

Advanced PHP

Objective: To write the web based application using Code Igniter and Laravel Framework

Pre-requisites: To know the basic fundamentals of programming language

Session 1 (Working with Object Oriented Programming in PHP)

- What is OOP?
- PHP Classes/Objects, Constructor, Destructor
- Access Modifiers, Inheritance, Constants
- Abstract Classes, PHP Static Methods
- PHP Static Properties

Session 2 (Working with Code Igniter)

- Introduction to CodeIgniter, Application Architecture
- MVC Framework, Basic Concepts, Configuration
- Working with Database, Libraries
- Error Handling, File Uploading
- Sending Emails

Session 3 (Working with Session and Cookies)

- Working with Session Management
- Working with Cookie Management
- Form Validations
- Common Functions, Page Caching

Session 4 (Overview and General Topics)

- CodeIgniter4 Overview, Application Structure
- Model, Views and Controllers
- Auto loading Files
- Services, Working with HTTP Requests
- Security Guidelines
- Working with Configuration Files, CodeIgniter URLs
- Helper Functions
- Global Functions and Constants
- Logging Information, Error Handling, Web Page Caching, Code Modules
- Managing Your Applications, Handling Multiple Environments

Session 5 (Request Handling)

- Controller and Routing: Controllers, URI Routing, Controller Filters
- HTTP Messages, Request Class, IncomingRequest Class
- Content Negotiation, HTTP Method Spoofing
- RESTful Resource Handling
- Building Responses: Views, View Cells, View Renderer, View Layouts, View Parser
- HTML Table Class, HTTP Responses, API Response Trait
- Alternate PHP Syntax for View Files

Session 6 (Handling Databases with CodeIgniter)

- Working with Databases, Database Configuration, Connecting to a Database
- Running Queries, Generating Query Results
- Query Helper Functions, Query Builder Class, Transactions, Getting Metadata
- Custom Function Calls, Database Events, Database Utilities
- Modeling Data: Using CodeIgniter's Model, Using Entity Classes
- Managing Databases: Database Manipulation with Database Forge
- Database Migrations, Database Seeding

Session 7 (Libraries and Helper)

- Email Class, Image Manipulation Class
- Pagination, Security Class, Session Library
- Date and Times, Working with Uploaded Files
- Validation, Cookie Helper, Date Helper
- Form Helper, HTML Helper, Number Helper
- Security Helper, Text Helper, URL Helper

Session 8 and 9 (Working with Laravel)

- Installation, Configuration, Directory Structure
- Homestead, Valet, Deployment
- Architecture Concepts: Request Lifecycle, Service Container
- Service Providers, Facades, Contracts

Session 10 (Basics of Laravel)

- Routing, Middleware, CSRF Protection
- Controllers, Requests, Responses, Views
- URL Generation, Session, Validation, Error Handling, Logging
- Blade Templates

Session 11 (Working with Laravel and Databases)

- General Overview, Query Builder
- Migrations, Pagination

Session 12 (Working with CodeIgniter Framework Project)