

CIW Application Developer Series – Course 2: Dynamic Server Pages (March 2002)

Dynamic Server Pages is an 18-hour course that teaches students how to work in the server-side scripting environment. Students learn the basics of application development, and general principles that apply to most development environments. Students develop applications using two specific server-side application development tools: Microsoft Active Server Pages (ASP) and PHP Hypertext Preprocessor (PHP). Students also learn key application standards such as source and revision control, coding standards, code optimization and data integrity.

Topics

Introduction to PHP

What is PHP?
Supported Platforms and Web Servers
Installation and Configuration

PHP Fundamentals

PHP Mechanics
Variables, Operators, Statements, Arrays,
and Functions

String Manipulation and File Input/Output

String Functions
Regular Expressions and Pattern Matching
Regular Expression Functions
File Input and Output

PHP and Databases

Relational Databases
Primary Keys and Foreign Keys
Structured Query Language (SQL)
Cursors and ResultSets
Stored Procedures
MySQL and PHP
The PHP Application
PHP and Other Databases

Debugging PHP and PHP Security

Steps for Debugging Code
Preventing Errors

Remote Debugging
PHP Security Issues
Writing Secure PHP Applications

Active Server Pages

ASP Mechanics
What Are ASP Applications?
Virtual Directories and ASP
Applications
ASP Delimiters
Global.asa – Starting a Web
Application

Using VBScript

Differences Between VBScript and
JavaScript
Declaring Variables with VBScript
Program Flow

ASP Intrinsic Objects

ScriptingContext, Server,
Application, Session, Request, and
Response Objects

ASP Default Components

Using Components
Global Components
ASP Default Components

ActiveX Data Objects

Open Database Connectivity (ODBC)
and OLE DB
ActiveX Data Objects
Registering Data Source Names (DSN)
Visual InterDev

Error Handling and Debugging ASP Applications

Debugging ASP Applications
Handling Errors
The *Err* Object
Logging Errors
Script Debugger

Project Management in Application Development

Project Management Fundamentals
Source and Revision Control
Coding Standards
Code Optimization
Test Assessment Plans

Data Integrity and Security Issues

Data Design Fundamentals
Database Security Issues
User Authorization
Goals for Security
Encryption
Symmetric, Asymmetric, and One-Way
Algorithms
Protocols

Target Audience

Webmasters, software developers, application programmers, client/server developers, and desktop publishers.

Job Responsibilities

Implement and maintain hypertext-based Web sites using authoring and server-side scripting languages; apply human-factors principles to design; create Web content; and use Web management tools and digital media tools.

Prerequisites

Students must have CIW Foundations certification or equivalent experience, and have completed the Web Languages series (*JavaScript Fundamentals* and *Perl Fundamentals*) and the *Fundamentals of CGI Using Perl* courses or have a working knowledge of client-side scripting, JavaScript or VBScript.

Duration

18 hours