

## Microsoft SharePoint 2010, Application Development

This course provides existing .NET developers with practical information and labs that enables them to build solutions on the Microsoft SharePoint 2010 platform.

### Détails

- **Code** : SP2010AD
  - **Durée** : 5 jours ( 35 heures )
- Public**
- Developers
- Pré-requis**
- Experience performing end user tasks with SharePoint 2007 or SharePoint 2010 and an understanding of the purpose and use of the following : Lists – Documents and Libraries – Personalizing an SP page/site – Using MySites – Using SharePoint Designer

### Objectifs

- Describe the SharePoint 2010 development platform and the benefits and features that it offers to developers.
- Use development tools that are integrated with the SharePoint 2010 development platform, such as Visual Studio 2010 and SharePoint Designer 2010.
- Develop Web Parts for SharePoint 2010 solutions.
- Develop code that uses the server-side objects provided by the SharePoint 2010 development platform.
- Develop event receivers and manipulate application settings for SharePoint 2010 solutions.

### Programme

#### Module 1: Introduction to the SharePoint 2010 Development Platform

- This module describes the SharePoint 2010 development platform and the benefits and features that it offers to developers.

#### Lessons

- Lesson 1: SharePoint 2010 as a Development Platform
- Lesson 2: SharePoint 2010 Object Hierarchy
- Lesson 3: Working with SharePoint 2010 Objects
- Lab : Developing with the SharePoint 2010 Object Hierarchy
- Exercise 1: Creating SharePoint 2010 Application Pages by Using Visual Studio 2010
- Exercise 2: Enumerating SharePoint 2010 Farm Hierarchies
- Exercise 3: Manipulating Properties of Objects in the SharePoint Farm
- After completing this module, students will be able to:
- Describe SharePoint 2010 as a development platform.
- Describe the SharePoint 2010 object hierarchy from the perspective of a developer.
- Work with SharePoint 2010 objects programmatically.

#### Module 2: Using SharePoint 2010 Developer Tools

- This module describes how to use development tools that are integrated with the SharePoint 2010 development platform, such as Visual Studio 2010 and SharePoint Designer 2010.

#### Lessons

- Lesson 1: Developing SharePoint Sites by Using SharePoint Designer 2010
- Lesson 2: Developing SharePoint Solutions by Using Visual Studio 2010
- Lesson 3: Packaging and Deploying SharePoint 2010 Solutions
- Lab : Using SharePoint 2010 Developer Tools
- Exercise 1: Creating Document Libraries by Using SharePoint Designer 2010
- Exercise 2: Creating SharePoint List Definitions and Instances by Using Visual Studio 2010
- Exercise 3: Packaging Features and Solutions by Using Visual Studio 2010
- After completing this module, students will be able to:
- Develop SharePoint sites by using SharePoint Designer 2010.
- Develop SharePoint solutions by using Visual Studio 2010.
- Package and deploy SharePoint 2010 solutions.

#### Module 3: Developing SharePoint 2010 Web Parts

- This module describes how to develop Web Parts for SharePoint 2010 solutions.

#### Lessons

- Lesson 1: Developing Standard Web Parts
- Lesson 2: Developing Connected Web Parts
- Lesson 3: Developing Visual Web Parts
- Lab : Creating SharePoint 2010 Web Parts by Using Visual Studio 2010
- Exercise 1: Creating, Deploying, and Debugging a Simple

#### Web Part by Using Visual Studio 2010

- Exercise 2: Using SharePoint Components in a Web Part
- Exercise 3: Creating a Visual Web Part by Using Visual Studio 2010
- After completing this module, students will be able to:
- Develop standard Web Parts.
- Develop connected Web Parts.
- Develop Visual Web Parts.

### Module 4: Working with SharePoint Objects on the Server

- This module describes how to develop code that uses the server-side objects provided by the SharePoint 2010 development platform.

#### Lessons

- Lesson 1: Working with SharePoint Sites Programmatically
- Lesson 2: Working with SharePoint Lists Programmatically
- Lesson 3: Working with List Data Programmatically
- Lab : Creating and Manipulating Server-Side Objects
- Exercise 1: Creating and Securing Sites Programmatically
- Exercise 2: Creating Lists Programmatically
- Exercise 3: Retrieving Secured Data
- After completing this module, students will be able to:
- Create and manipulate SharePoint sites.
- Create and manipulate SharePoint lists.
- Retrieve, add, update, and delete SharePoint list data.

### Module 5: Creating Event Receivers and Application Settings

- This module describes how to develop event receivers and manipulate application settings for SharePoint 2010 solutions.

#### Lessons

- Lesson 1: Creating Event Receivers
- Lesson 2: Working with Web.Config Programmatically
- Lab : Creating Event Receivers and Web.Config Modifications
- Exercise 1: Creating List Event Receivers
- Exercise 2: Creating Feature Receivers to Modify Web.Config
- Exercise 3: Creating Web Event Receivers
- After completing this module, students will be able to:
- Create event receivers for SharePoint 2010 solutions.
- Add, modify, and retrieve Web.config settings programmatically for use in your SharePoint solutions.

### Module 6: Developing Solutions by Using Business Connectivity Services

- This module describes how to develop solutions that access external data by using Business Connectivity Services.

#### Lessons

- Lesson 1: Business Connectivity Services Overview
- Lesson 2: Developing External Content Types and Lists by Using SharePoint Designer
- Lesson 3: Developing Business Connectivity Services

#### Solutions by Using Visual Studio 2010

- Lab : Building Business Connectivity Services Solutions
- Exercise 1: Creating External Content Types and Lists by Using SharePoint Designer 2010
- Exercise 2: Creating Business Data Catalog Models by Using Visual Studio 2010
- After completing this module, students will be able to:
- Describe Business Connectivity Services.
- Develop external content types and lists by using SharePoint Designer 2010.
- Develop Business Connectivity Services solutions by using Microsoft Visual Studio 2010.

### Module 7: Developing SharePoint 2010 Workflows

- This module describes how to develop workflows as part of SharePoint 2010 solutions.

#### Lessons

- Lesson 1: Creating Workflows with SharePoint Designer
- Lesson 2: Creating Workflows with Visual Studio 2010
- Lab : Creating Workflows for SharePoint 2010
- Exercise 1: Creating Workflows by Using SharePoint Designer
- Exercise 2: Creating a Sequential Workflow by Using Visual Studio 2010
- After completing this module, students will be able to:
- Create workflows for SharePoint by using SharePoint Designer 2010.
- Create workflows for SharePoint by using Microsoft Visual Studio 2010.

### Module 8: Working with Client-Based APIs for SharePoint 2010

- This module describes how to develop code that uses the client-side objects provided by the SharePoint 2010 development platform.

#### Lessons

- Lesson 1: Overview of the SharePoint 2010 Client Object Model
- Lesson 2: Working with the SharePoint 2010 Client Object Model in .NET Applications
- Lab : Developing .NET Applications by Using the SharePoint Client Object Model
- Exercise 1: Creating a SharePoint 2010 Site, List, and List Items Using the Client Object Model
- Exercise 2: Building and Using the Console Application
- After completing this module, students will be able to:
- Describe the SharePoint 2010 Client Object Model.
- Work with the SharePoint 2010 Client Object Model in Microsoft .NET Framework applications.

### Module 9: Developing Interactive User Interfaces

- This module describes how to develop server ribbon controls and client dialogs for the new user interface platform of SharePoint 2010.

#### Lessons

- Lesson 1: Creating Menu Items and Ribbon Controls
- Lesson 2: Creating Client-Side Dialogs

- Lab : Developing User Interface Components for SharePoint 2010 Solutions
- Exercise 1: Creating a Site Actions Menu Item
- Exercise 2: Creating a Ribbon Item
- Exercise 3: Creating a Client-Side Dialog
- After completing this module, students will be able to:
- Create menu items and ribbon controls.
- Create client-side dialogs.

## Module 10: Developing Silverlight Applications for SharePoint

- This module describes how to develop Silverlight applications that are integrated with SharePoint 2010 data and solutions.

### Lessons

- Lesson 1: Creating Silverlight Applications for SharePoint 2010
- Lesson 2: Deploying and Debugging Silverlight Applications for SharePoint 2010
- Lab : Developing Silverlight Applications by using the SharePoint Client Object Model
- Exercise 1: Creating a Silverlight Application
- Exercise 2: Developing the Silverlight Application
- After completing this module, students will be able to:
- Develop Silverlight applications for SharePoint 2010.
- Deploy and debug Silverlight applications for SharePoint 2010.

## Module 11: Developing Sandboxed Solutions

- This module describes how to develop sandboxed solutions for SharePoint 2010.

### Lessons

- Lesson 1: Sandboxing and User Solutions
- Lesson 2: Restrictions for Sandboxed Solutions
- Lab : Creating Sandboxed Solutions for SharePoint 2010
- Exercise 1: Creating a Sandboxed Solution by Using Visual Studio 2010
- Exercise 2: Investigating Allowed and Disallowed Operations in Sandboxed Solutions

- After completing this module, students will be able to:
- Develop sandboxed solutions.
- Describe what is allowed and what is not allowed in sandboxed solutions.

## Module 12: Working with SharePoint Server Profiles and Taxonomy APIs

- This module describes how to develop code that uses the taxonomic and user profile services of the SharePoint 2010 development platform.

### Lessons

- Lesson 1: User Profiles
- Lesson 2: Taxonomies
- Lab : Working with User Profiles and Taxonomies Programmatically
- Working with User Profiles and Taxonomies Programmatically
- Exercise 1: Managing User Profiles
- Exercise 2: Working with User Profiles Programmatically
- After completing this module, students will be able to:
- Create, retrieve, and manipulate user profiles and user profile properties.
- Create and retrieve taxonomic terms.

## Module 13: Developing Content Management Solutions

- This module describes how to develop code that uses the content management services of the SharePoint 2010 development platform.
- Lessons
- Lesson 1: Developing Enterprise Content Management Solutions
- Lesson 2: Developing Web Content Management Solutions
- Lab : Branding SharePoint Sites
- Exercise 1: Customizing Master Pages
- Exercise 2: Applying a Theme to a SharePoint Site
- After completing this module, students will be able to:
- Describe how to develop enterprise content management solutions for Microsoft SharePoint Server 2010.
- Describe how to develop Web content management features Microsoft SharePoint Server 2010.

## Modalités

- **Type d'action** :Acquisition des connaissances
- **Moyens de la formation** :Formation présentielle – 1 poste par stagiaire – 1 vidéo projecteur – Support de cours fourni à chaque stagiaire
- **Modalités pédagogiques** :Exposés – Cas pratiques – Synthèse
- **Validation** :Exercices de validation – Attestation de stages