Community Experience Distilled

# Laravel 5 Essentials

Explore the fundamentals of Laravel, one of the most expressive and robust PHP frameworks available

**Martin Bean**

[PACKT] PUBLISHING open source* community experience distilled

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BIRMINGHAM - MUMBAI

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# Preface

Application frameworks have grown in popularity over the past five years. There has been a tremendous shift from handwriting all code to leveraging these powerful frameworks with prebuilt components and features. However, with anything that comes to be in fashion, there are now a lot of contending options, and each of them viable.

While CodeIgniter was one of the first frameworks to enjoy widespread popularity, this popularity would come to be its undoing years later, as its large spread use and low barrier to entry meant it couldn't take advantage of newer versions of PHP without losing backwards compatibility, and potentially breaking lots of applications. This saw it then be surpassed by faster-moving alternatives such as Symfony and even FuelPHP, which was developed as a response to CodeIgniter's unwillingness to embrace change.

Enter: Laravel. Laravel joined the framework scene when there were already many players. However, the developers of Laravel used this timing to their advantage, instead creating a framework that avoided all of the problems and mistakes previous full stack frameworks had made and building on top of the excellent Symfony components in order to create a robust, component-based framework.

Instead of providing dozens of inflexible libraries, Laravel provides sensible, driver-based components that developers could use to build applications their own way, rather than trying to mash everything into the layout the framework author defined. This led to Laravel rising in popularity. It was also a fast-moving framework, and, by version 4, had become the most starred framework on GitHub, a testament to its popularity.

This book will give you a tour of Laravel and its core features. We'll look at how to manage multiple Laravel applications on the same machine and then we'll go ahead and start building our own Laravel application from scratch through to completion. Once we've got a basic application reading and writing data from a database, we'll take a look at Eloquent, Laravel's ORM, which is what makes it easy to read and write from a database and the more advanced features it offers. From there, we'll look at Artisan, Laravel's command-line utility, and even how to define our own commands. We'll then learn how to write automated tests for our application to make sure it keeps working the way we want it to, even with future developments. Then, finally, we'll look at how to build login and registration systems using Laravel's user authentication component.

By the end of the book, you'll have a complete Laravel application, as well as the tools and knowledge of how to build your own Laravel-based applications unassisted, and where to continue your learning of the framework.

# What this book covers

*Chapter 1*, *An Introduction to Laravel*, takes a look at application frameworks in PHP in general, a recent history of the Laravel framework, and the principles that the Laravel framework is built upon.

*Chapter 2*, *Setting Up a Development Environment*, lays the foundation for what's needed to build Laravel applications by installing and configuring the Homestead virtual machine and the Composer dependency manager.

*Chapter 3*, *Your First Application*, builds a working application in Laravel from start to finish. Here is where the fun begins!

*Chapter 4*, *Eloquent ORM*, takes a look at Eloquent, the object relation mapper that ships with Laravel and allows you to query your databases easily.

*Chapter 5*, *Testing – It's Easier Than You Think*, goes over the various approaches to test your Laravel applications to make sure they're as solid as possible and still work as intended after adding new features.

*Chapter 6*, *A Command-line Companion Called Artisan*, helps us meet Artisan, the command-line utility for Laravel. We cover the commands Artisan offers out of the box, as well as how to create our own command-line tools.

*Chapter 7*, *Authentication and Security*, shows you the various ways to protect your Laravel applications from common attacks, as well as how to authenticate and authorize users accessing your application.

*Appendix*, *An Arsenal of Tools*, covers the arsenal of tools that Laravel provides, which haven't been covered in the previous chapters.