

# A BRIEF STUDY OF LARAVEL FRAMEWORK WITH PHP

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## Abstract:

This article briefly describes the laravel framework using PHP. Generally speaking, a framework is a real or theoretical configuration intended to serve as a support or guide for web programming applications, with various predefined tools and directories on which to rely for simple projects. PHP is the most widely used server-side scripting language. It is primarily designed for web development and is also used for building dynamic websites. Almost 82% of web developers use PHP scripts for quality and complete website development. Laravel is a PHP framework. It has more flexible tools to develop more qualified and expensive websites in less time. Laravel is the first framework to introduce the concept of routing

**Keyword:** *Laravel, framework, MVC, PHP.*

## Introduction

In a computer system, a framework is a structural representation of what types of projects you can or need to build and how they are interconnected. Some computer system frameworks include native programs, define programming interfaces, or provide coding tools for using the framework. A framework can represent a set of features in a system and how they interact. Operating system layer. Application subsystem level. How do you need to standardize communication at a particular level of your network? Such. Frameworks are often more comprehensive than protocols and more normative than structures. Laravel is a web application framework with expressive and elegant syntax. We believe that for growth to be truly satisfying, it must be an enjoyable and creative experience. Laravel tries to reduce development problems by reducing common tasks used in most web projects, such as:

- Simple, fast routing engine.
- Powerful dependency injection container.

- Multiple back-ends for session and cache storage.
- Database nonbeliever schema migrations.
- Strong background job processing.
- Real-time event spreading.

## PHP 7 Advanced Concepts

- ❖ PHP5 has key OOP concepts such as type suggestion, function polymorphism, interfaces, abstract classes, and inheritance. Improved functionality of various applications and modularity of the PHP7 code. It was officially released in December 2015. Upgrade with Zend Engine 3.0. Two times faster performance and 50 times more memory usage than PHP5. Using PHP7 requires fewer servers to serve the same number of users. Here are some advanced features of PHP7:
- ❖ Improved performance
- ❖ New Zend Engine
- ❖ Type Declaration
- ❖ Abstract Syntax tree(AST)/Uniform variable syntax
- ❖ New Operators (< = >, ??)
- ❖ Error Handling
- ❖ 64-Bit Windows System Support

## LARAVEL:

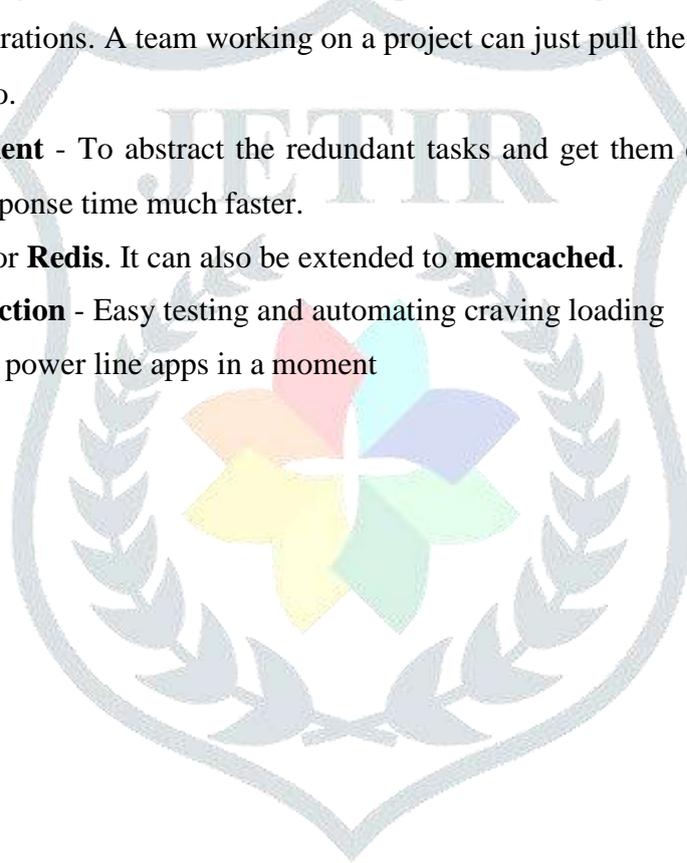
Laravel is a comprehensive framework for building early stage applications using MVC design. Laravel is currently the hottest PHP flagship and has a large developer community. Includes many Laravel specific packages, lightweight blade model motors, test parts,ORMs,encapsulation systems and shutdown controllers. Had a hard time bundling the code. Queue Management is also the ability to manage background tasks and log the activity of all users while the task runs correctly in the user interface. The bundle package can be easily combined with the powerful initializer built into Laravel. Integrated with Gulp and Elixir, all NPM and BOWER packages can be called directly via SSH to work within the framework.One of the benefits that Laravel can handle well is not in SQL structures like MongoDB or Redis. There is a simple database connection and recovery concept. It's easy to start with Laravel's many citations, reputations, and recognition of Laravel.

### Directory Structure:

Laravel's default application framework is a great starting point for applications large and small. Of course, we're free to order the app, but we love it. Laravel imposes some limits in your code where a particular class is placed, as long as Composer can dynamically load that class. Many programmers are confused by the lack

of a model directory. Some programmers call all the business logic the "model" of an application, while others call it the "model" as a layer related to the RDBMS. This directory concept thus follows an eloquent website development model. Laravel Framework Architecture

- **Bundles** and **composer** provide number of bundle modular packaging system and dependencies.
- **Routing** - The easiest to manage and abstract way of routing. It just makes everything hassle free and the abstraction provided takes out each and every complexity
- **Eloquent ORM support** - Another service provided to abstract and automate the model part. Relationships and mapping of database with our application with a simple convention over configuration technique
- **Migrations** - A way to version our database scripts in much elegant manner. No need to keep all the checks on migrations. A team working on a project can just pull the given migration and all is set and ready to go.
- **Queue management** - To abstract the redundant tasks and get them queued behind the scenes and make user response time much faster.
- Inhouse support for **Redis**. It can also be extended to **memcached**.
- **Dependency Injection** - Easy testing and automating craving loading
- **Artisan** - Making power line apps in a moment



### Comparative Analysis of Other Frameworks

Comparison Factors	Laravel	Zend
<b>Release date</b>	June 2011	March 2006
<b>License</b>	MIT License	BSD License
<b>Architecture development principles</b>	Convention over configuration Test-driven development Don't repeat yourself	Configuration over convention
<b>Architecture design pattern</b>	Active-Record Model-View-Controller Dependency injection Observer Singleton Event-Driven MTV Factory RESTful II Façade	Dependency injection Model-View-Controller Event-Driven Data Mapper Singleton Active-Record RESTful HMVC MVVM Service Locator
<b>Framework</b>	Laravel	Zend Framework 2
<b>Database support</b>	Sqlite MySQL L PostgreSQL L Redis Microsoft SQL Server 2012 MongoDB	Microsoft SQL Server 2012 MySQL PostgreSQL L MariaDB Sqlite IBM DB2 Oracle MongoDB
<b>Memory recommended</b>	1 GB	512 MB
<b>Database model</b>	Object-oriented NoSQL	Relational NoSQL XML Database
<b>Template language</b>	Blade Template Engine Blade	PHP Smarty Twig
<b>Target audience</b>	Web Development	Enterprise

Comparison Factors	Laravel	Zend
Client/Server code reuse	Model-View-Controller Template language Web services	Model-View-Controller Web services JSON API Template language
Data storage	Relational DB File System MongoDB	Relational DB File System Berkeley DB
Cloud platform support	Google App Engine Amazon EC2 Fortrabbbit Pagoda Box DigitalOcea n Heroku Linode OpenShif t	Windows Azure Amazon EC2 Heroku OpenShift
Library file size	17 MB	8 MB
iOS Development Support	Yes	No
Supported by Microsoft	No	Yes
Documentation	API Documentation Tutorials Forum eBook Events (Laracon)	API Documentation eBook Forum Tutorials

## Conclusion

Laravel is a relatively new PHP framework, but by far the most popular framework among developers. It has a wide range of functions. This graceful syntax PHP web application framework makes web development fast and easy. Common processes such as sessions, caching, and routing are simplified for the user. Built on powerful Symfony components, Laravel has a robust, reliable, and tested code base.

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