€TRAINING

PHP Language

4 - 8 May 2025
Sharm El-Sheikh (Egypt)

PHP Language

Introduction:

This training program introduces participants to PHP Hypertext Preprocessor, a powerful server-side scripting language widely used for web development. Through it, participants will gain comprehensive knowledge and practical skills essential for developing dynamic websites and web applications.

Program Objectives:

By the end of this program, participants will be able to:

- Understand the fundamentals of PHP language syntax and concepts.

- Develop web applications using PHP for server-side scripting.

- Integrate PHP with HTML and CSS to create dynamic web pages.

- Implement database connectivity and manipulate data using PHP.

- Apply security best practices and debugging techniques in PHP development.

Target Audience:

- Web Developers.

- Software Engineers.

- IT Professionals.

Program Outline:

Unit 1:

Introduction to PHP:

- Overview of PHP: history, features, and applications.

- Setting up a PHP development environment e.g., XAMPP, WAMP.

- Basic syntax and data types in PHP.

- Variables, constants, operators, and expressions in PHP.

- Writing and executing PHP scripts.

Unit 2:

Control Structures and Functions:

- Conditional statements if, else, elseif and loops for, while, do-while in PHP.

- Arrays: indexed, associative, and multidimensional arrays in PHP.

- Functions: defining, invoking, and passing parameters in PHP.

- Scope and lifetime of variables in PHP.

- Practical exercises and assignments on control structures and functions.

Unit 3:

PHP and Web Development:

- Integrating PHP with HTML and CSS for dynamic web pages.

- Form handling and processing user input in PHP.

- Session management and cookies in PHP.

- File handling and uploading files using PHP.

- Practical examples of web application development with PHP.

Unit 4:

Database Connectivity with PHP:

- Introduction to databases: MySQL, PostgreSQL, SQLite, etc.

- Connecting PHP with databases using MySQLi and PDO.

- Performing CRUD operations Create, Read, Update, Delete in PHP.

- Prepared statements and SQL injection prevention in PHP.

- Hands-on exercises on database integration and manipulation in PHP.

Unit 5:

Advanced PHP Concepts:

- Object-oriented programming OOP in PHP: classes, objects, inheritance, polymorphism.

- Exception handling: try, catch, finally blocks in PHP.

- PHP libraries and frameworks Laravel, Symfony.

- Security best practices: data validation, sanitization, and securing PHP applications.

- Debugging and error handling techniques in PHP.