

MASTERING OBJECT ORIENTED PROGRAMMING IN PHP 7

Goals:

In three days you will learn all the basic concepts of object-oriented programming in PHP to become operational on frameworks like Symfony, Silex, Laravel, Drupal and Zend. You'll also learn how to develop with the object-oriented philosophy with the latest PHP versions including PHP 7.

Duration: 3 days - 21 heures

Public: PHP Développeur

Pré-requis: Mastering the basics of the PHP language

INTRODUCTION TO OBJECT ORIENTED PROGRAMMING

- Introduction to the OOP main concepts
- Understanding the benefits of using OOP
- Discovering the main principles of OOP
- Learning how to think and design code with the object approach
- Discovering all new object oriented features introduced since PHP 5.3

FUNDAMENTALS OF OBJECT ORIENTED PROGRAMMING

- Understanding the concepts of classes and objects
- Setting the state of an object with its properties
- Reading and changing the state of an object thanks to its methods
- Instanciating and initializing an object with its constructor
- Destroying an object the right way with its destructor
- Ensuring object state encapsulation thanks to attributes and methods scopes
- Understanding the difference between instance and class scope
- Specializing classes thanks to the inheritance principle
- Leveraging classes to define new advanced data structures and types

ADVANCED OBJECT ORIENTED PROGRAMMING CONCEPTS

- Generalizing data structures types with abstract classes and methods
- Preventing class and methods specialization
- Overriding and overloading the behavior of a parent class' method
- Handling errors properly with the exception mechanism
- Design implementation contracts thanks to interfaces
- Overriding implicit default objects behaviors with « magic methods »
- Setting up mechanisms to automatically load class definitions files
- Organizing data structures thanks to namespaces
- Refactoring reusable chunks of object oriented code into « traits »

LEVERAGING THE PHP 7 SPL

- Discovering the « Standard PHP Library » aka SPL
- Raising and throwing SPL specific exceptions types
- Using the new SPL built-in data structures
- Creating objects iterators thanks to the « Iterator » interface
- Counting objects in a collection thanks to the « Countable » interface
- Converting a PHP object into a PHP regular array with the « ArrayAccess » interface

PRACTICING THE PHP 7 NATIVE OBJECT ORIENTED TOOLS

- Manipulating relational databases with PHP Data Objects aka PDO
- Traversing the data of an XML file thanks to the SimpleXML objects
- Manipulating and formatting dates with the DateTime objects
- Accessing files informations thanks to the SplFileInfo objects

ACQUIRE OBJECT ORIENTED DEVELOPMENT BEST PRACTICES

- Commenting and annotating code thanks to the « phpdoc » syntax
- Mastering the SOLID main principles
- Programming against interfaces
- Promoting composition over inheritance
- Discovering the main GoF design patterns
- Introducing automated code unit testing with PHPUnit