SharePoint 2010: Developer

Meet the expert: Doug Ware is a SharePoint expert and an instructor for many of our SharePoint 2007 and SharePoint 2010 courses. A Microsoft MVP several times over, Doug is the leader of the Atlanta .NET User Group, one of the largest user groups in the Southeast U.S., and is a frequent speaker at code camps and other events. In addition to teaching and writing about SharePoint, Doug stays active as a consultant and has helped numerous organizations implement and customize SharePoint.

Prerequisites: This course is intended for .NET developers who want to learn how to create custom SharePoint solutions. This course requires and understanding of Web development with .NET technologies and Visual Studio. It does not require knowledge of SharePoint, but that is helpful to get the most out of the course.

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Course description: This course is intended for .NET developers who want to learn how to create custom SharePoint solutions. This course requires and understanding of Web development with .NET technologies and Visual Studio. It does not require knowledge of SharePoint, but that is helpful to get the most out of the course.The topics in this course apply to all versions of SharePoint 2010 and all of the examples work in the free version, SharePoint Foundation 2010. SharePoint 2010 has reached a new level of features for .NET and web development that far exceeds previous versions. This course will cover SharePoint 2010 as a development platform, which includes creating sites, lists and pages. In creating these items you will be introduced to the many new features that SharePoint 2010 has to offer. Then you will cover the new SharePoint projects, item templates, feature and package designer found in Visual Studio 2010. The course will then cover programming lists with managed code including list instances, CAML queries and more. The SharePoint Client model is covered next with object instances, Silverlight and other elements. Then you will learn about branding for pages and styles, and then the importance of Sandbox Solutions. You will also see client side programming in JavaScript, as well as Site definitions and Web Templates. The instructor will then cover Security, Business Services and Workflow basics. To end the course you will see how to program navigation and the ribbon bars.

Course outline:

Introduction
- Introduction
- Development Platform
- Components
- Data Structures and Storage
- User Interfaces
- Security
- Background Services
- Service APIs
- Site Collection Basics
- Logical Site Hierarchy Example
- Single Site Collection
- Partitioning Site Collections
- Demo: Site Collection
- Summary

List and Web Parts
- Introduction
- Lists and Libraries
- List Views
- List Forms
- Basic List Types
- Foundation List Types
- Demo: Custom Lists
- Web Part Pages
- Fundamentals
- Structure of a Web Part Page
- Commonly Used Web Parts
- Demo: Web Part Page
- Summary

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- Web Application Architecture
- File Locations and Storage
- Demo: Locations and Storage
- Demo: Edit Master Page
- Configuration Management
- Security, Safety, Scalability
- Demo: Security and Safety
- Farm and Sandbox
- Summary

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- Features
- Capabilities of Features
- Features in SharePoint Root
- Demo: Features
- Feature Schema
- Feature Scopes
- Feature Schema
- Installing and Activating
- Demo: Installing + Activating
- Summary

Feature Types
- Introduction
- Types of Features
- New Feature Elements
- Defining Data Structures
- Field Element
- Demo: Field Element
- ContentType Element
- Demo: ContentType
- List Instance
- Demo: List Instance
- Content Type Binding
- Demo: Content Type Binding
- Feature Event Receivers
- Solutions
- Solution Files
- Demo: Solutions
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Visual Studio 2010
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- Visual Studio 2010
- Project Templates
- Site Selection
- Avoiding Problems
- Demo: New Project
- Item Templates
- Missing Template
- Demo: Item Templates
- Summary

VS 2010 Visual Designers
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- SharePoint Folders
- Replaceable Parameters
- Demo: SharePoint Folders
- Feature Designer
- Demo: Feature Designer
- Package Designer
- Demo: Package Designer
- Packaging Explorer
- Demo: Packaging Explorer
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Debugging
- Introduction
- Deployment

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- Demo: Deployment
- Debugging
- Demo: Debugging
- Reverse Engineering
- Demo: Reverse Engineering
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- Exploring Object Model
- Demo: Object Model
- Foundation Assemblies
- Core Classes
- SPContext
- Common Conventions
- Demo: Common Conventions
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- SPSecurity Class
- AllowUnsafeUpdates
- Demo: Security and Identity
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Best Practices
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- Avoiding Memory Leaks
- Demo: SPDispose Check
- Troubleshooting
- Demo: Troubleshooting
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List API
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- Demo: Creating Lists
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- Demo: Add Views
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List Queries
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- Retrieving Items
- CAML Queries
- SPQuery Class
- SPSiteDataQuery Class
- Query Properties
- ViewFields Property
- Query Property
- Comparsion Operators
- SPSiteDataQuery Additions
- Demo: SpQuery
- Joins
- Demo: Joins
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SharePoint LINQ
- Introduction
- Linq with SharePoint
- Limitations
- Demo: LINQ Query
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User Controls
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- Controls
- User Controls
- User Controls in Root
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- Web Controls in SharePoint
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- Web Parts in SharePoint
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- Delegate Controls in v4
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- Chrome
- Web Part Life Cycle
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- OnPreRender Uses
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- Deploying .webpart
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- ExecuteQuery
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- Demo: SP.UI
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CRUD and List Events
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- ListItemEvents
- Demo: ListItemEvents
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Custom List Forms
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- Options for Custom Forms
- Custom Forms -SP Designer
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- Fully Custom Forms
- Demo: Fully Custom Form
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Basic Look and Feel
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- Demo: Home Page
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- Demo: CSS Methods
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- Demo: Colors and Fonts
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Master Page Basics
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- Master Page Basics
- Demo: Master Pages
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SharePoint Master Pages
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- Master Page Locations
- Associating Master & Content
- Default and Custom Master
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- Why Sandbox
- How It Works
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Sandbox Constraints And Tools
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- Allowed Feature Elements
- Prohibited Feature Elements
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- Prohibited Functionality
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- VS 2010 SharePoint Power Tools
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Building Sandbox Solutions
- Introduction

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- Demo : Deploying
- JavaScript
- Demo: JavaScript
- Full Trust Proxies
- Demo : Full Trust Proxies
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- Site Definitions
- SharePoint Root Files
- Global Site Definition
- Demo: Global Site Definition
- WEBTEMP*.xml
- Key Elements
- DEMO:New Site Definition
- Onet.xml
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- NavBars Element
- DocumentTemplates Element
- Modules
- Configurations Element
- Feature Elements
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Web Templates
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- DEMO:Save Site as Template
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- SharePoint Users & Groups
- User and Group Classes
- SPGroupCollection
- AssociatedGroups
- DEMO:Create New Group
- SPUserCollection
- SPWeb.EnsureUser
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- DEMO:Users
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- Groups & Permission Levels
- Team Site Permission Levels
- Permission Levels-Lists
- Permission Levels-Sites
- Personalization Permissions
- DEMO:Restricted Read
- Securable Objects&Inheritance
- Breaking Inheritance
- DEMO:Breaking Inheritance
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- DEMO:Permissions Check
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- DEMO:Anonymous Access
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- Team Sites vs Publishing Sites
- Top Link Bar
- Quick Launch Menu
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- Adding Menu Items with Code
- DEMO: Top Menu
- SharePoint:AspMenu
- DEMO: AspMenu
- Adding Menu Links w/Features
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- DEMO: Sub Site Navigation
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- Basic CustomAction Attributes
- Common Non-Ribbon Locations
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- DEMO:Building a Custom Action
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- DEMO:Specific Lists
- The Ribbon
- GLOBAL\XML\CMDUI.XML
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- Hiding Ribbon & Site Actions
- DEMO:Hiding Ribbon&Site Actions
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- What BCS Does
- Concepts
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- DEMO:Adding Behivors
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- Migrating Declarative Models
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- Consuming WCF Services
- DEMO:WCF Service
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SP Designer Workflow
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- Improvements for Workflow
- Development Improvements
- SharePoint Server2010 Features
- SharePoint Designer Workflows
- DEMO:Simple Site Workflow
- Workflow Startup Options
- Elements of Designer Workflows
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- DEMO:Complex Site Workflow
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- Designing Workflows with Visio
- DEMO:Visio to SharePoint
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- DEMO:Simple Workflow & Log
- Save Workflow as Template
- DEMO:Save Workflow
- DEMO:Import
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