



Continuous issue-7 | June - July 2016

Complete introduction & Installation, Advance Web Development in Laravel

Abstract:

Laravel is a PHP MVC framework for developing web applications. It is an open source framework released under MIT License. Laravel was developed out of the need to address most of the challenges in CodeIgniter MVC.

Laravel is built on the shoulders of giants. It uses components from other time tested frameworks like Symfony. If populating is anything to go by, Laravel MVC has the Lion's share in the PHP MVC frameworks market share. According to a survey done by SitePoint, Laravel MVC framework is the most used framework in both personal projects and at work.

Features of Laravel MVC framework that make it better

The following are some of the features that make Laravel MVC framework very popular among developers.

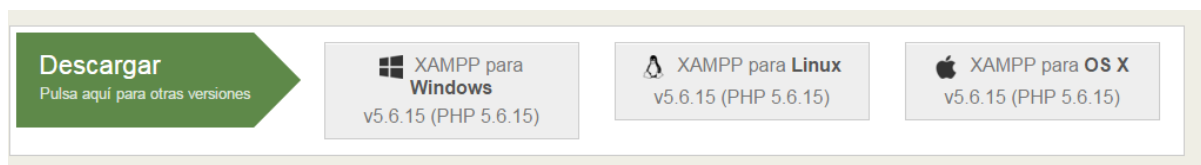
- Built on already time tested components
- Supports Rapid Application Developing (RAD) – the artisan command line utility can be used to create boiler plate code for controllers and models. The command line utility can also be used to perform other tasks such as running unit tests, migrations etc.
- Uses namespaces unlike other frameworks such as CodeIgniter.
- Blade template – this is a built in template engine
- Built in features for common web application tasks such as authentication, routing, database managing, sending emails etc.
- Class auto loading – this means you do not have to manually load the classes
- RESTful controllers – this allows you to take advantage of HTTP verbs such as GET, POST, PUT, and DELETE etc.
- Unit Testing – built in unit testing features that can be run from the artisan command line.
- Support for composer Laravel uses composer. Composer is a package management system for PHP. This means you can use packages from www.packagist.com in your Laravel projects
- Eloquent ORM – Eloquent is an Object Relational Mapper framework that implements PHP Active Record.
- Excellent developer community – Laravel has good documentation and free tutorials on the internet that all come in handy when learning Laravel. StackOverflow also has a good number of answered questions for Laravel. This means you can easily find solutions to most of the challenges that you will face when developing applications.

Requirements

- PHP >= 5.5.9
- OpenSSL PHP Extension
- PDO PHP Extension
- Mbstring PHP Extension
- Tokenizer PHP Extension

Install Xampp

First of all, we need Xampp, so we can download it from the official page



Composer

After you've downloaded and installed Xampp, we need to install Composer.

Composer is a PHP package manager that is integrated with Laravel Framework. In Windows we can install it easy going to the official page and download the installer.

```
C:\Users\Marc
λ composer

Composer
Composer version 1.0-dev (c9f35071b68e286f68ac64908c990c15b3ac4a0d) 2016-01-31 15:50:19

Usage:
  command [options] [arguments]

Options:
  -h, --help                Display this help message
  -q, --quiet                Do not output any message
  -V, --version              Display this application version
  --ansi                     Force ANSI output
  --no-ansi                  Disable ANSI output
  -n, --no-interaction       Do not ask any interactive question
  --profile                  Display timing and memory usage information
  -d, --working-dir=WORKING-DIR
                             If specified, use the given directory as working directory.
  -v|vv|vvv, --verbose      Increase the verbosity of messages: 1 for normal output, 2 for more verbose ou
                             tput and 3 for debug
```

Xampp Virtual Host

We will configure a Virtual Host in Xampp for a Laravel project, and in this example, we want to configure the domain **laravel.dev** for our project.

We need to edit **httpd-vhosts.conf** that is located in **C:\xampp\apache\conf\extra\httpd-vhosts.conf** and add following lines at the end of the file:

```
# VirtualHost for LARAVEL.DEV

<VirtualHost laravel.dev:80>
DocumentRoot "C:\xampp\htdocs\laravel\public"
ServerAdmin laravel.dev
<Directory "C:\xampp\htdocs\laravel">
Options Indexes FollowSymLinks
AllowOverride All
Require all granted
</Directory>
</VirtualHost>
```

After this, our apache is listening to laravel.dev connections, but we have to configure our **hosts** file that allows to redirect **laravel.dev** to the **localhost** that is located in **C:\Windows\System32\drivers\etc**
IMPORTANT: To edit this file, maybe we should give access, click properties and allow your user to modify this file. Edit hosts file adding our localhost for laravel.dev:

```
# localhost name resolution is handled within DNS itself.
# 127.0.0.1 localhost
# ::1 localhost

127.0.0.1 laravel.dev
```

Save the file and we are ready to install laravel.

Install Laravel Framework

We are prepared to install and configure a Laravel Framework. First of all, we have to navigate to **htdocs** folder to install it and run this following command:

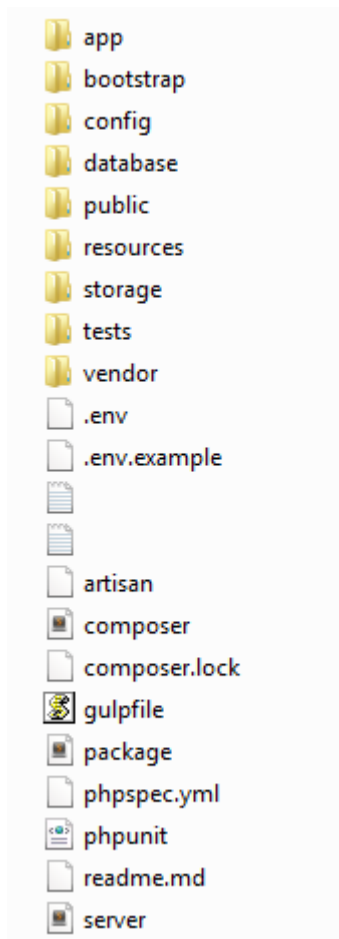
```
composer create-project laravel/laravel laravel "5.1.*"
```

```
C:\xampp\htdocs
λ composer create-project laravel/laravel laravel "5.1.*"
Installing laravel/laravel (v5.1.11)
- Installing laravel/laravel (v5.1.11)
  Loading from cache

Created project in laravel
> php -r "copy('.env.example', '.env');"
Loading composer repositories with package information
Installing dependencies (including require-dev)
Writing lock file
Generating autoload files
> php artisan clear-compiled
> php artisan optimize
Generating optimized class loader
> php artisan key:generate
Application key [9XqPkVtMk6eL2R0u0jaoRWKqqt9M3e0h] set successfully.

C:\xampp\htdocs
λ |
```

When it finishes, it will create following directory schema:

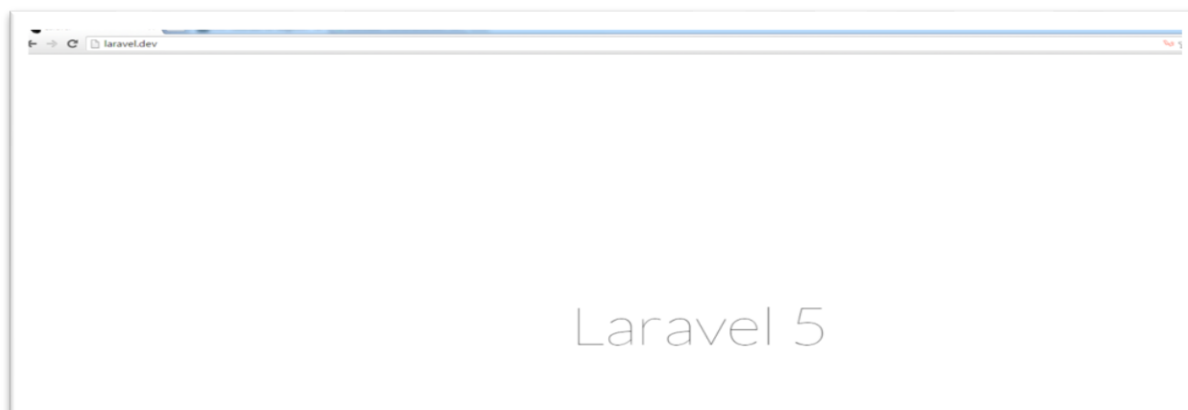


Finally, start our apache and MySQL from Xampp control panel:

| Modules | | | | |
|--------------------------|-----------|--------------|---------|---|
| Service | Module | PID(s) | Port(s) | Actions |
| <input type="checkbox"/> | Apache | 5764 6352 | 80, 443 | <input type="button" value="Stop"/> <input type="button" value="Admin"/> <input type="button" value="Config"/> <input type="button" value="Logs"/> |
| <input type="checkbox"/> | MySQL | 4916 | 3306 | <input type="button" value="Stop"/> <input type="button" value="Admin"/> <input type="button" value="Config"/> <input type="button" value="Logs"/> |
| <input type="checkbox"/> | FileZilla | | | <input type="button" value="Start"/> <input type="button" value="Admin"/> <input type="button" value="Config"/> <input type="button" value="Logs"/> |

Success!

Navigate to **laravel.dev** and Laravel it's installed!



Reference

1. Online Laravel 5.2 Documentation (<https://laravel.com/docs/5.2>)
2. Laravel 5 Essentials, Martin Bean, Packet Publishing, ISBN 978-1-78528-301-7
3. Bootstrap, Jake Spurlock, O'reilly, ISBN: 978-1-449-34391-0
4. <https://laravel.com/docs/4.2>

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