

40 HORAS

INTRODUCTION

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.

AUDIENCE

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.

COURSE OUTLINE

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

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