

# WEB DEVELOPMENT



# HTML,PHP and MySQL

PHP and MySQL™ 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.

## Course Objectives

- Learning HTML
- Overview of CSS and CSS frameworks
- Familiarity with PHP languages and syntax
- Integration of PHP with HTML
- Processing form data
- Inserting form data into MySQL
- Fetching data from MySQL
- Sending Emails using PHP using inbuilt methods
- Uploading images/files on the server
- Securing contents using Cookies and Sessions

## Who Should Attend

This course is designed for individuals who have been developing web pages with a GUI and want to progress to developing using three tier architecture (Client, Middle, and Database).

## Prerequisite

All MySQL and PHP training attendees must be fluent in HTML. The course can be customized to any level of programming and relational database familiarity.

## Course Duration

60 Hours, 20 Classes, 3 Hours per class

# Course Details

## Lesson 01: HTML Basic

- HTML Elements
- HTML Attributes
- HTML Headings
- HTML Paragraphs
- HTML Formatting
- HTML Fonts
- HTML Styles
- HTML Links
- HTML Images
- HTML Tables
- HTML Lists
- HTML Forms
- HTML Frames
- HTML Colors
- HTML Color names
- HTML Color values

## Lesson 02: Installing Required Software

- Installing MySQL
- Installing Apache with PHP
- Setting MySQL permissions
- Testing the installation
- Configuring PHP

## Lesson 03: PHP Basics

- PHP
- Basic syntax
- Sending data
- Understanding PHP, HTML, and white space
- Writing comments
- Using variables
- Using strings
- Using numbers
- Using constants

## Lesson 04: Programming with PHP

- Creating HTML forms
- Handling HTML forms
- Managing magic quotes
- Using conditionals and operators
- Validating form data
- Using arrays
- Creating and accessing arrays
- Multidimensional arrays
- Arrays and strings
- Sorting arrays
- For and While loops

## Lesson 05: Creating Dynamic Web Sites

- Including multiple files
- Using PHP redux
- Making sticky forms
- Creating your own functions
- Creating a function that takes arguments
- Setting default argument values
- Returning values from a function
- Variable scope
- Date and time functions

## Lesson 06: SQL and MySQL

- MySQL
- Choosing column types
- Choosing other column properties
- Using mysql client
- Creating databases and tables
- Inserting records
- Selecting data
- Using conditionals
- Using LIKE and NOT LIKE
- Sorting and limiting query results
- Updating and deleting data
- Using text and numeric functions
- Formatting date and time functions

## Lesson 07: Advanced SQL and MySQL

- Normalization, keys, and relationships
- First Normal Form
- Second Normal Form
- Third Normal Form
- Creating and populating the database
- Performing joins
- Grouping selected results
- Creating indexes
- Using different table types
- Performing basic FULLTEXT searches
- Performing Boolean FULLTEXT searches
- Optimizing the database

## Lesson 08: Error Handling and Debugging

- General error types and debugging
- Debugging HTML
- Displaying PHP errors
- Adjusting PHP error reporting
- Creating custom error handlers
- Logging PHP errors
- PHP debugging techniques
- SQL and MySQL debugging techniques

# Course Details

## Lesson 09: Using PHP with MySQL

- Modifying the template
- Connecting to MySQL and selecting the database
- Executing simple queries
- Retrieving query results
- Ensuring secure SQL
- Counting returned records
- Updating records with PHP

## Lesson 10: Developing Web Applications

- Adjusting behavior for server settings
- Sending values manually
- Using hidden form inputs
- Editing existing records
- Paginating query results
- Making sortable displays
- Understanding HTTP headers

## Lesson 11: Cookies and Sessions

- Setting cookies
- Accessing cookies
- Setting cookie parameters
- Deleting cookies
- Setting session variables
- Accessing session variables
- Deleting session variables
- Changing session behavior
- Changing the session cookie settings
- Using sessions without cookies
- Improving session security

## Lesson 12: Web Application Security

- Preventing multiple submissions
- Validating the right form
- Handling HTML
- Validating data
- JavaScript form validation
- Defining a pattern with regular expressions
- Matching regular expression patterns
- Matching and replacing patterns
- Database security and encryption
- Secure salt storage

## Lesson 13: Extended Topics

- Handling File Uploads
- Uploading PHP Files Creating Java
- Script Using Output Buffering Using the Improved MySQL Extension
- New MySQL Features
- Using Prepared Statements
- Using PEAR

## Lesson 14: Content Management Example

- Creating the template
- Creating the basic pages
- Managing URLs
- The list() function
- The serialize() and urlencode() functions
- Managing files
- Viewing and downloading files

## Lesson 15: User Registration Example

- Creating the templates
- Writing the configuration scripts
- Creating the home page
- Registration
- Activating an account
- Logging in and logging out
- Resetting a password
- Changing a password

## Lesson 16: E-Commerce Example

- Creating the database
- The administration side
- Creating the public template
- The product catalog
- The shopping cart
- Recording the orders

