

PHP_MYSQL

Duration: 2 Weeks

Prerequisite -

- HTML, because it's what PHP normally outputs to the browser.
- MySQL, because you'll want to store user data in a database.
- CSS, because it's how you add style to HTML pages.

Course Objectives

- Static vs. Dynamic Web Sites
- Dynamic Content from Databases
- Developing Dynamic Internet Applications
- Client-Side Scripting vs. Server-Side Scripting
- Overview of PHP Advantages and Capabilities
- Configuring php.ini

Lab Setup Details :

Hardware requirement:

CPU : I4/I5 , Hard Disk : 50GB , RAM :8 GB

Software Requirement:

- XAMPP <https://www.apachefriends.org/download.html> (DOWNLOAD VERSION 5.6.31)
- MSOFFICE 2010
- NOTEPAD++ <https://notepad-plus-plus.org/download/v7.5.1.html> (DOWNLOAD VER 7.5.1)
- SUBLIME TEXT3 <https://www.sublimetext.com/3>
- Visual Studio Code <https://code.visualstudio.com/download>
- PDF READER <https://adobe-reader.en.softonic.com/download>
- Browser Google Chrome OS Window 10

Course Outline

PHP 7 New Features

- Function Improvements
- New Operators
- Unicode Codepoint Syntax
- Filtered Unserialize
- IntlChar Support
- Expectations

Introduction to the Windows IIS Server or Apache Web Server

Server Configuration Files
Configuring Apache for PHP
WWW Sites within Apache
Apache Virtual Hosts
Website Properties

Basic Scripting PHP Operators and Looping Constructs

- PHP Scripting Fundamentals
- Print Statement
- Code Blocks
- Logical Operators
- Relational Operators
- Bitwise Operators
- Other Operators
- PHP7 Null Coalescing operator
- PHP7 Spaceship Operator
- Primitive Data Types
- Defining Constants and Variables
- Looping Constructs
- while
- do... while
- for
- exit and break
- Conditional Constructs
- True and False Expressions
- if, else and elseif
- switch/case Statement
- The ? (Ternary) Operator
- Timestamps

Arrays in PHP

- What are Arrays?
- Usage of Arrays in PHP
- Array Indexing
- Initializing Arrays
- Operating on Arrays
- Sorting Arrays
- One-Dimensional Arrays
- Multi-Dimensional Arrays
- Associative Arrays
- Array Functions
- Forms and Arrays in Web Applications

Working with Databases and Forms

- Configuring PHP For Database Support
- PHP's Database APIs
- PHP's SQL API
- MySQL vs. Access

- MySQL vs. SQL Server
- Database Drivers
- Database Driver Class Wrappers
- ODBC
- Simple SQL Queries via PHP
- Tracking Visitors with Session IDs
- Populating Forms
- Retrieving Data from Forms
- Modularity through Include Files
- Using Include Files
- The Require Statement
- Modularizing Code with Functions
- Defining and Using Basic Functions
- PHP Functions
- Introduction to Functions
- Declaring Functions
- Scope
- Passing Arguments to Functions
- Local and Global Scope
- Passing Arguments to Functions by Value and Reference
- Variable Scoping and Return Values
- Recursion
- Coercive and Strict Type Declarations for Parameters and Return Values
- Optional and REST Parameters
- Argument Unpacking
- Generator Return Expressions
- Dynamic Function Calls
- Predefined PHP Functions

Basic OOP in PHP

- Defining Object Oriented Programming
- Creating New Objects in PHP
- PHP Object Syntax
- Using Predefined PHP OOP Libraries

Writing OOP PHP

- Implementing New Classes
- Extending Classes
- Understanding Private, Public and Protected
- Inheriting Methods and Properties
- Overriding Methods and Properties

Working with Data Files in PHP

- Searching File Contents With Regular Expressions
- Changing and Editing File Contents
- Splitting and Joining Information Inside Files
- String Functions
- Regular Expression Functions
- Reading, Writing and Deleting Files

- Handling File Permissions
- File Locking
- Reading Directory Contents
- Creating and Deleting Directories

Configuring and Using MySQL

- MySQL as a Client/Server Solution
- Introduction to MySQL Capabilities as a Powerful RDBMS
- Installing and Configuring MySQL
- Connecting to MySQL
- PHP Functions Specific to MySQL
- Executing SQL Calls
- SELECT
- INSERT
- FETCH
- UPDATE
- DELETE
- Using PHP MyAdmin to Configure MySQL

Using Cookies with PHP

- Purpose of Cookies
- Cookie Myths
- Setting Cookies
- Retrieving Cookies
- Expiring Cookies
- Deleting Cookies
- Storing Arrays in Cookies

Miscellaneous PHP Tasks

- Error Logging
- Session Management and Maintaining State
- Web Application Architecture
- Using Environment Variables
- Changing Execution by Redirecting to Other URLs
- Embedding JavaScript within PHP
- Using the HTTP Protocols to Pass Data
- Showing Different Content to Different Browsers
- Getting IP Addresses from Visitors

Implementing RESTful Servers with PHP

- Understanding RESTful Servers
- Benefits of PHP for Implementing RESTful Servers
- Using HTTP Verbs to Access Data
- Understanding RESTful URIs
- Defining PHP Objects to Access RESTful URIs
- Effective Use of OOP Inheritance
- Implementing a RESTful Server in PHP for a Small Application