



DEPAUL UNIVERSITY

COLLEGE OF COMPUTING AND DIGITAL MEDIA

Institute for Professional Development

SHAREPOINT DEVELOPER PROGRAM

A ten-week comprehensive program covering Microsoft SharePoint® development

DePaul University's SharePoint Developer Program is designed to provide .NET programmers with an intensive and comprehensive introduction to the core technologies of Microsoft SharePoint. The program exposes students to SharePoint architecture and the use of SharePoint as a development platform for building customized solutions focusing on SharePoint as a collaboration framework and content management system.

Classroom lectures and demonstrations will be complemented by reading and programming assignments. The student will be provided with several hosted environments, a virtual machine, and supporting tools enabling the student to develop and test applications from his or her own computer.

YOU WILL LEARN:

- .NET refresher
 - .NET framework
 - Assemblies
 - Versioning and the Global Assembly Cache (GAC)
 - Code Access Security
 - ADO.NET
- ASP.NET for SharePoint
 - Master and layout pages
 - Web Parts framework
 - Page life cycle
 - Component development
 - Web Services
- SharePoint end user experience
 - Basic site provisioning
 - Security
 - Lists
 - Document libraries
 - Branding
- SharePoint architecture
 - Object model programming
 - Workflow development
 - Content types
 - Events
 - Document/list programming
 - Site definitions
 - Feature and solution development
- Content management
 - Web publishing
 - Document management
 - Reporting and dashboards
 - Business Data Catalog
 - Business process management

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SHAREPOINT DEVELOPER PROGRAM

SharePoint is Microsoft's central technology for connecting people and business processes. For the programmer, it provides a set of reusable tools that can be customized to build enterprise-level, collaborative applications. These tools include sites, lists, document libraries, workflows, event handlers, and enterprise search. It also provides a base-level functionality out of the box, which can be used to generate websites quickly. These websites can range from read-only, public-facing, marketing-driven websites to small-team collaboration sites to complex data-driven portals.

SharePoint is a framework for building business applications that encourage user collaboration and information sharing. The framework manages, in a unified manner, the backed data stores found within the typical enterprise. Building off ASP.NET, SharePoint allows organizations to leverage their existing .NET investments and expertise into the realm of portals, content management, and workflow.

The goal of the SharePoint Development Program is to give the student a complete working knowledge of SharePoint from the end user perspective to its core APIs. The program will begin with an overview of the various product editions and their features as well as a refresher of the .NET 2.0+ fundamentals that SharePoint is built upon. The program will then provide in-depth coverage of the core development constructs of SharePoint to enable the student to understand how the pieces fit together in common use cases. Finally, the program will expose the student to current development trends and how they will carry over into the next release of the product, SharePoint 2010.

Students in the SharePoint Developer Program are expected to do a considerable amount of work outside of class. The software provided enables the student to maximize learning opportunities. Instructors will be accessible in person and through e-mail.

CURRICULUM

The following topics are covered in the program. Each unit involves reading and assignments. All work can be done with the software provided.

YOUR LEARNING ENVIRONMENT

Program overview. Computing environment available to students and software distribution.

OVERVIEW OF SHAREPOINT

Tour of SharePoint. Windows SharePoint Services (WSS) vs. Microsoft Office SharePoint Server (MOSS).

Creating and managing sites and permissions, etc.

Lists: Announcements, Calendar, Contacts, Discussions, Link Lists, Task Lists.

Document Libraries: standard libraries, form libraries, picture libraries, Wikis.

Overview of Windows and Office integration.

Introduction to SharePoint Designer.

Workflows: out-of-the-box templates; custom workflows with SharePoint Designer.

Web Parts: out-of-the-box Web Parts; adding Web Parts to a site.

ASP.NET DEVELOPMENT FUNDAMENTALS

Visual Studio and C# refresher. Projects and solutions.

ASP.NET overview: Web projects, the debugger, data binding.

Page lifecycle.

Building and signing components (.ascx and .dlls). Global Assembly Cache. Consuming and using Web Services. Code access security.

ADO.NET. Connected and disconnected mode.

Master pages. ASP.NET 2.0 Web Parts.

SHAREPOINT ARCHITECTURE

Building and working within a development environment. SharePoint architecture (site collections, sites, Webs). SharePoint Object Model. Lists. Document libraries.

ADVANCED SHAREPOINT DEVELOPMENT

Collaborative Markup Language (CAML).

Content types. Event handlers: lists and site level; timer jobs.

Site branding and customization. Creating and applying themes. Regional settings. Ghosted and unghosted pages.

Custom workflows. Programming Web Parts.

SharePoint Web Services. Administrative tasks: provisioning sites; managing permissions. Custom Web Services integration.

Site definitions and custom fields.

Building Features. Types of Features. Activation. Scope Features. Dependencies. Deploying.

Building solutions for deployment.

Publishing Web template. Customizing a Web template. Forms authentication and building custom navigation providers.

Content management.

Business Data Catalog (BDC) and related Web Parts. Excel® services. Forms services.

ADDITIONAL TOPICS AND FUTURE EDITIONS OF SHAREPOINT

Integrating Ajax and Silverlight™ with SharePoint. Exploring the new features of SharePoint 2010.

GENERAL INFORMATION

ADMISSION

Applicants must have a solid programming background (at least two years of professional experience is preferred), including some experience building dynamic websites using ASP.NET and C#, and knowledge of basic HTML/CSS.

A substantial commitment of time is required for this intensive course of study. Acceptance into the program will be determined by the admissions committee on the basis of an applicant's overall qualifications, including work history and educational background.

FACILITIES

To promote the learning process, the Institute maintains special-purpose laboratories as well as dedicated classrooms equipped with state-of-the-art audio/visual equipment.

In addition, the college's unique Course OnLine (COL) technology allows students to replay classes over the Internet. COL captures and replays five components of the classroom experience—audio, video, PC screen, whiteboard, and document camera input—and incorporates them into one interface to provide an innovative rebroadcast system.

CLASSES

The Institute offers one section of the program each quarter. Classes meet on Tuesday and Thursday evenings.

FACULTY

The faculty consists of a team of instructors from the College of Computing and Digital Media and experts from industry. Faculty will be available throughout the program both in person and through e-mail.

COLLEGE OF COMPUTING AND DIGITAL MEDIA

The college, through its School of Computing and its School of Cinema and Interactive Media, offers a variety of programs at the undergraduate and graduate levels. Over 1,000 students are enrolled in the college's bachelor's programs and over 2,000 students are enrolled in the master's and Ph.D. programs making the college's graduate program one of the largest in the country. The college offers more than 200 courses each quarter, many in the evening, in several locations: the Loop Campus, the Lincoln Park Campus, the O'Hare Campus, the Naperville Campus, and the Rolling Meadows Campus. Many of the degree programs are also available exclusively online.

Current offerings at the undergraduate level include:

School of Computing

Computer Games Development
Computer Graphics and Motion Technology
Computer Science
Computing
Information Assurance and Security Engineering
Information Systems
Information Technology
Interactive Media
Math and Computer Science
Network Technology

School of Cinema and Interactive Media

Animation
Computer Games Development
Computer Graphics and Motion Technology
Digital Cinema
Interactive Media

Current offerings at the graduate level include:

School of Computing

Applied Technology
Business Information Technology
Computer Graphics and Motion Technology
Computational Finance
JD/MS in Computer Science Technology
JD/MS in Computer Science Technology
Computer Information and Network Security
E-Commerce Technology
Human-Computer Interaction
Information Systems
Information Technology
Instructional Technology Systems
IT Project Management
Software Engineering
Telecommunications Systems

School of Cinema and Interactive Media

Computer Games Development
Computer Graphics and Motion Technology
Digital Cinema – MS
Digital Cinema – MFA
Human-Computer Interaction

INSTITUTE FOR PROFESSIONAL DEVELOPMENT

The Institute for Professional Development was formed by the college in 1984 to assist both individuals and businesses in keeping pace with the rapid development of computer technologies. The Institute currently offers a variety of intensive certificate programs in these areas:

- Advanced SQL
- IT Project Management
- Java™ Developer
- Java™ EE Developer (formerly J2EE Developer)
- Java™ Web Services
- Lightweight Java™ Web Development
- .NET Developer
- Ruby on Rails™
- SharePoint® Developer Program
- SQL Server® Business Intelligence
- SQL Server® Database Administration
- Web Development with Python®

APPLICATION PROCEDURE:

Complete the enclosed application and return it with a non-refundable \$40.00 application fee (check or money order made payable to DEPAUL UNIVERSITY) to:

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