Laravel is an open-source PHP framework, which is robust and easy to understand. It follows a model-view-controller design pattern. Laravel reuses the existing components of different frameworks which helps in creating a web application. The web application thus designed is more structured and pragmatic.

Laravel offers a rich set of functionalities which incorporates the basic features of PHP frameworks like CodeIgniter, Yii and other programming languages like Ruby on Rails. Laravel has a very rich set of features which will boost the speed of web development.

If you are familiar with Core PHP and Advanced PHP, Laravel will make your task easier. It saves a lot time if you are planning to develop a website from scratch. Moreover, a website built in Laravel is secure and prevents several web attacks.

Advantages of Laravel

Laravel offers you the following advantages, when you are designing a web application based on it

* The web application becomes more scalable, owing to the Laravel framework.
* Considerable time is saved in designing the web application, since Laravel reuses the components from other framework in developing web application.
* It includes namespaces and interfaces, thus helps to organize and manage resources.

## Features of Laravel

Laravel offers the following key features which makes it an ideal choice for designing web applications −

### Modularity

Laravel provides 20 built in libraries and modules which helps in enhancement of the application. Every module is integrated with Composer dependency manager which eases updates.

### Testability

Laravel includes features and helpers which helps in testing through various test cases. This feature helps in maintaining the code as per the requirements.

### Routing

Laravel provides a flexible approach to the user to define routes in the web application. Routing helps to scale the application in a better way and increases its performance.

### Configuration Management

A web application designed in Laravel will be running on different environments, which means that there will be a constant change in its configuration. Laravel provides a consistent approach to handle the configuration in an efficient way.

### Query Builder and ORM

Laravel incorporates a query builder which helps in querying databases using various simple chain methods. It provides **ORM** (Object Relational Mapper) and **ActiveRecord** implementation called Eloquent.

### Schema Builder

Schema Builder maintains the database definitions and schema in PHP code. It also maintains a track of changes with respect to database migrations.

### Template Engine

Laravel uses the **Blade Template** engine, a lightweight template language used to design hierarchical blocks and layouts with predefined blocks that include dynamic content.

### E-mail

Laravel includes a **mail** class which helps in sending mail with rich content and attachments from the web application.

### Authentication

User authentication is a common feature in web applications. Laravel eases designing authentication as it includes features such as **register, forgot password** and **send password reminders**.

### Redis

Laravel uses **Redis** to connect to an existing session and general-purpose cache. Redis interacts with session directly.

### Queues

Laravel includes queue services like emailing large number of users or a specified **Cron** job. These queues help in completing tasks in an easier manner without waiting for the previous task to be completed.

# Laravel - Installation

For managing dependencies, Laravel uses **composer**. Make sure you have a Composer installed on your system before you install Laravel. In this chapter, you will see the installation process of Laravel.

**Step 1** − Visit the following URL and download composer to install it on your system.

<https://getcomposer.org/download/>

**Step 2** − After the Composer is installed, check the installation by typing the Composer command in the command prompt as shown in the following screenshot.

**Step 3** − Create a new directory anywhere in your system for your new Laravel project. After that, move to path where you have created the new directory and type the following command there to install Laravel.

composer create-project laravel/laravel –-prefer-dist

Now, we will focus on installation of version 5.7. In Laravel version 5.7, you can install the complete framework by typing the following command –

composer create-project laravel/laravel test dev-develop

**Step 4** − The above command will install Laravel in the current directory. Start the Laravel service by executing the following command.

php artisan serve