20488: Developing Microsoft® SharePoint® Server 2013 Core Solutions

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

Course Description

In this course, participants 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.

Target Audience

This course is intended for:

- Professional developers who develop solutions for SharePoint products and technologies in a team-based, medium-sized to a large development environment.

Prerequisites

To attend this course, candidates must have:

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

Course Objectives

Upon successful completion of this course, attendees 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 behaviour of user interface elements.
- Customize navigation and site branding.

Course Topics

Module 1: SharePoint as a Developer Platform

- Introducing the SharePoint Developer Landscape
- Choosing Approaches to SharePoint Development
- Understanding SharePoint 2013 Deployment and Execution Models

Module 2: Working with SharePoint Objects

- Understanding the SharePoint Object Hierarchy
- Working with Sites and Webs
- Working with Execution Contexts

Module 3: Working with Lists and Libraries

- Using List and Library Objects
- Querying and Retrieving List Data
- Working with Large Lists

Module 4: Designing and Managing Features and Solutions

- Understanding Features and Solutions
- Configuring Features and Solutions
- Working with Sandboxed Solutions

Module 5: Working with Server-Side Code

- Developing Web Parts
- Using Event Receivers
- Using Timer Jobs
- Storing Configuration Data

Module 6: Managing Identity and Permissions

- Understanding Identity Management in SharePoint 2013
- Managing Permissions in SharePoint 2013
- Configuring Forms-Based Authentication
- Customizing the Authentication Experience

Course Topics *Continued*

Module 7: Introducing Apps for SharePoint

- Overview of Apps for SharePoint
- Developing Apps for SharePoint

Module 8: Client-Side SharePoint Development

- Using the Client-Side Object Model for Managed Code
- Using the Client-Side Object Model for JavaScript
- Using the REST API with JavaScript

Module 9: Developing Remote Hosted SharePoint Apps

- Overview of Remote Hosted Apps
- Configuring Remote Hosted Apps
- Developing Remote Hosted Apps

Module 10: Publishing and Distributing Apps

- Understanding the App Management Architecture
- Understanding App Packages
- Publishing Apps
- Installing, Updating, and Uninstalling Apps

Module 11: Automating Business Processes

- Understanding Workflow in SharePoint 2013
- Building Workflows by using Visio 2013 and SharePoint Designer 2013
- Developing Workflows in Visual Studio 2012

Module 12: Managing Taxonomy

- Managing Taxonomy in SharePoint 2013
- Working with Content Types
- Working with Advanced Features of Content Types

Module 13: Managing Custom Components and Site Life Cycles

- Defining Custom Lists
- Defining Custom Sites
- Managing SharePoint Sites

Module 14: Customizing User Interface Elements

- Working with Custom Actions
- Using Client-Side User Interface Components
- Customizing the SharePoint List User Interface

Module 15: Working with Branding and Navigation

- Creating and Applying Themes
- Branding and Designing Publishing Sites
- Tailoring Content to Platforms and Devices
- Configuring and Customizing Navigation

LABS INCLUDED