

Course Brochure

PHP with MySQL

Overview

• PHP is server side script which helps in developing secured websites. PHP is available to individuals with minimal investment. And as it's very light as net its recognized as light weigh server side script.

Pre-requisites

• Knowledge of HTML, Java Script, VB Script, CSS is advantage for page designing which is optional pre-requisites.

Applications

COURSE CONTENTS

Web Application Development
Introduction to PHP & MySQL
Evaluation of PHP
Features of PHP
PHP Versions & Comparisons
Installation & Configuration
WAMP, LAMP, MAMP, XAMPP
PHP Project Development using IDEs

PHP Basics

- ❖ Introduction to Scripting
- ❖ PHP Program Structure
- ❖ Basic PHP Syntax
- ❖ Configuration Settings
- ❖ Output functions in PHP
- ❖ Comments in PHP

Variables

- ❖ Variable Declarations
- ❖ Variable Scopes
- ❖ Data Types
- ❖ Variable Manipulations
- ❖ String Variables
- ❖ Heredoc Style
- ❖ Nowdoc Style
- ❖ Variable-Variables
- ❖ Reference Variables
- ❖ Constant Variables
- ❖ Magic Constants
- ❖ Errors Types in PHP
- ❖ Operators
- ❖ Making Decisions
- ❖ Condition Statements
- ❖ Control Statements
- ❖ Case Studies

Arrays

- ❖ Anatomy of an Array
- ❖ Creating index based & Associative Array
- ❖ Accessing Array Element
- ❖ Looping with index based array

- ❖ Looping with associative array using each() and foreach()
- ❖ Array Functions

Web Application Development

- ❖ Handling HTML form with PHP
- ❖ PHP Forms & Validations
- ❖ Super Global Variables of PHP
- ❖ Capturing Form data
- ❖ Dealing with Multi value fields
- ❖ Redirecting a form after submission

Functions

- ❖ What is a function?
- ❖ Define a function
- ❖ Functions Passing & returning arguments
- ❖ Call by Value
- ❖ Call by reference
- ❖ Function overloading
- ❖ Local & Global Variables
- ❖ Static Variables
- ❖ Recursive Functions

Built-in Functions

- ❖ Date Functions
- ❖ String Functions
- ❖ Working with Files & Directories
- ❖ Understanding file & directory
- ❖ Opening and closing a file
- ❖ Copying, renaming, deleting a file
- ❖ Working with directories
- ❖ File Functions
- ❖ Directory Functions
- ❖ **File Uploading & Downloading**

Server Side Includes

- ❖ include() & include_once()
- ❖ require() & require_once()

COURSE CONTENTS

Authentication Methodologies

- ❖ HTTP Authentication
- ❖ PHP Authentication

Session Tracking/ State Management

- ❖ Need for State Management
- ❖ Session Tracking using Hidden form fields
- ❖ Session Tracking using query string (URL rewriting)
- ❖ Session Tracking using Cookies
- ❖ Session Tracking using PHP Session
- ❖ Encoding & Decoding Session Data
- ❖ Recently viewed document index
- ❖ Login Module in Project

String matching with Regular Expressions

- ❖ What is Regular Expression
- ❖ Pattern Matching in PHP
- ❖ Replacing text
- ❖ Splitting a string with regular Expression
- ❖ Validating text box values
- ❖ Validating emails, phone number etc
- ❖ Creating custom regular expressions

Generating Images with PHP

- ❖ Basics of Computer Graphics
- ❖ Creating Image
- ❖ Manipulating Image
- ❖ using text in Image

Object Oriented Programming in PHP

- ❖ Introduction
- ❖ Class & Objects
- ❖ Attributes & Methods
- ❖ Declaring a class
- ❖ Encapsulation
- ❖ new Keyword
- ❖ private, protected and public properties & methods

- ❖ Constructors & Destructors
- ❖ Instance of operator
- ❖ Overloading Member Functions
- ❖ Inheritance
- ❖ Polymorphism
- ❖ Overriding Members
- ❖ parent:: & self:: keywords
- ❖ Static & Constant Members
- ❖ Scope Resolution Operator
- ❖ Helper Functions
- ❖ Abstract Class
- ❖ Interfaces
- ❖ Object Iteration
- ❖ final Keyword
- ❖ Object Cloning
- ❖ Object Serialization
- ❖ Reflections

Exception Handling

- ❖ Understanding Exception & Error
- ❖ Configurations
- ❖ PHPs Exception class
- ❖ try...catch..throw
- ❖ User-defined Exceptions
- ❖ Server Side Validations using PHP Filters

E-mail Services

- ❖ Email Protocols
- ❖ Mail Servers
- ❖ Sending email using sendmail
- ❖ Working with PHP Mailer
- ❖ Working with Swift Mailer
- ❖ Sending an Email with Attachment

Using PHP from the Command Line

PHP Zip file functions

Google Maps API

MySQL

- ❖ Introduction to DBMS & RDBMS
- ❖ Introduction to MySQL Database
- ❖ Database Creation
- ❖ SQL

COURSE CONTENTS

- ❖ DDL Commands
- ❖ DML Commands
- ❖ DRL Command
- ❖ TCL & DCL Commands
- ❖ Storage Engines
- ❖ MySQL Data Types
- ❖ Constraints
- ❖ Working with MySQL in the Backend
- ❖ Working with phpMyAdmin
- ❖ PHP functions to work with MySQL
- ❖ Performing CRUD operations
- ❖ Working with Large Objects
- ❖ Storing Images in Database
- ❖ Aggregate Functions
- ❖ Sub-queries
- ❖ Functions in MySQL
- ❖ Stored Procedures in MySQL
- ❖ Cursors
- ❖ Indexing in MySQL
- ❖ Joins
- ❖ Views
- ❖ SQL Injection
- ❖ Pagination, Sorting etc
- ❖ PHP working with Oracle, SQL Server etc
- ❖ Using ODBC & OCI functions
- ❖ MySQL Vs MySQLi in PHP
- ❖ PHP Data Objects (PDO) Interface
- ❖ Mini Project

XML

- ❖ Introduction to XML
- ❖ XML Parsing
- ❖ Tree based Parsers
- ❖ Event based Parser
- ❖ Reading an XML document
- ❖ Creating an XML document for data in DB

AJAX

- ❖ AJAX Introduction
- ❖ XMLHttpRequest
- ❖ AJAX Examples
- ❖ Stock Market Example

Web Services

- ❖ Introduction to Web Services
- ❖ Interoperability
- ❖ SOAP
- ❖ Setting up the PEAR SOAP Module
- ❖ WSDL file
- ❖ Create a Web Service using PHP
- ❖ Consume a Web Service using PHP
- ❖ Live Examples

jQuery

- ❖ Introduction
- ❖ jQuery Selectors
- ❖ jQuery Event functions
- ❖ jQuery Effects
- ❖ jQuery Custom Animations
- ❖ jQuery Callback Functions
- ❖ jQuery HTML Manipulations
- ❖ jQuery CSS Manipulations
- ❖ AJAX and jQuery
- ❖ jQuery UI
- ❖ jQuery Plugins

JOOMLA

- ❖ Content Management System
- ❖ Types of CMS
- ❖ Installation
- ❖ Setting up a JOOMLA Site
- ❖ Create Articles
- ❖ Template Manager
- ❖ Change the Template
- ❖ Custom Templates
- ❖ Create Menus in Joomla Site
- ❖ Module Manager
- ❖ Login Page
- ❖ User Administration
- ❖ Search Module
- ❖ Breadcrumb, Statistics
- ❖ Who's Online, Wrapper Modules
- ❖ Integrate a Banner & Contacts
- ❖ Integrate Web Links

COURSE CONTENTS

- ❖ Integrate Captcha-reCaptcha
- ❖ JOOMLA Components
- ❖ Plug-in Manager
- ❖ Extended Modules & Plugins into Joomla Site
- ❖ Live Support
- ❖ Simple Image Gallery
- ❖ Google Maps
- ❖ PHP code in Joomla Site
- ❖ Other extended modules
- ❖ Backing up and /or Restoring JOOMLA Site
- ❖ Custom Modules

Drupal

- ❖ Introduction
- ❖ Installation
- ❖ Basic Site Configuration
- ❖ Toolbar & Shortcut Bar
- ❖ Site Maintenance
- ❖ Basic Page & Articles
- ❖ Using Text Formats to prevent Content Damage
- ❖ Changing Site Information, Graphics & Interface
- ❖ Change the Themes
- ❖ Custom Themes
- ❖ Create a Contact Page
- ❖ Our own PHP in Drupal
- ❖ Working with Blocks
- ❖ Modules
- ❖ Working with Polls, Blogs & Forums
- ❖ User Administration
- ❖ Managing Comments
- ❖ Stopping Spam using CAPTCHA
- ❖ Enabling Styles Text with WYSIWYG
- ❖ Creating New Content Types
- ❖ Views in Drupal
- ❖ Launching your site

Wordpress

- ❖ Introduction
- ❖ Understanding & using Domains
- ❖ Wordpress Hosting Options

- ❖ Installing Wordpress
- ❖ Understanding the Wordpress Dashboard
- ❖ Site & Blog
- ❖ Pages Vs Posts
- ❖ Core Wordpress Settings
- ❖ Managing Images, Video & Other Media
- ❖ Working with Wordpress Themes
- ❖ Finding & Using Wordpress Plugins
- ❖ Custom Themes
- ❖ Wordpress Content Management
- ❖ Site Maintenance & Security

MVC & Zend Framework

- ❖ Introduction
- ❖ MVC Design Pattern
- ❖ Installation & Configuration
- ❖ Create a Project
- ❖ Controllers, Actions & Views
- ❖ Controller Related Components
- ❖ Model Related Components
- ❖ View Related Components
- ❖ Create a Layout
- ❖ Create a Model & Database Table
- ❖ Wiring in CRUD
- ❖ Create a Form
- ❖ Filtering & Validations
- ❖ Internationalization
- ❖ Security
- ❖ Search
- ❖ Mail
- ❖ URL Routing & Controllers
- ❖ Zend Framework 2

Introduction to Cake PHP, Code Igniter SMS Gateways & sending SMS using PHP Payment Gateways

SDLC

Application Development

Hosting a Web Applications

Working with free Hosting Server & Domain

How to prepare for a Job Interview