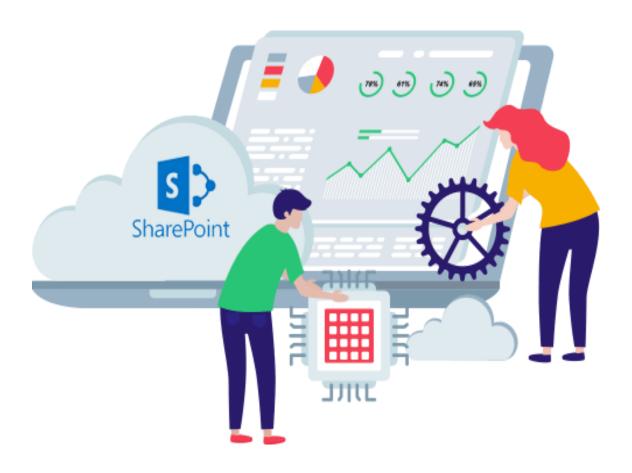# TechyEdz Solutions

Training | Consulting | Developement | Outsourcing

SharePoint

Microsoft SharePoint Developer

Microsoft SharePoint Developer

♦ Course Overview:

This course is intended for professional developers who use Microsoft SharePoint 2013 in a team-based, medium- to large-sized development environment. SharePoint 2013 Developer provides existing .NET developers with practical information and labs that enables them to build solutions on the Microsoft SharePoint 2013 platform. SharePoint is a web based collaborative platform that integrates with Microsoft Office. Launched in2001, SharePoint is primarily sold as a document management and storage system, but the product is highly configurable and usage varies substantially between organizations. This training will sharpen your skills in optimizing SharePoint applications, exploring workflows in SharePoint Designer, creating Office app, deploying it to catalogue, and installing them.

♦ Course Outline:

1: Introduction to the SharePoint 2013 Development Platform

- ➤ SharePoint 2013 as a Development Platform
- ➤ SharePoint 2013 Object Hierarchy
- ➤ Working with SharePoint 2013 Objects
- ➤ Lab: Creating SharePoint 2013 Application Pages by Using Visual Studio 2013
- ➤ Lab: Enumerating SharePoint 2013 Farm Hierarchies
- ➤ Lab: Manipulating Properties of Objects in the SharePoint Farm

2: Using SharePoint 2013 Developer Tools

- ➤ Developing SharePoint Sites by Using SharePoint Designer 2013
- ➤ Developing SharePoint Solutions by Using Visual Studio 2013
- ➤ Packaging and Deploying SharePoint 2013 Solutions
- ➤ Lab: Creating Document Libraries by Using SharePoint Designer 2013
- ➤ Lab: Creating SharePoint List Definitions and Instances by Using Visual Studio 2013
- ➤ Lab: Packaging Features and Solutions by Using Visual Studio 2013

3: Developing SharePoint 2013 Web Parts

- ➢ Developing Standard Web Parts
- ➢ Developing Connected Web Parts
- ➢ Developing Visual Web Parts
- ➢ Lab: Creating, Deploying, and Debugging a Simple Web Part by Using Visual Studio 2013
- ➢ Lab: Using SharePoint Components in a Web Part
- ➢ Lab: Creating a Visual Web Part by Using Visual Studio 2013

4: Working with SharePoint Objects on the Server

- ➢ Working with SharePoint Sites Programmatically
- ➢ Working with SharePoint Lists Programmatically
- ➢ Working with List Data Programmatically
- ➢ Lab: Creating and Securing Sites Programmatically
- ➢ Lab: Creating Lists Programmatically
- ➢ Lab: Retrieving Secured Data

5: Creating Event Receivers and Application Settings

- ➢ Creating Event Receivers
- ➢ Working with Web.Config Programmatically
- ➢ Lab: Creating List Event Receivers
- ➢ Lab: Creating Feature Receivers to Modify Web.Config
- ➢ Lab: Creating Web Event Receivers

6: Developing Solutions by Using Business Connectivity Services

- ➢ Business Connectivity Services Overview
- ➢ Developing External Content Types and Lists by Using SharePoint Designer
- ➢ Developing Business Connectivity Services Solutions by Using Visual Studio 2013
- ➢ Lab: Creating External Content Types and Lists by Using SharePoint Designer 2013
- ➢ Lab: Creating Business Data Catalog Models by Using Visual Studio 2013

7: Developing SharePoint 2013 Workflows

- ➢ Creating Workflows with SharePoint Designer
- ➢ Creating Workflows with Visual Studio 2013
- ➢ Lab: Creating Workflows by Using SharePoint Designer
- ➢ Lab: Creating a Sequential Workflow by Using Visual Studio 2013

8: Working with Client-Based APIs for SharePoint 2013

- ➢ Overview of the SharePoint 2013 Client Object Model
- ➢ Working with the SharePoint 2013 Client Object Model in .NET Applications
- ➢ Lab: Creating a SharePoint 2013 Site, List, and List Items Using the Client Object Model
- ➢ Lab: Building and Using the Console Application

9: Developing Interactive User Interfaces

- ➢ Creating Menu Items and Ribbon Controls
- ➢ Creating Client-Side Dialogs
- ➢ Lab: Creating a Site Actions Menu Item
- ➢ Lab: Creating a Ribbon Item
- ➢ Lab: Creating a Client-Side Dialog

10: Developing Silverlight Applications for SharePoint

- ➢ Creating Silverlight Applications for SharePoint 2013
- ➢ Deploying and Debugging Silverlight Applications for SharePoint 2013
- ➢ Lab: Creating a Silverlight Application
- ➢ Lab: Developing the Silverlight Application

11: Developing Sandboxed Solutions

- ➢ Sandboxing and User Solutions
- ➢ Restrictions for Sandboxed Solutions
- ➢ Lab: Creating a Sandboxed Solution by Using Visual Studio 2013
- ➢ Lab: Investigating Allowed and Disallowed Operations in Sandboxed Solutions

12: Working with SharePoint Server Profiles and Taxonomy APIs

- ➢ User Profiles
- ➢ Taxonomies
- ➢ Lab: Managing User Profiles
- ➢ Lab: Working with User Profiles Programmatically

13: Developing Content Management Solutions

- ➢ Developing Enterprise Content Management Solutions
- ➢ Developing Web Content Management Solutions
- ➢ Lab: Customizing Master Pages
- ➢ Lab: Applying a Theme to a SharePoint Site

14: Advanced ASP.NET Concepts for SharePoint

- ➤ Server Memory
- ➤ Server CPU
- ➤ Transfer and Client
- ➤ Lab: Using Fiddler to Observe Page Loading
- ➤ Lab: Using Fiddler to Examine Page Size
- ➤ Lab: Reducing Page Size
- ➤ Lab: Capturing a Memory Profile
- ➤ Lab: Reviewing the Report
- ➤ Lab: Resolving Memory Issues and Retest

15: Designing for User Experience

- ➤ SharePoint Background
- ➤ Page Parts
- ➤ Pages
- ➤ Globalization and Localization
- ➤ Designing for Accessibility
- ➤ Lab: Plant Summary Page
- ➤ Lab: Plant Configuration Page
- ➤ Lab: Employee List
- ➤ Lab: Line Status
- ➤ Lab: Line Dashboard
- ➤ Lab: Manager's Dashboard
- ➤ Lab: Alert Notification

16: Designing for Data

- ➤ List and Library Fundamentals
- ➤ Large Data Strategies
- ➤ SharePoint Data Management
- ➤ Lab: Creating List Views
- ➤ Lab: Indexing Key Columns
- ➤ Lab: Establishing an Invoice Content Type
- ➤ Lab: Creating a Solution for Storing Invoices
- ➤ Lab: Testing the Solution for Storing Invoices

17: Designing Data Capture and Integration

- ➤ Designing for Data Capture

- ➢ Designing for Integration
- ➢ Lab: Connecting to the Data Source
- ➢ Lab: Defining the External Content Types
- ➢ Lab: Defining the External Lists
- ➢ Lab: Setting Security for the Content Types
- ➢ Lab: Defining an Association
- ➢ Lab: Deciding the kind of form to create
- ➢ Lab: Creating the Header fields
- ➢ Lab: Creating the Lines
- ➢ Lab: Publishing the Form to a SharePoint Library

18: Designing Artefacts

- ➢ Customer Requirements
- ➢ Creating Sites
- ➢ Lab: Evaluating the Requirements
- ➢ Lab: Designing the Solution
- ➢ Lab: Evaluating the Requirements
- ➢ Lab: Designing the Solution

19: Designing Processing Solutions

- ➢ Multi-Server Configurations
- ➢ In and Out of the Sandbox
- ➢ Getting Work Done
- ➢ Working with Workflows
- ➢ Lab: Evaluating Client Capabilities and Requirements
- ➢ Lab: Evaluating Sandbox Capabilities and Requirements
- ➢ Lab: Evaluating Farm Deployment Capabilities and Requirements
- ➢ Lab: Designing Data Access for Sensor Data
- ➢ Lab: Designing a Processing Solution for the Report
- ➢ Lab: Designing a Processing Solution for Approval

20: Designing Packaging

- ➢ Understanding the Packaging Lifecycle
- ➢ Establish Design Principles
- ➢ Lab: Designing a Solution
- ➢ Lab: Create the Final Solution
- ➢ Lab: Creating a Common Assembly
- ➢ Lab: Creating a dependent Solution

21: Designing a Development Strategy

- Developing for the Enterprise
- The Role of Logging
- Application Flexibility and Configuration
- Lab: List based configuration appraisal
- Lab: SharePoint List based configuration
- Lab: SharePoint List based logging
- Lab: Configure logging level
- Lab: Add Logging to SharePoint ULS

22: Developing Versioning and Deployment

- Application Lifecycle
- Versioning Strategy
- Upgrading
- Lab: Defining Base Version
- Lab: Upgrading the Assembly
- Lab: Creating Upgrade Manage Page
- Lab: Adding Feature to Upgrade
- Lab: Upgrade Feature

23: Designing Information Architecture and Navigation

- Designing an Information Architecture
- Planning for Software Boundaries
- Designing Content Navigation
- Lab: Card Sort
- Lab: Design Content Types and Site Columns
- Lab: Deploying a custom SiteMap
- Lab: Adding an ASP Menu to the Master Page

24: Designing Branding and Customization

- Introduction to Branding
- Themes
- Master Pages
- Cascading Style Sheets
- Tools Overview
- Implementing SharePoint Branding
- Lab: Deploying a Custom Site Column and Content Type

- ➢ Lab: Using custom CSS
- ➢ Lab: Deploying a custom master page
- ➢ Lab: Deploying a Custom Site Column and Content Type

25: Designing Security

- ➢ Security within SharePoint
- ➢ Using an Alternate Identity Store
- ➢ Forms-Based Authentication
- ➢ Deeper look at SharePoint Claims
- ➢ Lab: Setting Up the Authentication Provider
- ➢ Lab: Creating an FBA-Claims Site
- ➢ Lab: Viewing Claims for an FBA User
- ➢ Lab: Understanding the Scope and Relating it to Configuration
- ➢ Lab: Designing a Security Strategy

26: Designing for Page and Data Access Performance

- ➢ Optimizing SharePoint Page Performance
- ➢ Analyzing Performance with the SharePoint Developer Dashboard
- ➢ Optimizing SharePoint Data Access Performance
- ➢ Lab: Using the SharePoint Server 2013 Developer Dashboard to Capture Performance Metrics
- ➢ Lab: Leveraging the SharePoint Server 2013 Search API for Large Data Queries

27: Designing Testing Strategy

- ➢ Testing Concepts
- ➢ Unit, Integration, Regression Testing
- ➢ Performance Testing
- ➢ Lab: Unit Testing
- ➢ Lab: Performance Testing
- ➢ Lab: Load Testing

✦ Prerequisites:
- • Familiarity with SharePoint environments
- • Familiarity with SharePoint capabilities and online services such as Azure, and SharePoint Online
- • Knowledge of or experience in developing Office client apps.

- Before attending this course, students should ideally be Developers with 1-2 years ASP.NET development experience.

⚜ Who Can attend:
- Basics of Web development
- Attendees should have professional development experience with Visual Studio, the NET framework and ASP. NET (C#.Net / VB.NET – Any Version).

⚜ Number of Hours: 40hrs
⚜ Certification: MS 100 & 101
⚜ Key Features:
- ➢ One to One Training
- ➢ Online Training
- ➢ Fastrack & Normal Track
- ➢ Resume Modification
- ➢ Mock Interviews
- ➢ Video Tutorials
- ➢ Materials
- ➢ Real Time Projects
- ➢ Virtual Live Experience
- ➢ Preparing for Certification