Introduction to PHP



In this intensive, hands-on PHP training course, students will learn to create database-driven websites using PHP and MySQL. Students will first learn the basics of PHP including syntax, flow control, string manipulation, and functions. Next, they will learn to integrate PHP with the database, both directly, as well as through the PEAR DB package. Regular Expressions are covered next to give students the tools they need for advanced form validation. Then, students will learn to track users as they move from page to page within a web site using PHP session variables. Finally, they will learn to manipulate files and send emails using built-in PHP functions.

Course Objectives:

- Write PHP scripts using all the major features of the language.
- Control the flow of program execution.
- Use indexed and associative arrays to store sets of values.
- Process and validate HTML forms.
- Work with PHP's built-in string manipulation functions.
- Write reusable files and include them in multiple pages.
- Define functions to create more manageable PHP applications.
- Integrate PHP with a database to create reports and insert and update records.
- Use the PEAR DB package as a database abstraction layer.
- Use PHP regular expressions for advanced form validation.
- Use session variables to create site-wide user authentication and cookies to remember visitors between visits.
- Send email with PHP's built in mail() function.
- Read, write, and upload files.

Audience: Programmers who want to learn PHP.

Prerequisites: HTML experience is required. Programming experience in a high-level language is required. Basic CSS knowledge is helpful.

Number of Days: 3 days

1 PHP Basics

How PHP Works The php.ini File

PHP Tags

PHP Statements and Whitespace

Comments

PHP Functions

Variable Types

Variable Names (Identifiers)

Type Strength Variable Scope Superglobals Constants

Variable Testing and Manipulation

Functions

PHP Operators

Creating Dynamic Pages

Single Quotes vs. Double Quotes

Passing Variables on the URL

2 Flow Control

Conditional Processing

Working with Conditions

Types of Loops

Working with Loops



3 8 MDB2 **Arrays** Advantages and Disadvantages of **Enumerated Arrays Initializing Arrays** MDB2 Appending to an Array Why use a database abstraction layer? Reading from Arrays When not to use a database abstraction **Associative Arrays** layer? **Initializing Associative Arrays** Using MDB2 Reading from Associative Arrays Creating a Customer Report 9 Looping through Associative Arrays Authentication with PHP and SQL Superglobal Arrays A Database-less Login Form Two-dimensional Arrays **Authenticating Users** Reading from Two-dimensional Arrays 10 **Regular Expressions** Looping through Two-dimensional Perl-compatible Regular Expression Arrays **Functions** preg_match() **Array Manipulation Functions** 4 PHP and HTML Forms preg_replace() Regular Expression Tester How HTML Forms Work Regular Expression Syntax A Sample HTML Form Start and End (^ \$) Form Variables Number of Occurrences (?+*{}) Processing Form Input **String Manipulation** Common Characters (. \d \D \w \W \s \S) 5 Concatenation Grouping ([]) Negation (^) **String Manipulation Functions** Magic Quotes Subpatterns (()) magic_quotes_gpc Alternatives (|) magic_quotes_runtime Escape Character (\) **Reusing Code and Writing Functions** Form Validation Functions with Regular 6 **Including Files Expressions** require 11 **Session Control and Cookies** require once Sessions include_path directive **Configuring Sessions Session Functions** auto prepend file and auto append file Adding a Header and Footer Cookies Authentication with Session Control **User Functions Defining Calling Functions** 12 **Sending Email with PHP** Default Values mail() Variable Scope Shortcomings of mail() By Reference vs. By Value **PHPMailer** Form Processing Sending a Password by Email Form Validation & Presentation **File System Management** 13 Opening a File **Functions** 7 Reading from a File **Managing Data** Writing to a File Querying a Database mysqli() Overview File Locking Uploading Files via an HTML Form mysqli Methods and Properties Getting File Information mysqli Prepared Statements

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