

SharePoint Training DVD Videos



SharePoint 2013 Development

Intended for: Developer / Architect

Prerequisites: Development Skills

Hours: 30.5 hours of video + 30 hours of hands on labs

OVERVIEW

Majority of SharePoint development courses start the development portion without giving you practical understanding of out-of-box SharePoint functionality and its strengths and limitations. By the time you open Visual Studio in our course, you will be an expert in collaboration, enterprise document management, search, workflows, and many other aspects of SharePoint. With that knowledge you will understand not only the **how** but the **why** of SharePoint development.

We will cover the most important aspects of the SharePoint API and how to access it using client and JavaScript object models. Additionally, you will learn to access and manipulate SharePoint lists using REST API. For the app development, you will build a SharePoint hosted app that uses SharePoint components. Also, you will create a provider hosted app that utilized Windows Azure web app, SQL, no SQL tables and BLOB storage. We will discuss app security, developer workflow, and deployment options in details.

Learn all the topics covered in the Fundamentals, Administration, Business Intelligence, and System Administration courses plus:

- Learn site collection management and understand when to create separate site collections
- Learn the most important aspects of the SharePoint client, JavaScript, and REST APIs.
- Build and deploy SharePoint hosted app that uses pages, ribbon actions, lists, and app parts.
- Learn about app deployment in an organization and SharePoint app store licensing model.
- Understand developer workflow.
- Understand app security
- Build an asp.net MVC provider hosted app that resides on Windows Azure.
- Use entity framework to access SQL Azure data.

Use Azure blobs and no SQL tables storage, CORS, signed URLs, and REST APIs

SECTION 1 – Fundamentals

1. Definitions, History, and Expectations

- Definitions
- History
- Editions
- How to Make SharePoint Successful

2. Sites, Lists, Versioning

- Site Collection
- Site
- Navigation
- Features
 - o Site template comparison
- Navigation
- List = App
 - o Columns
 - o Views
 - o Sharing
 - o Collaborative editing and SkyDrive Pro
 - o Versioning
 - Alerts and popularity
- List specific features
 - o Connect to Outlook
 - o Calendar aggregation
 - o Task indents and timeline

3. Social, User Profiles, My Site

- User Profile and Personal content
 - o Basic information
 - o Contact and details
 - o Contact and details
- Task aggregation on my site synchronization all tasks from all site collections to person's my site

- Newsfeed and Following
 - o Commenting, hashtags, likes
 - o Aggregation and settings
 - o Follow sites, people, hashtags
- Community site template
 - o Discussions
 - o Reputation and badges

4. Pages, Web Parts, Apps, and Themes

- Types of Pages
- Web Parts

5. InfoPath in SharePoint

- Form design
 - o Fields / columns
 - o Visual layout
 - Two column layout
 - Four column layout
 - o Logic
 - Rules
 - Validation
 - Hide / show controls
 - o External data
 - Get data from other SharePoint lists or databases
- InfoPath Form Web Part
- List forms vs. form library
 - o Digital signatures
 - o Complicated schema not all fields stored in SharePoint list

6. Workflows with SharePoint Designer

- Introduction
- Two platforms and what's new in 2013
- Definitions
- Stages, steps, and loops
- Conditions and branches
- Actions and variables
- Workflow types and association
- Information Management Polices
- Export and import workflows

7. Security Authorization

- Permissions and Permission Levels
- Site Collection Administrator
- Authentication vs. Authorization
- What provides authentication
- Who can assign permissions
- SharePoint groups
- Web Part to show users and SharePoint groups that have access to the site

8. Site Administration Tools

- Manage Content and Structure Tool
- Features
- Recycle Bin
- List and Site Templates
- Usage Statistics

9. Project: Libraries and Lists

- Setup Research Papers library with folders and metadata
- Setup Area for Industry Clinic project management

10. Mobile Access

- Windows 8 phone
- iPad
- Android browser

SECTION 2 - Administration

1. Site Collection Management

- Definition
- Why separate site collections
- Management

2. Site Columns

- Site Columns definition
- Scopes and updates

3. Managed Metadata

- Terms sets and term groups
- Local vs. Global context
- Enterprise keywords
- Social tags
- Search refinement based on metadata

4. Content Types

- Content type use cases
- Content type hierarchies and inheritance
- Using content types to create information architecture
- Document templates
- 2010 Workflows and information management policies for content types
- Content Type Syndication Hub
 - o How it works
 - o Relation to managed metadata
 - o View and other settings

5. Document sets

- Metadata and page layouts
- Versioning and workflows
- Document ids

6. User Profiles

- User profile properties
- Audiences
- My site settings

7. Search Administration

- Content Sources and Crawl Rules
- Properties
- Refinement in search web parts
- Query Rules
- Analytics
- Entity Extraction

8. Final Project

Metadata and Search

9. Records Management

- In place records management
- Record center template and use of content types
- Making documents into records using workflows
- eDiscovery cases
 - o eDiscovery sets
 - o Sources
 - o Custodians
 - o Queries

10. External Data and Business Data Services

- Data Sources and Data Views
- Secure Store Service
 - Application definitions
 - o Credentials
- Business Data Services
 - o External content types and lists in SharePoint Designer
 - o Editing forms using InfoPath Forms

SECTION 3 – System Administration

1. PowerShell

• Using PowerShell to administer SharePoint

2. Site Collection Management

- Site Collection
- Why and when to create multiple site collections
- Host header based site collections
- Site collection recycle bin

Moving sites using export import

3. Web Applications, Content Databases, and Service Applications

- Content database management
 - o Create new content database
 - o Move site collections
- Web application management
 - Web application level settings
 - Security policy
 - Max upload size
 - o Create new web application
 - Register a new service account
 - Create new application pool with the service account
 - Specify authentication
 - Port and host header
 - Database
 - Service applications
 - o Extend a web application
 - o Alternate access mappings
 - o Move content databases
- Service applications management
 - o Administrators
 - o Associations
 - o Create new

4. Authentication

- Windows: NTLM vs. Kerbero
- Claims-based authentication
- oAuthetnication
- SAML

5. IIS and SQL

- IIS application pools and application pages
- Content database structure

6. Issue Resolution

- Knowing when there is a problem
 - o Health Analyzer
 - o Correlations IDs

- Where to look for issue details
 - o IIS Log
 - o Windows Event Log
 - o SharePoint ULS Log
 - o Diagnostic Logging settings

7. User Profile Service Application

- AD Synchronization
 - o Permissions
 - o How to looks at synchronization errors in Forefront Identity Manager.

8. Search Service Application

- Search architecture
- Components
- Search Index
- Management through PowerShell

9. Backup and Restore

- Catastrophic backup
- Content database restore
- Unattached content database restore

10. Features and Site Definitions

- Hive 15
- Site Definitions and Features
- Solutions Management

11. Farm Topology

- Three tier architecture
- Adding servers
- Request management

1. Development Overview

- Goals
- State of Development
- Development Components
- SharePoint API
- Types of Applications
- Application Integration
- Lists Manipulation and Location

2. SharePoint API

- How to access
 - o Server side
 - o Client side
 - o JavaScript
 - o REST
- Server side as a web site
 - o Sites and Site Collections
 - o List manipulation
 - o List queries
- Javascript
 - o Sites
 - o Lists manipulation
- REST
- o Sites
- o Lists manipulation
- o Cross domain library
- Other API Sections using .NET Object Model
 - Security
 - o Central Administration
 - o Search
 - o Impersonation
- JavaScript in content editor web part via web day or skydrive

3. Server Side Application – Audit Trail

- Application Pages
- Custom Actions
- List Definition and Instances
- Visual web part
- Fields and Content Types
- Event Receivers
- Features and Solutions
- Server side solution Audit app

4. App Model and SharePoint Hosted App – Shared With Plus

- What to do
 - o Use SharePoint components and access SharePoint list data
 - o Use remote web applications, surface remote data, make SharePoint a portal
- Development options
 - o Napa development tools
 - o Visual Studio 2013
- Definitions
 - o Host web
 - o App web
 - o Isolated domain
- Hosting options
 - o SharePoint hosted
 - o Provider hosted
- Components
 - o Pages with JavaScript
 - o Custom actions for ribbon and menus with links to pages
 - o Modules
 - o App parts
 - o Features
 - o Packages and app manifest
- Authentication and Permissions
 - o OAuth
 - o App permissions
- Deployment in an organization
 - o App catalog
 - o App versions and updates
 - o Access permissions

5. Provider Hosted App - Learning Management

- Provider Hosted App Solution Structure
 - о Арр
 - o Web
 - o Azure ASP.NET MVC website management
 - o App registration in SharePoint
 - o Publishing profiles in Visual Studio 2013
- Azure SQL and Entity Framework
 - o Creation and design of Azure SQL database
 - o Model generation in Visual Studio
 - o Use of models in controllers and views
 - o Database schema and models updates
- Azure Blob Storage
 - o Terminology and URL structure
 - o Permissions and signed URLs
 - o Use in controllers, views, and JavaScript
- Azure No SQL Tables Storage
 - o Terminology and URL structure
 - o Table design: partition and row keys
 - o Permissions, signed URLs, CORS (Cross-origin resource sharing), and REST API
 - o Use in controllers, views, and JavaScript
- Licensing for SharePoint App Store
 - o Terminology and options
 - o Import of test licenses
 - o App license checks and caching recommendations

6. Event handlers

Server side event receivers

7. Deployment and Development Process Notes

- Code
- o Deployment process
- o Source control
- o Server code
- o Client code
- Content
 - o SharePoint Designer packages
 - o Site changes
 - o Save as template
 - o Content type syndication hub
 - o Custom code for global changes

 $\circ \ \text{Publishing content deployment} \\$