

Course Code:	PHP-DMV-002
Course Title:	Introduction to PHP & MySQL
Duration	2 Days

Training Objectives

MySQL™ and PHP are two of the most popular open source technologies to emerge during the past decade. PHP is a powerful language for writing server-side Web applications. MySQL is the world's most popular open source database. Together, these two technologies provide you with a powerful platform for building database-driven Web applications.

This hands-on MySQL and PHP training course teaches attendees everything they need to successfully build data-driven Web sites using MySQL and PHP.

Hands-on/Lecture Ratio

This MySQL and PHP training class is 70% hands-on, 30% lecture, with the longest lecture segments lasting for 10 minutes. Students "learn by doing," with immediate opportunities to apply the material they learn to real-world problems.

PHP Training Materials

All MySQL and PHP training students receive a copy of Apress' <u>Beginning PHP and MySQL 5:</u> <u>From Novice to Professional</u> and other related courseware.

Software Needed on Each Student PC

The following should be installed on each student PC:

- Microsoft Windows XP / Microsoft Windows Vista / Microsoft Windows 7
- Internet Explorer 6 or later or Firefox 2 or later, Google Chrome or Opera.
- Adobe Dreamweaver CS 5 or earlier

Note: WAMP, available at http://www.wampserver.com/en/download.php provides a single installer with everything you need for the class Windows. Students will install wamp as part of the hands-on "learn by doing" activities.

Training Outline

- PHP Basics
 - How PHP Works
 - o The php.ini File
 - o Basic PHP Syntax
 - PHP Tags
 - PHP Statements and Whitespace
 - Comments



- PHP Functions
- Hello World!
- o PHP Tags
- o PHP Statements and Whitespace
- Comments
- o PHP Functions
- Hello World!
- Variables
 - Variable Types
 - Variable Names (Identifiers)
 - Type Strength
 - Hello Variables!
 - Variable Scope
 - Superglobals
 - Constants
 - Variable-Testing and Manipulation Functions
- Variable Types
- Variable Names (Identifiers)
- Type Strength
- o Hello Variables!
- Variable Scope
- Superglobals
- Constants
- o Variable-Testing and Manipulation Functions
- o PHP Operators
- Creating Dynamic Pages
 - Single Quotes vs. Double Quotes
 - Howdy World!
- o Single Quotes vs. Double Quotes
- Howdy World!
- Conclusion
- Flow Control
 - Conditional Processing
 - If Conditions
 - If Conditions
 - Loops
 - while
 - do...while
 - for
 - break and continue
 - o while
 - do...while
 - o for
 - break and continue
 - Conclusion
- Arrays
 - Enumerated Arrays
 - Initializing Arrays
 - Appending to an Array
 - Reading from Arrays
 - Looping through Arrays



- Initializing Arrays
- Appending to an Array
- Reading from Arrays
- Looping through Arrays
- Associative Arrays
 - Initializing Associative Arrays
 - Reading from Associative Arrays
 - Looping through Associative Arrays
 - Superglobal Arrays
- Initializing Associative Arrays
- o Reading from Associative Arrays
- Looping through Associative Arrays
- Superglobal Arrays
- Two-dimensional Arrays
 - Reading from Two-dimensional Arrays
 - Looping through Two-dimensional Arrays
- Reading from Two-dimensional Arrays
- Looping through Two-dimensional Arrays
- Array Manipulation Functions
- Conclusion
- PHP and HTML Forms
 - o HTML Forms
 - How HTML Forms Work
 - A Sample HTML Form
 - Form Variables
 - How HTML Forms Work
 - A Sample HTML Form
 - Form Variables
 - Conclusion
- String Manipulation
 - Formatting Strings
 - Concatenation
 - String Manipulation Functions
 - Examples of String Functions
 - Concatenation
 - String Manipulation Functions
 - Examples of String Functions
 - Magic Quotes
 - magic_quotes_gpc
 - magic_quotes_runtime
 - Recommendation on Magic Quotes
 - Conclusion
 - magic_quotes_gpc
 - o magic quotes runtime
 - Recommendation on Magic Quotes
 - Conclusion
- Reusing Code and Writing Functions
 - Including Files
 - require
 - require_once
 - auto_prepend_file and auto_append_file



- o require
- o require_once
- o auto_prepend_file and auto_append_file
- User Functions
 - Defining and Calling Functions
 - Default Values
 - Variable Scope
 - By Reference vs. By Value
- Defining and Calling Functions
- Default Values
- Variable Scope
- o By Reference vs. By Value
- o Form Processing
 - Code Organization
 - Code Organization
- Conclusion
- Simple SELECTs
 - Introduction to the Northwind Database
 - Some Basics
 - Comments
 - Whitespace and Semi-colons
 - Case Sensitivity
 - Comments
 - Whitespace and Semi-colons
 - Case Sensitivity
 - SELECTing All Columns in All Rows
 - SELECTing Specific Columns
 - Sorting Records
 - Sorting By a Single Column
 - Sorting By Multiple Columns
 - Sorting By Column Position
 - Ascending and Descending Sorts
 - Sorting By a Single Column
 - Sorting By Multiple Columns
 - Sorting By Column Position
 - Ascending and Descending Sorts
 - The WHERE Clause and Operator Symbols
 - Checking for Equality
 - Checking for Inequality
 - Checking for Greater or Less Than
 - Checking for NULL
 - WHERE and ORDER BY
 - Checking for Equality
 - Checking for Inequality
 - Checking for Greater or Less Than
 - Checking for NULL
 - WHERE and ORDER BY
 - The WHERE Clause and Operator Words
 - The BETWEEN Operator
 - The IN Operator
 - The LIKE Operator



- The NOT Operator
- The BETWEEN Operator
- o The IN Operator
- The LIKE Operator
- The NOT Operator
- Checking Multiple Conditions
 - AND
 - OR
 - Order of Evaluation
- o AND
- o OR
- Order of Evaluation
- Conclusion
- Subqueries, Joins and Unions
 - Subqueries
 - Joins
 - Table Aliases
 - Multi-table Joins
 - Table Aliases
 - o Multi-table Joins
 - Outer Joins
 - o Unions
 - UNION ALL
 - UNION Rules
 - UNION ALL
 - UNION Rules
 - o Conclusion
- Inserting, Updating and Deleting Records
 - INSERT
 - UPDATE
 - DELETE
 - Conclusion
- Managing Data
 - Querying a Database
 - mysqli() Overview
 - mysqli Methods and Properties
 - Inserting and Updating Records
 - mysqli Prepared Statements
 - mysqli() Overview
 - mysqli Methods and Properties
 - Inserting and Updating Records
 - o mysqli Prepared Statements
- PEAR:DB
 - Advantages and Disadvantages of PEAR DB
 - Why use a database abstraction layer?
 - When not to use a database abstraction layer?
 - o Why use a database abstraction layer?
 - When not to use a database abstraction layer?
 - Using PEAR DB
- Authentication with PHP and SQL
 - o A Database-less Login Form



- Conclusion Regular Expressions
 - Perl-compatible Regular Expression Functions
 - preg match()
 - preg_replace()
 - Regular Expression Tester
 - o preg_match()
 - preg_replace()
 - o Regular Expression Tester
 - Regular Expression Syntax
 - Start and End (^ \$)
 - Number of Occurrences (? + * {})
 - Common Characters (. \d \D \w \W \s \S)
 - Grouping ([])
 - Negation (^)
 - Subpatterns (())
 - Alternatives (|)
 - Escape Character (\)
 - Start and End (^ \$)
 - Number of Occurrences (? + * {})
 - Common Characters (. \d \D \w \W \s \S)
 - Grouping ([])
 - Negation (^) 0
 - Subpatterns (())
 - Alternatives (|)
 - Escape Character (\)
 - o Form Validation Functions with Regular Expressions
 - Conclusion
 - Session Control and Cookies
 - Sessions
 - Configuring Sessions
 - Session Functions
 - Configuring Sessions
 - Session Functions
 - Cookies
 - Conclusion
 - Sending Email with PHP
 - o mail()
 - Shortcomings of mail()
 - Shortcomings of mail()
 - PHPMailer
 - Conclusion
 - File System Management
 - Opening a File
 - fopen()
 - fopen()
 - Reading from a File
 - fgets()
 - fgets()
 - Writing to a File
 - fwrite()



- o fwrite()
- File Locking
 - flock()
- o flock()
- o Uploading Files via an HTML Form
- o Getting File Information
- More File Functions
- Directory Functions
 - Getting a Directory Listing
- Getting a Directory Listing
- Conclusion

Lunch Break

Jellof/Fried Rice, Pasta/Spaghetti Bolognias, Seasoned Chicken In sauce, Fried Fish in Tomato Sauce, Pounded Yam/Semovita/Garri, Efo Riro/Egusi/Afan, Plantain, Vegetable Salad.