

Laravel - Overview

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 of 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 frameworks in developing web applications.
- It includes namespaces and interfaces, thus helping to organize and manage resources.

Composer

Composer is a tool which includes all the dependencies and libraries. It allows a user to create a project with respect to the mentioned framework (for example, those used in Laravel installation). Third-party libraries can be installed easily with the help of Composer.

All the dependencies are noted in **composer.json** file which is placed in the source folder.

Artisan

Command line interface used in Laravel is called **Artisan**. It includes a set of commands which assist in building a web application. These commands are incorporated from Symfony.

framework, resulting in add-on features in Laravel 5.1 (latest version of Laravel).

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.

Event and Command Bus

Laravel 5.1 includes **Command Bus** which helps in executing commands and dispatch events in a simple way. The commands in Laravel act as per the application's lifecycle.