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Sign up

Laravel training

4 days (28 hours)

Presentation

Our Laravel training course will enable you to design your applications with incredible productivity. It's a framework that will improve the speed of your development and the robustness of your applications.

Our Laravel training course will save you time and enable your teams to use Laravel as their main Framework in a professional context. We'll start by reinforcing your OOP skills so you can harness the full power of this new framework.

After working on the basics, we'll move on to the HTTP layer, template and form management, then database processing with the Eloquent ORM. We'll finish with advanced notions such as securing and testing your applications.

Like all our training courses, this one will introduce you to the latest stable version and its new features (Laravel 11 and PHP 8).

Objectives

- Master Laravel principles and best practices
- Understanding and using Eloquent (ORM)
- Understanding and using Blade (Template engine)

Target audience

- Web developers
- Project managers.

Prerequisites

- Knowledge of PHP
- Be familiar with object-oriented programming in PHP

Software requirements

- Installing these technologies :
  - An IDE
  - PHP
  - Dial
  - Node and NPM

Further information

We also offer the Symfony framework.

Laravel training program

Introduction to the Laravel PHP framework

- Why choose Laravel: advantages over competitors
- Composition of the framework
- Installation methods and composition
- Responsibilities, naming and agreements
- Best practices

Strengthening : Advanced object-oriented programming

- Inheritance, encapsulation, polymorphism
- Namespaces
- Autoload classes
- Iterators and generators
- Introspection

MVC: Model View Controller concept

- Syntax reminders: UML, Classes, Inheritance, Abstraction, Interfaces and Features
- Relevance and implementation of different Design Patterns
- PHP implementation of a complete 3-tier architecture
- Laravel 9.x approach. Overview of MVC kinematics

CLI: Laravel command line

- Artisan command line tools
- Artisan's embedded PHP server
- The Laravel Valet virtual server
- Managing environment variables via DotEnv
- Directory tree
- Manage controller

Getting started with Laravel

- Route parameters, route groups
- Restrictive parameters and redirects
- Middleware
- Resource controller: setting up a CRUD
- Request and Response objects
- Views
- HTTP layer management (routing, security, session...)

Blade: Forms management & Templating

- Blade components
- Content section and inheritance
- Vue Maître / Master View
- Escape and XSS
- Control structure (conditional and iterative)
- Template inclusion
- Asset management, Bootstrap and Vue.js
- Compiling assets with Laravel Vite
- Model
- Introducing Laravel Mix

Eloquent: the ORM for managing access to your databases

- Reminder of how an ORM works, the DAO pattern
- Defining entities, relationships and attributes
  - 1 à 1
  - n to n & Pivot Tables
  - Has-many-through
  - Polymorphic relationships
- Loading instances
- Inserting, updating and deleting
- Setting up Scopes: global, local and anonymous
- Lifecycle event
- Forms
- Headphones & Observers (Observer)

Unit testing

- PHPUnit
  - Assertions
  - Preparation and cleaning
  - Exceptions
  - Interdependent classes
- E2E tests
  - Principle
  - Framework assertions
  - User emulation
  - Mock, Fake, Stub
  - DBMS
  - Analyze view rendering

Craftsmen: always up to date

- Inspection & Application Interaction
  - Direct connection
  - Engine stop
  - Fine tuning
  - Hiding Routes
  - Generators
- Custom orders
  - Order creation
  - Anatomy of an Order
  - Write an Order
  - Plan an order
  - View Order results

Authentication: Security with Laravel

- Authentication & Security with Laravel
  - Authenticate a user
  - Create a user template
  - Database creation
  - Authenticate Routes & Views
  - Middleware
  - Input validation
- Securing your application
  - CSRF
  - XSS and escapes
  - SQL injections
  - Mass allocations
  - Cookies
  - HTTPS

Going further with Laravel: Advanced concepts

- Native forms management with Laravel
- Internationalization
- Unit and functional testing

- Table Assistants
- Text manipulation
- Files & Uploads
- e-mails
- Carbon
- Queues
- Performance

Complementary module: going further

- Performance optimization
- PHP Unit
- Facades
- Contract testing
- Migration
- Debugging

Companies concerned

This training course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced computer technology, or to acquire specific business knowledge or modern methods.

Positioning on entry to training

Positioning at the start of training complies with Qualiopi quality criteria. As soon as registration is finalized, the learner receives a self-assessment questionnaire which enables us to assess his or her estimated level of proficiency in different types of technology, as well as his or her expectations and personal objectives for the training to come, within the limits imposed by the selected format. This questionnaire also enables us to anticipate any connection or security difficulties within the company (intra-company or virtual classroom) which could be problematic for the follow-up and smooth running of the training session.

Teaching methods

Practical course: 60% Practical, 40% Theory. Training material distributed in digital format to all participants.

Organization

The course alternates theoretical input from the trainer, supported by examples, with brainstorming sessions and group work.

Validation

At the end of the session, a multiple-choice questionnaire is used to check that skills have been correctly acquired.

Sanction

A certificate will be issued to each trainee who completes the course.