

Course Name : PHP AND MYSQL WEB APP DEVELOPMENT
Duration : 3 Days (Physical Classroom / Virtual Live Instructor)
Skill Level : Beginners

COURSE DESCRIPTION:

This course offers an introduction to the PHP language, its key concepts, and best practices. Upon completion, participants will have a comprehensive understanding of:

- The syntax and structural components of PHP.
- The proper use of various control flow structures.
- PHP's data types, type-casting, type juggling, and operator precedence.
- The organization of code into reusable functions.
- The utilization of PHP's built-in file system and array functions.
- The fundamental elements of HTTP, such as cookies and sessions.
- Input and output validation techniques.
- The creation of web forms for user information collection.
- Database (RDBMS) interaction through PHP's MySQL functions.
- The development of a course project: an Employee Database Management System.

WHAT WILL YOU LEARN?

This covers an overview of the PHP language, its main concepts, and best practices. Upon completion, participants will have a comprehensive understanding of the PHP and will be able to build the fully functional Employee Database Management System project.

PREREQUISITE:

This course is designed for non-programmers, and beginners, who want to learn the basics of the PHP language.

METHODOLOGY:

This program will be conducted with interactive lectures, PowerPoint presentations, discussions, and practical exercises. This course can be conducted as instructor-led (ILT) or virtual instructor-led training (VILT).

JOB SCOPE:

Upon completion of this course, candidates may pursue the following career paths:

- Web Developer (PHP & Laravel)
- Backend Developer
- Full Stack Developer
- PHP Developer
- Software Developer
- PHP Architect

DAY I

MODULE 1: INTRODUCTION TO PROGRAMMING

- Welcome
- Types of Programming Languages and
- Vocabulary
- What is PHP
- Why use PHP
- Installation
- Setup Development Environment

MODULE 2: PHP BASICS

- Syntax
- Source Files and PHP Tags
- Newline Characters
- Anatomy of a PHP Script
- Comments
- Whitespace
- Code Blocks
- Language Constructs

MODULE 3: DATA TYPES

- Numeric Values
- Strings
- Booleans
- Compound Data Types
- Other Data Types
- Converting Between Data Types

MODULE 4: VARIABLES & CONSTANTS

- Type Casting
- Variable Variables
- Inspecting Variables
- Determining If a Variable Exists
- Determining If a Variable is Empty
- Constants

DAY 2

MODULE 5: OPERATORS

- Arithmetic Operators
- The String Concatenation Operator
- Bitwise Operators
- Assignment Operators
- Referencing Variables
- Comparison Operators
- Logical operators
- Other Operators
- Operator Precedence and Associativity

MODULE 6: CONTROL STRUCTURES & LOOPS

- Conditional Structures
- If – Else
- Ternary Operator
- Iterative Constructs – Loops
- While & Do While Loop
- For Loop
- Foreach Loop
- Breaking and Continuing

MODULE 7: ARRAYS

- Array Basics
- Short Array Syntax
- Printing Arrays
- Enumerative vs. Associative
- Multi-dimensional Arrays
- Unravelling Arrays
- Array Operations
- Comparing Arrays
- Counting, Searching and Deleting Elements
- Flipping and Reversing
- Array Iteration
- The Array Pointer
- An Easier Way to Iterate
- Passive Iteration
- Sorting Arrays
- Other Sorting Options
- The Anti-Sort

MODULE 8: FUNCTIONS

- Basic Syntax
- Declaring and Calling Functions
- Returning Values
- Variable Scope
- Anonymous Functions & Lambdas
- Closures

DAY 3

MODULE 9: WEB PROGRAMMING

- Anatomy of a Web Page
- Forms and URLs
- HTTP Headers
- Super Global Variables
- \$_GET, \$_POST, \$_COOKIE, \$_SERVER
- Cookies
- Sessions

MODULE 9: DATABASE PROGRAMMING

- An Introduction to Relational Database
- Introduction to MySQL CLI
- Create a Database
- Create a Table
- Insert, Update, Delete Queries
- Connect PHP with MySQL
- Advanced Database Topics

MODULE 11: PROJECT: CREATE AN EMPLOYEE MANAGEMENT SYSTEM (CRUD)

CONCLUSION

- QA
- Useful References and Books
- Feedback