.
- Use client-side code to access and server-side code to access and update user profile data.
- Configure and manage user profile properties.
- Describe how to identify, diagnose, and remove bugs in SharePoint apps during development.
- Describe how to record information about issues that arise in deployed SharePoint apps.
- Describe how developers optimize the performance of SharePoint apps by implementing best practices, measuring performance, and load testing.

Prerequisites

Before attending this course, students must have:

- Completed course 20488A: Developing Microsoft SharePoint Server 2013 Core Solutions (or equivalent knowledge).
- A working knowledge of using Visual Studio 2010 or Visual Studio 2012 to develop solutions.
- A basic working knowledge of SharePoint solution development, either in SharePoint 2013 or in earlier versions of SharePoint.
- A working knowledge of Visual C# and the .NET Framework 4.5.
- A basic understanding of ASP.NET and server-side web development technologies, including request/response and the page lifecycle.
- A basic working knowledge of client-side web technologies including HTML, CSS, and JavaScript.

Certification Exam

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