### SE001PHP - Web Development with PHP

Duration: 5 Days; Instructor-led

#### WHAT YOU WILL LEARN

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.

#### **AUDIENCE**

This workshop is for those who have some experience in using at least one scripting language but who do not know Python. It is assumed that you can edit a text file using your favorite editor, and be able to execute your script file on the command line of a shell.

# **PREREQUISITES**

This course requires participants to meet the following prerequisites:

- Introduction to operating system.
- Basic programming experience

### **METHODOLOGY**

This program will be conducted through Instructor-led (classroom)

#### **COURSE OBJECTIVES**

After completing this course, students will be able to:

- Gain the PHP programming skills needed to successfully build interactive, data-driven sites
- Test and debug a PHP application
- Work with form data
- Use cookies and sessions
- Work with regular expressions
- Handle exceptions
- · Validate data

#### **COURSE OUTLINE**

# Module 1 - Installation and Configuration

- PHP Interpreter
- Apache Server
- The IDE
- The Database Server
- The Browser
- Testing Your Installation

#### Module 2 - Introduction to PHP

- The architecture of a web application
- Server side scripting
- HTTP Protocol
- PHP Files and PHP Web Files
- PHP's Variables
- PHP Global Variables
- Comments

### Module 3 - Strings, Numbers and Date Time

- String Concatenation
- Single Vs. Double Quotation Marks
- Numbers
- Date Time
- Introducing Constants

# Module 4 - Operators

- Arithmetic Operators
- Assignment Operators
- Strong Operators
- Bitwise Operators
- Comparison Operators
- Incrementing and Decrementing Operators
- Logical Operators

# **Module 5 - Control Structures**

- Basic Conditionals
- Switch Statements
- The While Statements
- Using for and foreach

## Module 6 - Arrays

- Introducing Arrays
- Identifying Elements of an Array
- Storing Data in Arrays
- Multidimensional Arrays
- Array as Hash Table (Associative array)
- Array as Dynamic List
- Array as Stack
- Array as Queue

### **Module 7 - Functions**

- Creating Your Own Functions
- Defining a Function
- Variable Scoping
- Function Parameters
- Return Values

# **Module 8 - Object-Oriented Programming**

- Declare constructor
- Constructor chain
- Technique for Constructor Overloading
- Declare properties
- Control Read/Write with properties
- Polymorphism
- The Interface

# Module 9 - Error Handling and Debugging

- Error Types and Basic Debugging
- Displaying PHP Errors
- Creating Custom Error Handlers
- PHP Debugging Techniques

# Module 10 - Introducing Forms

- Creating an HTML Form
- Handling an HTML Form
- · Get Vs. Post methods
- Page Postback and redirection
- Handle Form ViewState
- Validating Form Data
- Using Filters for validation

# Module 11 - Introducing to MySQL

- Naming Database Elements
- Choosing Your Column Types
- Choosing Other Column Properties
- Accessing MySQL from PHP

# Module 12 - Introducing to SQL Statements

- Using Data Definition Language
- Inserting Records
- Update Records
- Delete Records
- Retrieve Information from Records
- Retrieve last generated auto number
- Limiting Query Results
- Transaction handling

# Module 13 - Using PHP Include

- Understanding PHP include
- Using include for header and footer
- Using include for the database connection

# Module 14 - State Management

- Using Hidden Form Inputs
- Cookies
- Session Variables
- Implement Shopping Cart

# **Module 15 - Security**

- Dealing with Session Stealing
- Making a Login Page
- Making the Login Functions
- Logout
- "Remember Me" features
- Membership handling