### A Modern Review on Laravel- PHP Framework

MISS. KAUSAR I. BAGWAN<sup>1</sup>, PROF. SWATI D. GHULE.<sup>2</sup>

<sup>1, 2</sup> MCA Department, PES's Modern College of Engineering, Pune, India.

Abstract- Laravel is the PHP based web-framework that provides to create high-end secure web-applications. It facilitates developers by saving time and the thinking for planning for the web-apps from scratch. Laravel framework provides the developers to install various packages related to the work and made easier the coding and the logical part. Laravel framework is becoming one of the popular framework and first choice for web-based application developers. In the age of modern technologies it is mandatory to think over for something secure, and for security purpose laravel is best suit for the web application development.

Indexed Terms- features, Laravel Framework, MVC Introduction, Laracast platform, Packages.

#### I. INTRODUCTION

Laravel is a PHP based web-framework for building high-end web applications using its significant and graceful syntaxes. Laravel was developed by Taylor Otwell in July 2011 and it was released more than five years after the release of the Codeigniter. It comes with a strong collection of tools and provides application architecture.

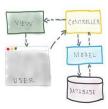
Moreover, it includes various characteristics of technologies like ASP.NET MVC, CodeIgniter, Ruby on Rails and lot more. This framework is open source framework.

It facilitates developers by saving huge time and helps reduce the thinking and planning to develop the entire website from scratch.

Along with that security of the application is also Laravel take care of. Hence all its features can boost the web development pace for you. If anyone is familiar with the basics of PHP along with some intermediate PHP scripting, Laravel can craft your work more easily.

Laravel follows the model-view-controller (MVC) architectural pattern.

# II. CONCEPT OF MODEL, VIEW, CONTROLLER(MVC):



MVC is a software architecture...that separates domain/application/business logic from the rest of the user interface. It does this by separating the application into three parts: the model, the view, and the controller.

The model manages fundamental behaviors and data of the application. It can respond to requests for information, respond to instructions to change the state of its information, and even to notify observers in event-driven systems when information changes. This could be a database, or any number of data structures or storage systems. In short, it is the data and datamanagement of the application.

The view effectively provides the user interface element of the application. It'll render data from the model into a form that is suitable for the user interface.

The controller receives user input and makes calls to model objects and the view to perform appropriate actions.

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All in all, these three components work together to create the three basic components of MVC.

#### III. LARAVEL AS MVC FRAMEWORK

Laravel is the PHP - web based MVC Framework that provides developer to build secure and robust web-based applications. Laravel provides number of different packages and API's to integrate within the application and made work easier for developers. Laravel provides the use of PHP Composer to install and run for the project and used for using several artisan commands to create various models, controllers and services.

Laravel provides feature to use bootstrap, Angular JS as front-end technologies and to represent UI as immense format as per developer choice.

All Laravel projects run under the root directory of project structure. Laravel Project can be easily installed via composer commands or by installing zip for the project. Various packages are predefined and can be easily available on web for use.

Models in the laravel are like container for storing database table credentials and provide easy storage and maintain relationships using query builder and eloquent feature of laravel.

Controllers are responsible for connection and acts as bridge between the UI views and the database connections as models. The functions that are to be written for handling queries and logical calculations are also held in the controller.

The Views are the heart of the project as they are the main thing to interact with the users of the system. View held HTML part as UI for the project. We can use any front-end technology to provide best solution for UI. Laravel provides the compatibility solutions to integrate different UI platform like bootstrap, angular etc.

The routes are the main URLs that user wants to display on the web.

# IV. LARACAST - ONLINE LEARNING PLATFORM FOR LARAVEL

Laravel provide their own awesome learning tutorial platform for new bee and the experience persons ones. Whether you are out for free videos or for paid ones, laracast serve best for you. The beauty of laracast is that, it provide discussion forum, learning material, Technical quiz and competitions and also provide the platform for the people who are searching for the career opportunities in laravel.

The instructions provided are precise, clear and easy to understand which can produce high-end content and training material thus making this framework learning a real bliss and fun.

Laracast have the number of experienced developers who spent years on developing projects using laravel. The starter for the framework doesn't feel like alone and tensed as the developer are helping to solve number of complex problems of each other and made the best forum and helping platform. As laravel is one of the most popular web framework and user friendly, it having best impression and become first choice for the PHP developers.

#### V. INTACT SECURITY

Of course security of the application is the major concern for every web app development. No doubt, every developer uses some effective process to keep the app secure. This framework is well equipped with the security system within its own framework.

The Security is provided at client and server side too so that developers do not need to search for other technologies for serving security.

Some of the security areas are:

- It is packed with hashed and salted password which means no password can ever be saved as normal text in the database.
- It generates an encrypted representation of the password using "Bcrypt Hashing Algorithm" which is a safe secure way to generate password.
- In addition, it also applies SQL statements thus warding off any injection attacks.

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- It provides multi-auth system to include for multiple users authentication in the system.
- Laravel also provides CSRF password protection that protects user passwords and essential user information from hacker and other attacks.

## VI. OFFICIAL PACKAGES PROVIDED BY LARAVEL

#### 1. Cashier:

The Cashier is one of the official package which is expressive, fluent interfaces to Stripe's and Braintree's subscription billing co-operation. It allows to helping all of the boilerplate subscription billing code you are dreading writing. It can be handle coupons, swapping subscription, subscription "quantities", cancellation grace periods, and even generate invoice PDFs.

#### 2. Envoy:

Envoy gives a clean, minimal syntax for establishing common tasks you operate on your remote servers. Now, Envoy only supports the Mac & Linux OS.

#### 3. Passport:

Laravel does API authentication a breeze using Laravel Passport that gives a full OAuth2 server implementation for your Laravel application in a lesser time. Passport is built on top of the League OAuth2 server that is managed by Alex Bilbie.

#### 4. Scout:

Scout provides a simple, driver based solution for adding full-text search to your eloquent models and will sync search indexes with eloquent records.

#### 5. Socialite:

Socialite provides a powerful, fluent interface to OAuth authentication with Facebook, Twitter, Google, LinkedIn, GitHub and Bitbucket.

#### **CONCLUSION**

Laravel framework provide us the best solution for developing high-end, user satisfied and secure web apps with less time span and more reliable code and product deliverable. Laravel is one of the best solution for tackle the security issues and to develop best web based products.

Overall, Laravel provides easy learning platform, easy to work for developers and provides the best features and in-built packages to be used within the application for making some new and feasible solution as web based product.

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#### **REFERENCES**

- [1] Vishal V. Parkar, Prashant P. Shinde, "Utilization of Laravel Framework for Development of Web Based Recruitment Tool", IOSR Journal of Computer Engineering (IOSR-JCE), Vol.38, PP. 50-58, July 2000.
- [2] Jauari Akhmad NH, Masfu Hisyam. "Implementing Singleton method in Design of MVC-Based PHP Framework Sentinel Web". Informatics Department Electronic Engineering Polytechnic Institute of Surabaya Surabaya, Indonesia 2015.
- [3] Christopher Pecoraro, "Mastering Laravel", 2012.
- [4] Martin Bean, "Laravel 5 Essentials 1st Edition", Wiley, 2014.
- [5] R. Rizal Isnanto. "Implementation of Laravel Framework in Web Based Temperature and Humidity Monitoring System". Department of Computer Engineering Faculty of Engineering, Diponegoro University Semarang, Indonesia.