MVC & Laravel intro

PHP WebDevelopment 2019

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MVC

Model View Controller /MVC/

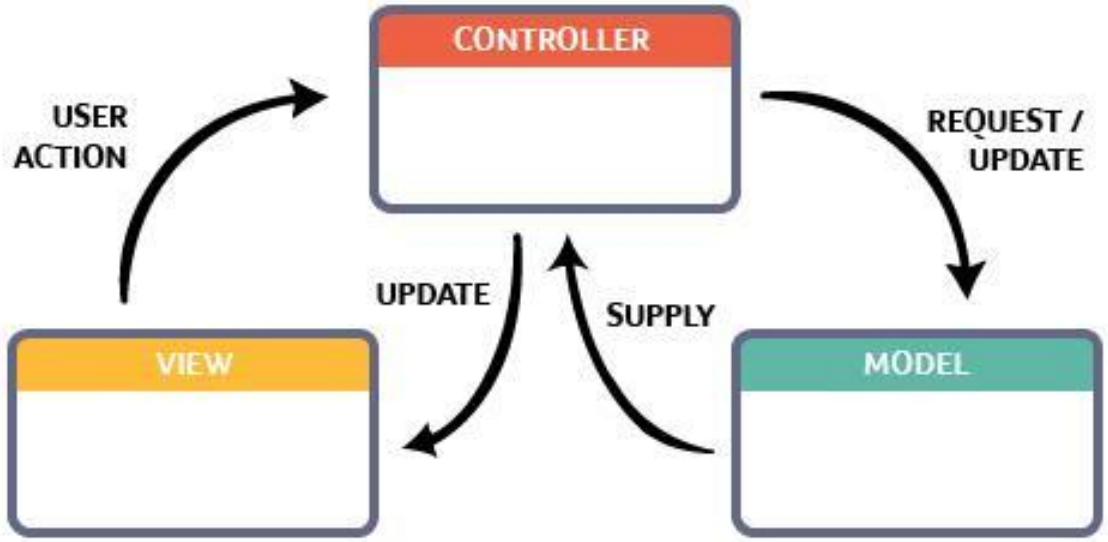
A **software design pattern** used for developing **user interfaces.**

MVC divides the related program logic into three interconnected elements -

Model

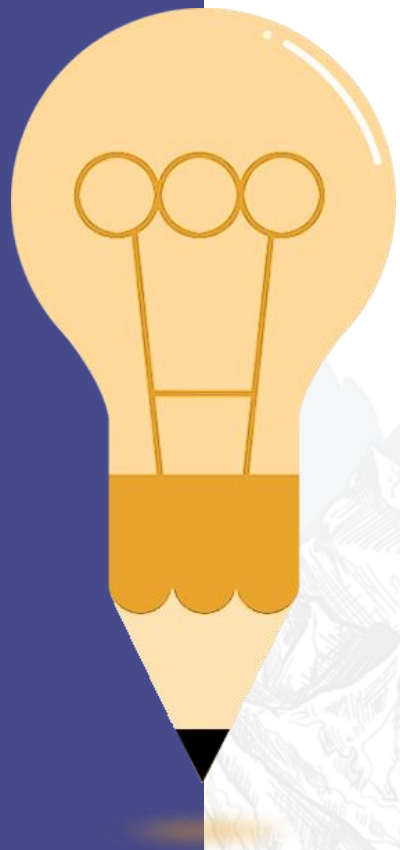
View

Controller



This is done to **separate** internal **representations of information** from the ways **information is presented** to and accepted from the user.

MVC



Model

The central component of the pattern. It is the application's dynamic data structure, independent of the user interface. It directly manages the data, logic and rules of the application.

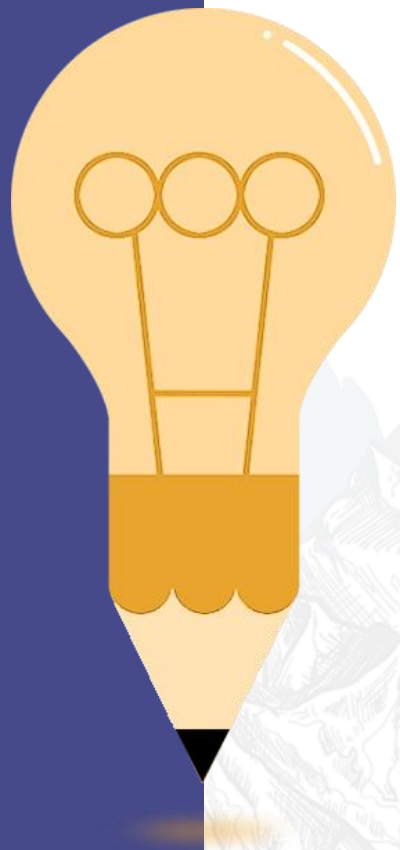
View

Any representation of information such as a chart, diagram or table. It is what the user sees on the screen.

Controller

Accepts input and converts it to commands for the model or view.

MVC



In addition to dividing the application into these components, the **model–view–controller** design defines the interactions between them.

- The **model** is responsible for **managing the data** of the application. It receives user input from the controller.
- The **view** means presentation of the **application`s data** in a particular format.
- The **controller responds** to the **user input** and performs interactions on the data model objects. The controller receives the input, optionally validates it and then passes the input to the model.

Composer

Framework

Software - **pre-built and pre-tested code segments and functionalities -**

that is developed and used by developers to build applications.

As a programmer, you don’t need to start from scratch your projects.

Using a software framework to develop applications lets you

focus on the **high-level functionality** of the application.

This is because any **low-level functionality** is **taken care of** by the framework itself.

Framework

Advantages of using a software framework:

- Assists in establishing **better programming practices** and fitting use of **design patterns**
- Code is **more secure**
- Duplicate and redundant code can be avoided
- Helps **consistent** developing code with fewer bugs
- Makes it easier to work on sophisticated technologies
- One could create their software framework or contribute to open-source frameworks. Hence, there is a **continuous improvement in the functionality**
- **Several code segments and functionalities are pre-built and pre-tested**. This makes applications more reliable
- Testing and debugging the code is a lot easier and can be done even by developers who do not own the code
- **The time required to develop an application is reduced significantly**

Framework

Composer

Installation

Composer is a tool for **dependency management** in PHP.

It allows you to declare the libraries

your project **depends on** and it will manage (install/update) them for you.

composer.json is where all of the project libraries are listed.

Laravel

Convention over configuration

Laravel focuses on convention instead of the configuration

You`ll spent **less time for initial project setup** compared to other frameworks, when using Laravel default configuration. Even if you have to customize default settings, it is no problem at all.

Compared to other PHP frameworks, Laravel requires **less time for developing** a project.

Simplicity

Laravel focuses on simplicity

The documentation and Laravel community will always recommend to **resolve** any problem or task with the **simplest implementation possible.**

Expressive, Dynamic, Simplified

Laravel focuses on simplicity

Taylor Otwell /the creator/ of Laravel and his followers are connected and inspired by Ruby on Rails and programming languages that use functional programming.

There is a strong current in the modern PHP that supports and tends to complicate and aggravate the development, supporting the JAVA like features of PHP.

Laravel tends to be **on the other side** - it supports the **expressive, dynamic and simplified** practices and features of the programming language.

The Community

Laravel community

A distinctive component of Laravel, contributing to his growth and success, is its constantly growing community.

Laravel has a diverse and vibrant community of people who have supported him since day one.

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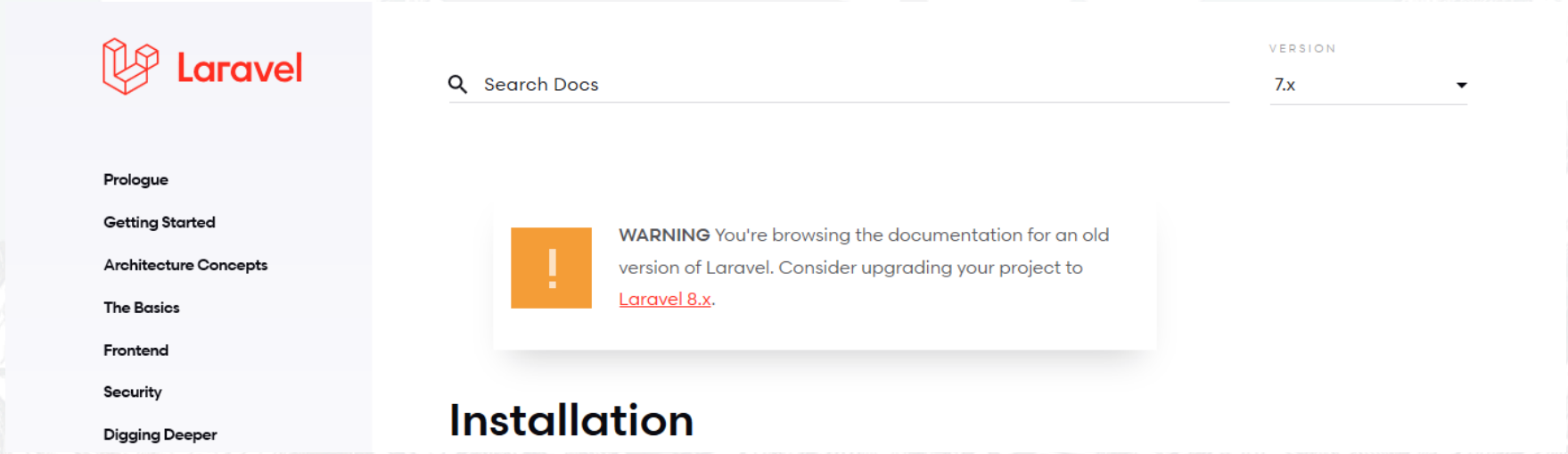
> … From the very beginning of Laravel, I've had this idea that all people want to feel like they are part of something. It's a natural human instinct to want to belong and be accepted into a group of other like-minded people.
> **So, by injecting personality into a web framework** and being really active with the community, that type of feeling can grow in the community.
>
> —Taylor Otwell,Product and Support interview

The Documentation

The Documentation

Always select the Laravel version before reading the documentation!



Installing Laravel

Installing Laravel

Check server requirements

Installing Laravel

Via Laravel Installer

```
composer global require laravel/installer
laravel new blog
```

Via Composer Create-Project

```
composer create-project --prefer-dist laravel/laravel:^7.0 blog
```

Installing Laravel

Open Git Bash in the folder where the project will reside!

Via Laravel Installer

```
composer global require laravel/installer
laravel new blog
```

Via Composer Create-Project

```
composer create-project --prefer-dist laravel/laravel:^7.0 blog
```

Installing Laravel

Access the project folder in the browser with

`localhost/path-to-project-folder/public`

Resources

Resources

https://laracasts.com/

Edwin Diaz - PHP with Laravel, Become a master in Laravel /for Laravel 5.x/

Folder Structure

Questions?

Враца Софтуер Общество
Гнездото Coworking
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Дизайн курс
Курс по дигит. маркети нг
MindHub
CodeWeek Враца
HACK VRATSA
#кодаправиш

Partners

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ВРАЦА

Telerik Academy

НАЦИОНАЛНА МРЕЖА ЗА ДЕЦАТА

MindHub

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