



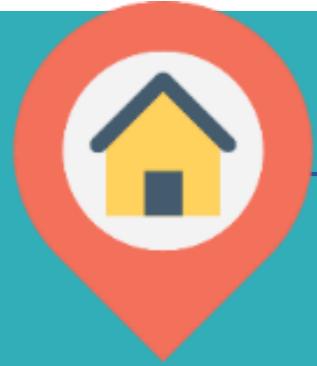
# Pengenalan Laravel

ISH3D4 – Sistem Informasi

Rahmat Fauzi, S.T., M.T

# AGENDA

Week	Topic	Week	Topic
1	Introduction HTML dan CSS	9	Model View Controller pada Framework Laravel
2	HTML, CSS dan Java Script	10	Model View Controller pada Framework Laravel
3	Server-Side berbasis web menggunakan PHP	11	<ul style="list-style-type: none"><li>• POST dan GET</li><li>• Pengenalan Cookies dan Session</li></ul>
4	Operator-operator pada PHP	12	<ul style="list-style-type: none"><li>• POST dan GET</li><li>• Pengenalan Cookies dan Session</li></ul>
5	Operator-operator pada PHP	13	TUBES
6	Percabangan dan Perulangan pada PHP	14	TUBES
7	mengintegrasikan halaman website dengan database	15	UAS
8	Mid Term Exam	16	UAS



Home

Saya Bee.. akan membantu Anda mempelajari modul ini.

Silahkan pilih materi yang ingin Anda pelajari



Pokok Bahasan



Capaian



Bahasan



Video Animasi



Kuis / Latihan



Link



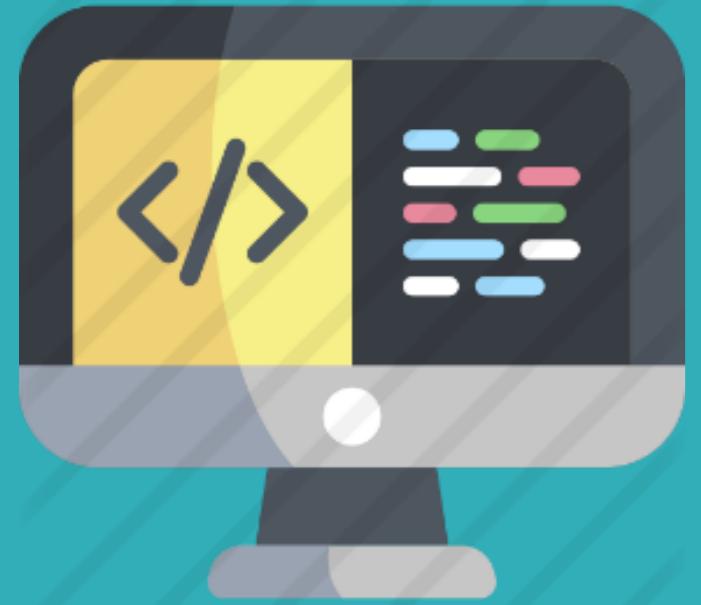
Kesimpulan



Pustaka



# Capaian Pembelajaran



P02

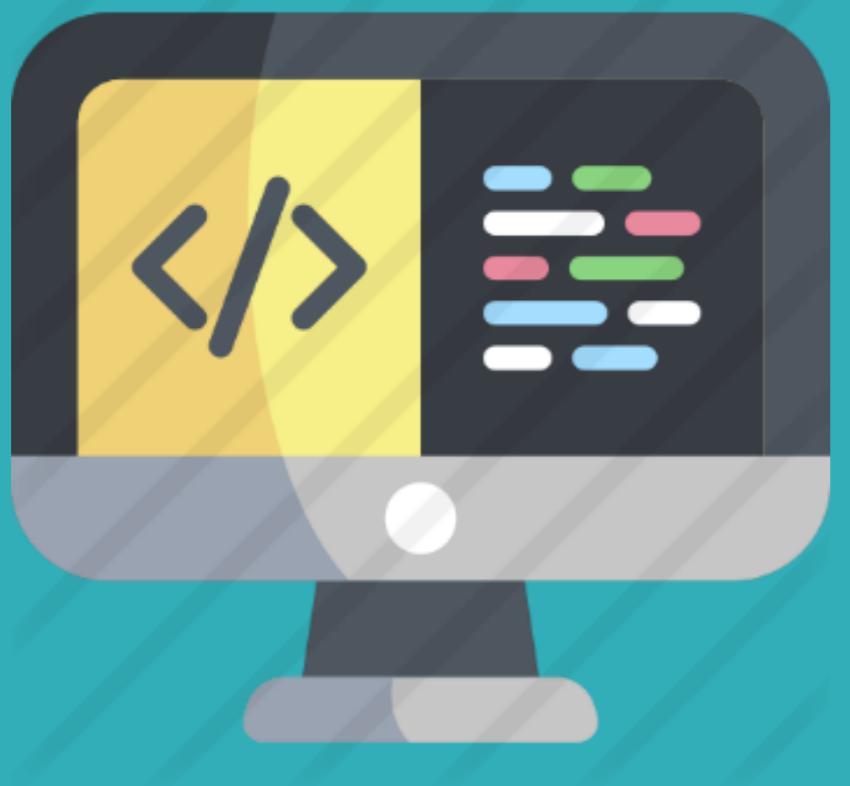
Kemampuan menganalisis permasalahan, melakukan identifikasi dan mendefinisikan kebutuhan komputasi Yang bersesuaian dengan solusi

P03

Kemampuan untuk merancang, melakukan implementasi dan mengevaluasi sistem berbasis komputer, proses, komponen, atau program untuk memenuhi kebutuhan yang diinginkan.

P07

Kemampuan untuk menganalisis dampak lokal dan global dari komputasi pada individu, organisasi dan masyarakat



# Bab I

## Pengenalan dan Definisi

## Laravel

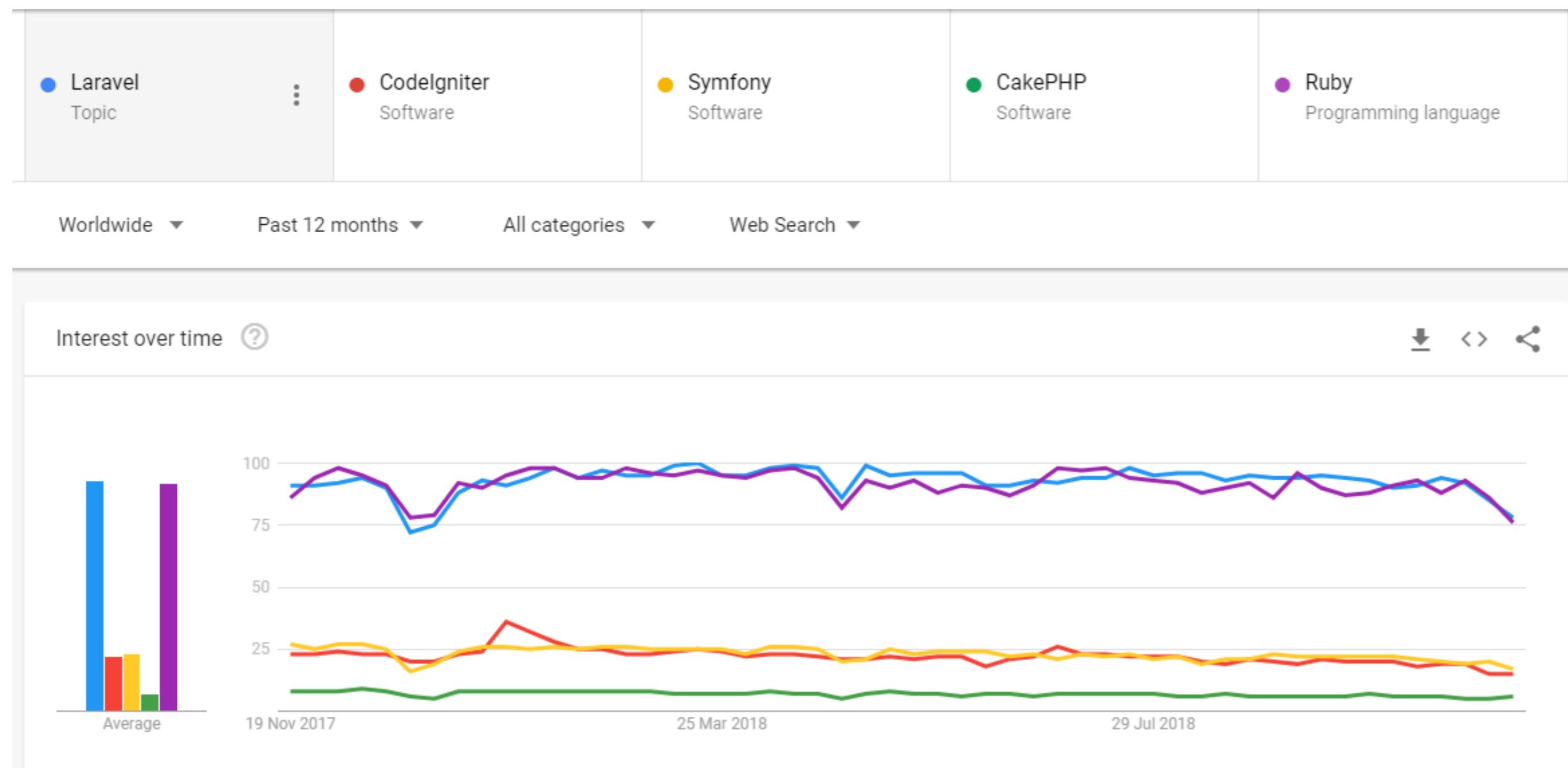
# Apa itu Laravel ?

- Laravel adalah Kerangka kerja (Framework) Bahasa pemrograman PHP (Hypertext Preprocessor) berbasis open source dengan konsep MVC (Model View Controller).
- Framework Laravel **bertujuan** meningkatkan pengalaman bekerja dengan aplikasi dengan menyediakan sintaks yang ekspresif, jelas dan menghemat waktu.
- Laravel Menggunakan **GITHUB** sebagai tempat untuk berbagi kode.
- MVC Sendiri adalah sebuah pendekatan software yang memisahkan beberapa komponen aplikasi yakni komponen **manipulasi data**, komponen **controller** dan komponen **user interface**.

Dasar  
LARAVEL



# Mengapa Laravel ?



- **Laravel** sedang Naik Daun setara dengan **Ruby On Rail (Google Trends : 2017-2018)**
- **Laravel** lebih unggul dibanding framework PHP lainnya seperti Codeigniter, CakePHP, Symfony dkk



# Mengapa Laravel ?

Dasar  
LARAVEL

- *Open Source (BEBAS tapi GRATIS).*
- Ekosistem Bagus.
- Mature. (API lengkap)
- Kenyamanan dan Kemudahan.
- Secure / Keamanan.
- Modern.
- Arsitektur MVC.
- Blade Template.
- Fitur Migration.
- Mudah & Dokumentasi Lengkap.

# Mengapa Laravel ?



Dasar  
**LARAVEL**

- Expressive & Beautiful Syntax
- Cocok untuk Tim
- Modern Toolkit
- Magic



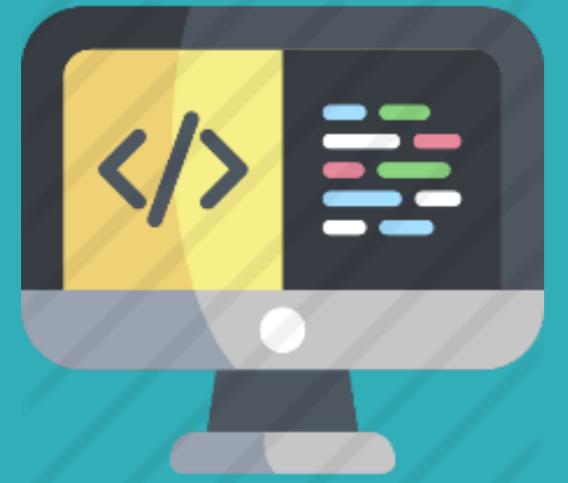
# Persiapan Lingkungan Laravel



# Persyaratan Sistem

Perlu disiapkan persyaratan berikut ini :

1. PHP  $\geq 7.1.3$
2. OpenSSL PHP Extension
3. PDO PHP Extension
4. Mbstring PHP Extension
5. Tokenizer PHP Extension
6. XML PHP Extension
7. Ctype PHP Extension
8. JSON PHP Extension



# Persyaratan Sistem

Perlu disiapkan persyaratan berikut ini :

Cmder (khusus pengguna windows);

Git;

Composer.



# Persyaratan Sistem

Kemudian kita juga akan membutuhkan hal-hal berikut ini:

1. Nginx sebagai web server;
2. MySQL sebagai database engine;
3. PhpMyadmin untuk mengelola database menggunakan Web GUI;
4. Redis untuk mengelola cache.



# DOKUMENASI LARAVEL

Installation - Laravel - The PHP Framework for Web Artisans

laravel.com/docs/6.x

VERSION

6.x

- Master
- 6.x
- 5.8
- 5.7
- 5.6
- 5.5
- 5.4
- 5.3
- 5.2
- 5.1
- 5.0
- 4.2

## Laravel

Search Docs

# Installation

# Installation

- # Server Requirements
- # Installing Laravel
- # Configuration

# Web Server Configuration

- # Directory Configuration
- # Pretty URLs

## # Installation

### # Server Requirements

The Laravel framework has a few system requirements. All of these requirements are satisfied by the [Laravel Homestead](#) virtual machine, so it's highly recommended that

Type here to search

14:47 05/11/2019



# INSTALL LARAVEL

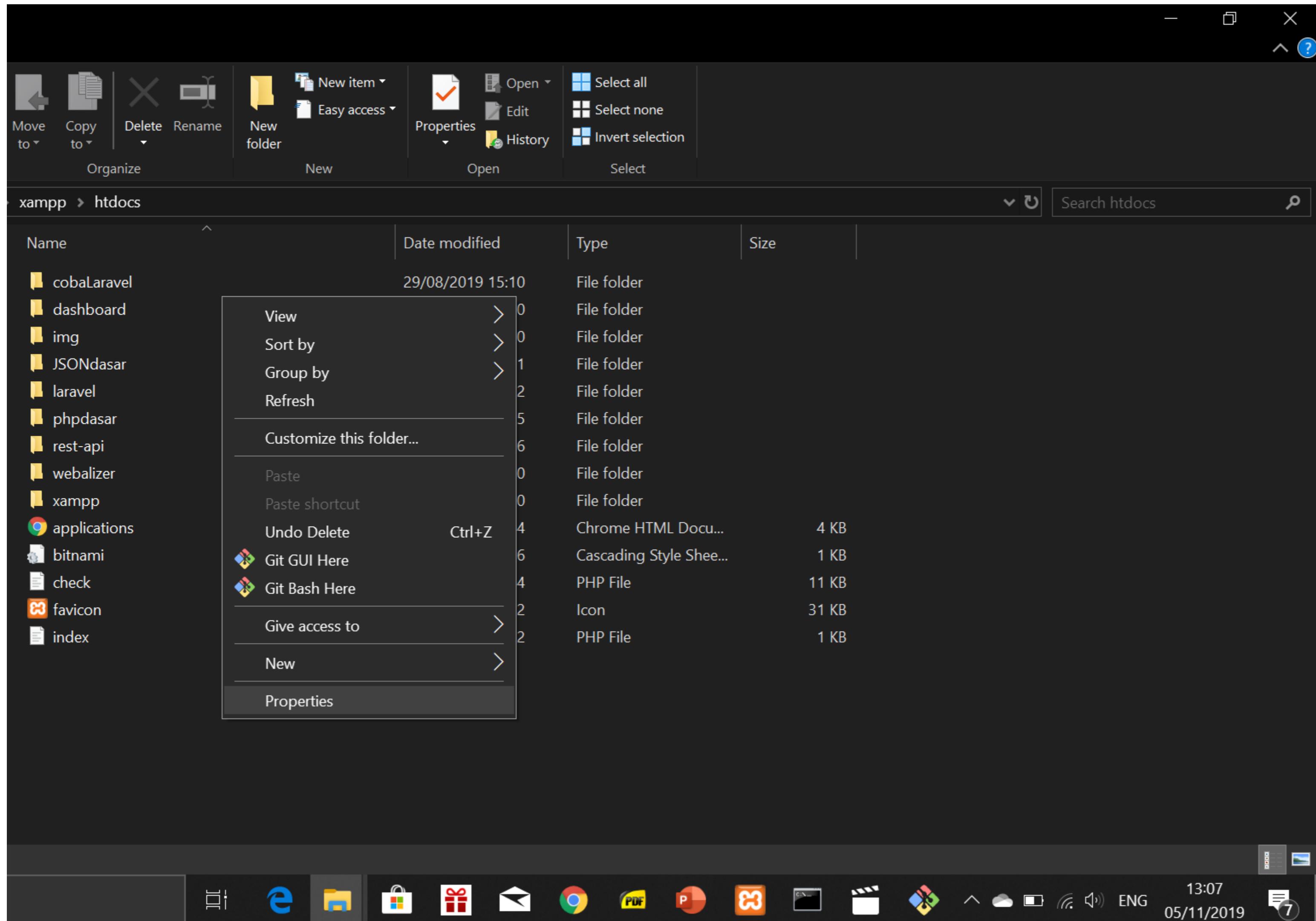


# INSTALL DAN KONFIGURASI LARAVEL

1. Install XAMPP
2. Install Composer
3. Install GIT Bash



# INSTALL DAN KONFIGURASI LARAVEL



Jalankan **GIT Bash**  
di folder **htdocs**



# INSTALL DAN KONFIGURASI LARAVEL

A screenshot of a terminal window titled 'MINGW64:/c/xampp/htdocs'. The window shows the command '\$ composer create-project --prefer-dist laravel/laravel testLaravel' being typed at the prompt. The background of the terminal is black, and the text is white.

Kita membuat projek Laravel dengan nama **testLaravel**



# INSTALL DAN KONFIGURASI LARAVEL

```
ASUS@RahmatFauzi MINGW64 /c/xampp/htdocs
$ composer create-project --prefer-dist laravel/laravel testLaravel
Installing laravel/laravel (v6.4.0)
- Installing laravel/laravel (v6.4.0): Downloading (100%)
Created project in testLaravel
> @php -r "file_exists('.env') || copy('.env.example', '.env');"
Loading composer repositories with package information
Updating dependencies (including require-dev)
Package operations: 84 installs, 0 updates, 0 removals
- Installing symfony/polyfill ctype (v1.12.0): Loading from cache
- Installing phpoption/phpoption (1.5.0): Loading from cache
- Installing vlucas/phpdotenv (v3.6.0): Downloading (100%)
- Installing symfony/css-selector (v4.3.6): Downloading (100%)
- Installing tijsverkoyen/css-to-inline-styles (v2.2.2): Downloading (100%)
- Installing symfony/polyfill-php72 (v1.12.0): Loading from cache
- Installing symfony/polyfill mbstring (v1.12.0): Loading from cache
- Installing symfony/var-dumper (v4.3.6): Downloading (100%)
- Installing symfony/routing (v4.3.6): Downloading (100%)
- Installing symfony/process (v4.3.6): Downloading (100%)
- Installing psr log (v1.1.2): Downloading (100%)
- Installing symfony/polyfill php73 (v1.12.0): Loading from cache
- Installing symfony/debug (v4.3.6): Downloading (100%)
- Installing symfony/polyfill intl idn (v1.12.0): Loading from cache
- Installing symfony/mime (v4.3.6): Downloading (100%)
- Installing symfony/http foundation (v4.3.6): Downloading (100%)
- Installing symfony/event dispatcher contracts (v1.1.7): Downloading (100%)
- Installing psr/container (1.0.0): Loading from cache
- Installing symfony/event dispatcher (v4.3.6): Downloading (100%)
- Installing symfony/http kernel (v4.3.6): Downloading (100%)
- Installing symfony/finder (v4.3.6): Downloading (100%)
- Installing symfony/service contracts (v1.1.7): Downloading (100%)
- Installing symfony/console (v4.3.6): Downloading (100%)
- Installing symfony/polyfill iconv (v1.12.0): Loading from cache
- Installing doctrine/lexer (1.1.0): Loading from cache
- Installing egulias/email-validator (2.1.11): Loading from cache
- Installing swiftmailer/swiftmailer (v6.2.1): Loading from cache
- Installing paragonie/random compat (v9.99.99): Loading from cache
- Installing ramsey/uuid (3.8.0): Loading from cache
- Installing psr/simple-cache (1.0.1): Loading from cache
- Installing opis/closure (3.4.1): Downloading (100%)
- Installing symfony/translation contracts (v1.1.7): Downloading (100%)
- Installing symfony/translation (v4.3.6): Downloading (100%)
- Installing nesbot/carbon (2.25.3): Downloading (100%)
- Installing monolog/monolog (2.0.0): Downloading (100%)
- Installing league/flysystem (1.0.57): Downloading (100%)
- Installing erusev/parsedown (1.7.3): Loading from cache
- Installing dragonmantank/cron expression (v2.3.0): Loading from cache
- Installing doctrine/inflector (v1.3.0): Loading from cache

ASUS@RahmatFauzi MINGW64 /c/xampp/htdocs
league/flysystem suggests installing spatie/flysystem dropbox (Allows you to use Dropbox storage)
league/flysystem suggests installing smklive/flysystem dropbox v2 (Allows you to use Dropbox storage for PHP 5 applications)
league/flysystem suggests installing league/flysystem cached adapter (Flysystem adapter decorator for metadata caching)
league/flysystem suggests installing league/flysystem sftp (Allows you to use SFTP server storage via phpsseclib)
league/flysystem suggests installing league/flysystem zip archive (Allows you to use ZipArchive adapter)
laravel/framework suggests installing ext memcached (Required to use the memcache cache driver.)
laravel/framework suggests installing ext pcntl (Required to use all features of the queue worker.)
laravel/framework suggests installing ext posix (Required to use all features of the queue worker.)
laravel/framework suggests installing ext redis (Required to use the Redis cache and queue drivers.)
laravel/framework suggests installing aws aws sdk php (Required to use the SQS queue driver, DynamOdb failed job storage and SES mail driver (^3.0.))
laravel/framework suggests installing doctrine dbal (Required to rename columns and drop SQLite columns (^2.6.))
laravel/framework suggests installing guzzle http puzzle (Required to use the Mailgun mail driver and the ping methods on schedules (^6.0.))
laravel/framework suggests installing league flysystem aws s3 v3 (Required to use the Flysystem S3 driver (^1.0.))
laravel/framework suggests installing league flysystem cached adapter (Required to use the Flysystem cache (^1.0.))
laravel/framework suggests installing league flysystem sftp (Required to use the Flysystem SFTP driver (^1.0.))
laravel/framework suggests installing psr http message (Required to allow Storage::put to accept a StreamInterface (^1.0.))
laravel/framework suggests installing moontoast math (Required to use ordered UUIDs (^1.1.))
laravel/framework suggests installing pda pheanstalk (Required to use the beanstalk queue driver (^4.0.))
laravel/framework suggests installing pusher pusher php server (Required to use the Pusher broadcast driver (^4.0.))
laravel/framework suggests installing symfony cache (Required to use PSR 6 cache bridge (^4.3.4.))
laravel/framework suggests installing symfony psr http message bridge (Required to use PSR 7 bridging features (^1.2.))
laravel/framework suggests installing wildbit swiftmailer postmark (Required to use Postmark mail driver (^3.0.))
psy/psysh suggests installing ext pcntl (Enabling the PCNTL extension makes PsySH a lot happier :))
psy/psysh suggests installing ext posix (If you have PCNTL, you'll want the POSIX extension as well.)
psy/psysh suggests installing ext pdo sqlite (The doc command requires SQLite to work.)
psy/psysh suggests installing hoa console (A pure PHP readline implementation. You'll want this if your PHP install doesn't already support readline or libedit.)
filp/whoops suggests installing whoops soap (Formats errors as SOAP responses)
facade ignition suggests installing laravel telescope (^2.0)
sebastian global state suggests installing ext uopz (*)
sebastian environment suggests installing ext posix (*)
phpunit php code coverage suggests installing ext xdebug (^2.7.2)
phpunit phpunit suggests installing phpunit php invoker (^2.0.0)
phpunit phpunit suggests installing ext soap (*)
phpunit phpunit suggests installing ext xdebug (*)
Writing lock file
Generating optimized autoload files
> Illuminate\Foundation\ComposerScripts::postAutoloadDump
> @php artisan package:discover --ansi
Discovered Package: facade ignition
Discovered Package: fideloper proxy
Discovered Package: laravel tinker
Discovered Package: nesbot carbon
Discovered Package: nunomaduro collision
Package manifest generated successfully.
> @php artisan key:generate --ansi
Application key set successfully.

ASUS@RahmatFauzi MINGW64 /c/xampp/htdocs
$
```

Kita check di folder htdocs nya pasti sudah muncul folder **testLaravel**



# INSTALL DAN KONFIGURASI LARAVEL

Index of /testLaravel

localhost/testLaravel/

Name	Last modified	Size	Description
<a href="#">Parent Directory</a>		-	
<a href="#">app/</a>	2019-11-05 13:11	-	
<a href="#">artisan</a>	2019-11-05 13:11	1.6K	
<a href="#">bootstrap/</a>	2019-11-05 13:11	-	
<a href="#">composer.json</a>	2019-11-05 13:11	1.5K	
<a href="#">composer.lock</a>	2019-11-05 13:16	172K	
<a href="#">config/</a>	2019-11-05 13:11	-	
<a href="#">database/</a>	2019-11-05 13:11	-	
<a href="#">package.json</a>	2019-11-05 13:11	1.0K	
<a href="#">phpunit.xml</a>	2019-11-05 13:11	1.3K	
<a href="#">public/</a>	2019-11-05 13:11	-	
<a href="#">resources/</a>	2019-11-05 13:11	-	
<a href="#">routes/</a>	2019-11-05 13:11	-	
<a href="#">server.php</a>	2019-11-05 13:11	563	
<a href="#">storage/</a>	2019-11-05 13:11	-	
<a href="#">tests/</a>	2019-11-05 13:11	-	
<a href="#">vendor/</a>	2019-11-05 13:16	-	
<a href="#">webpack.mix.js</a>	2019-11-05 13:11	538	

Apache/2.4.37 (Win32) OpenSSL/1.1.1a PHP/7.3.1 Server at localhost Port 80

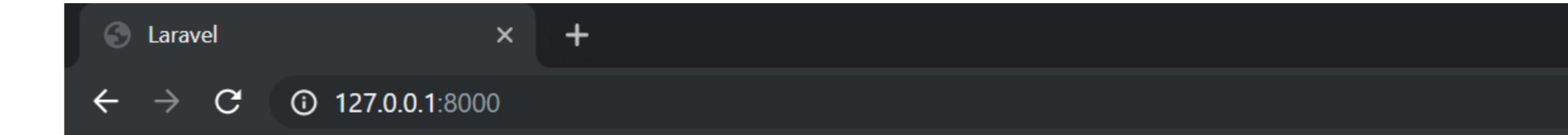
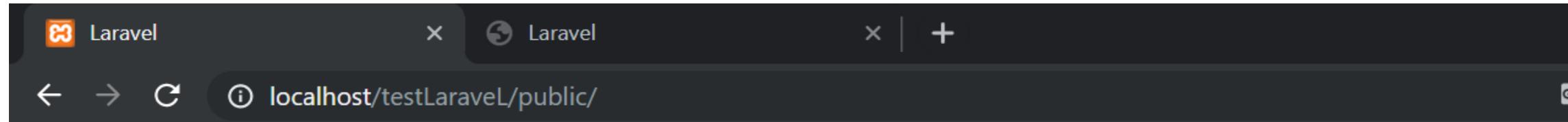
Type here to search

13:43 ENG 05/11/2019 7

**Coba akses folder public**



# MENJALANKAN LARAVEL



# Laravel

DOCS    LARACASTS    NEWS    BLOG    NOVA    FORGE

Menjalankan di Laravel  
**(harus di folder htdocs )**

# Laravel

DOCS    LARACASTS    NEWS    BLOG    NOVA    FORGE

Menjalankan serve di Laravel  
**\$ php artisan serve**  
**( tidak harus di folder htdocs )**



# Arsitektur LARAVEL



# Arsitektur LARAVEL

- MVC merupakan kependekan dari **Model View Controller** dan merupakan sebuah pola yang sudah teruji dalam pengembangan aplikasi. Awalnya, MVC digunakan untuk pengembangan GUI desktop, tapi kini telah banyak diadopsi oleh framework-framework aplikasi berbasis web. Jika kita mengembangkan aplikasi **tanpa pola** MVC, kita berkecenderungan untuk **mencampur adukkan** kode logika kita dengan kode tampilan serta kode untuk mengambil data ke database.



# Arsitektur LARAVEL

Setelah kita mengetahui konsep Laravel Menggunakan MVC (model view controller). Jika dirinci lebih detail fungsi dari masing – masing komponen tersebut adalah :

## 1. Model

Komponen yang berfungsi mengelola dengan sumber data dan logika data.

## 2. View

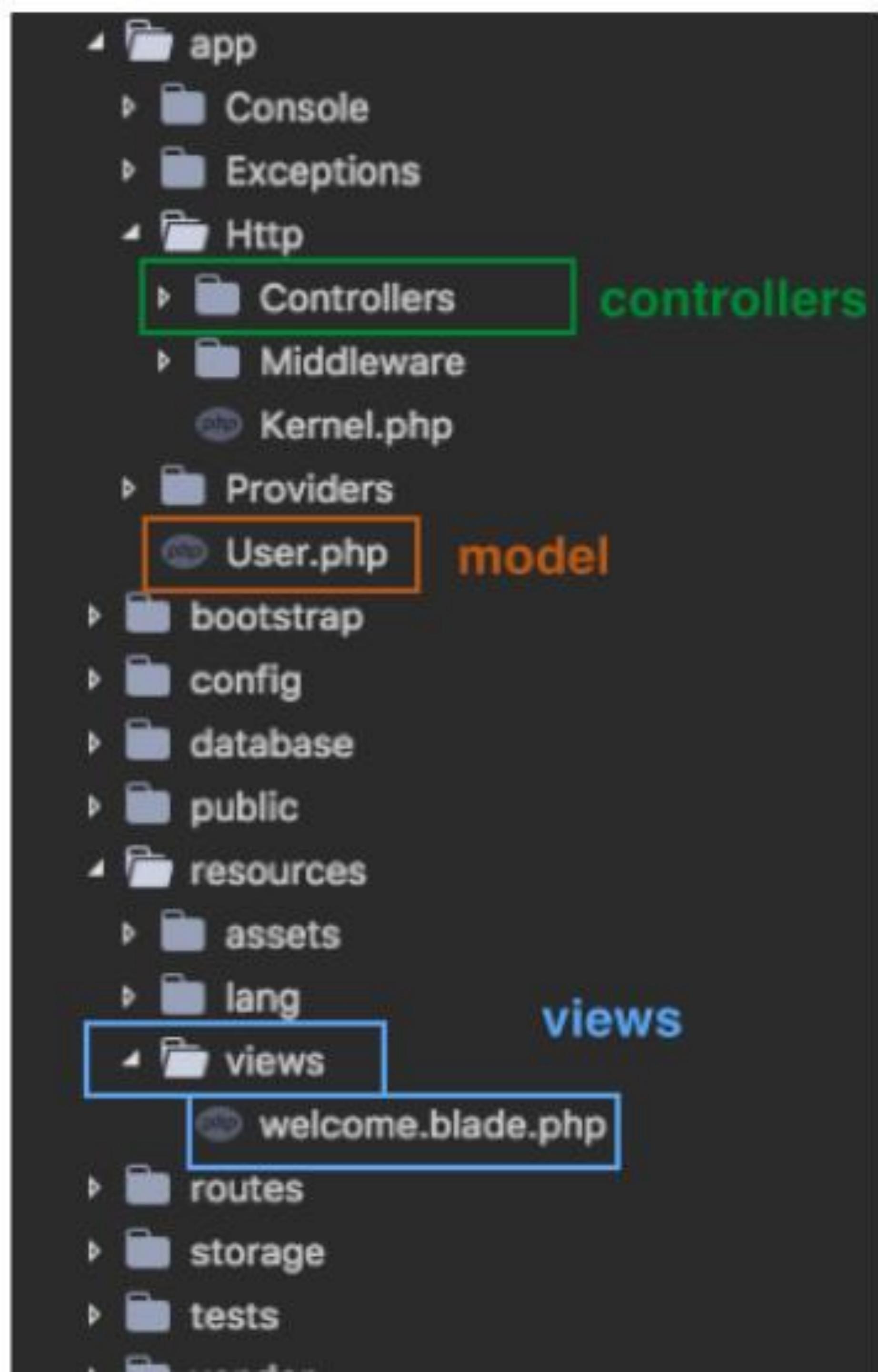
Komponen yang berfungsi membuat tampilan

## 3. Controller

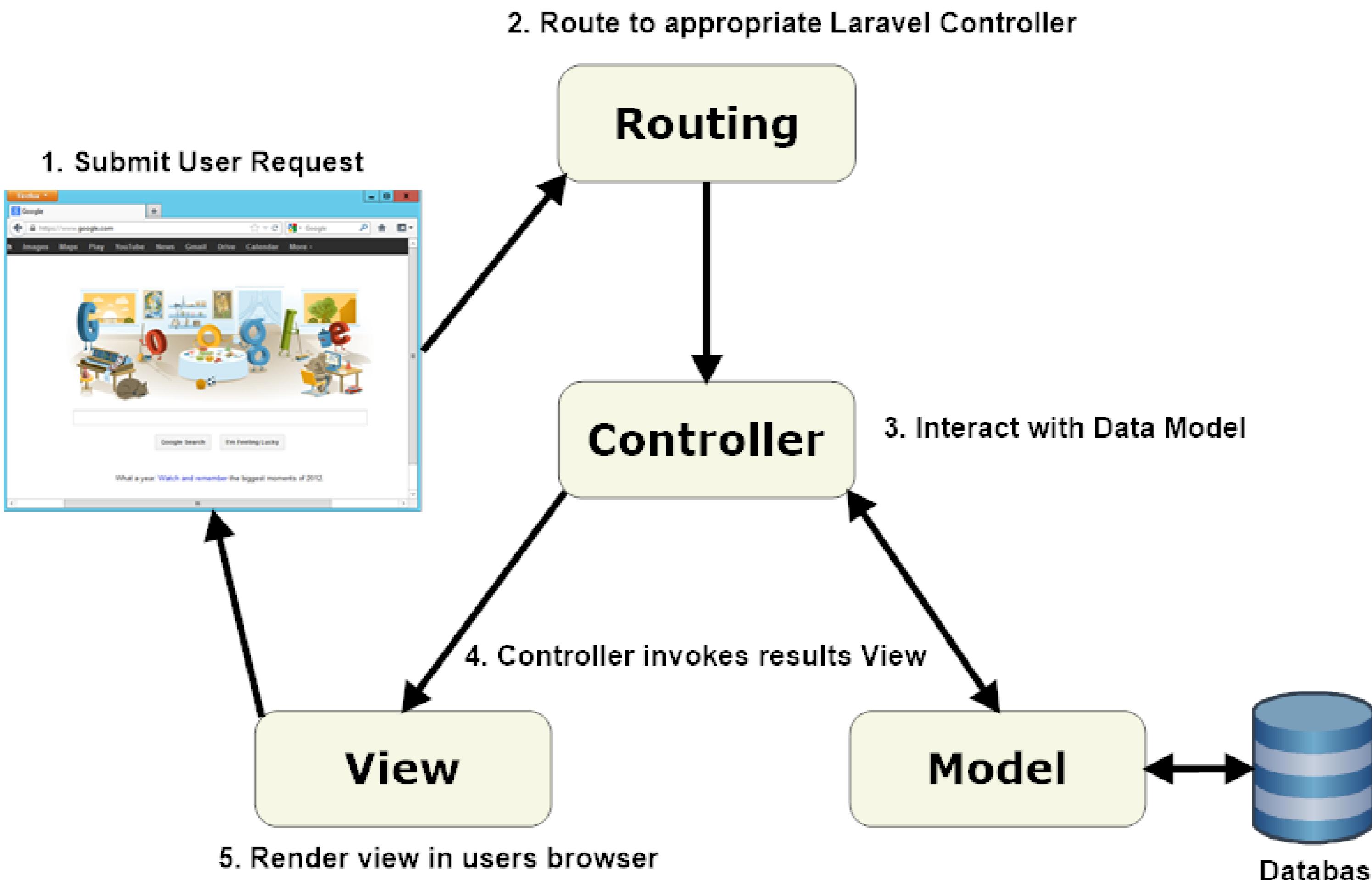
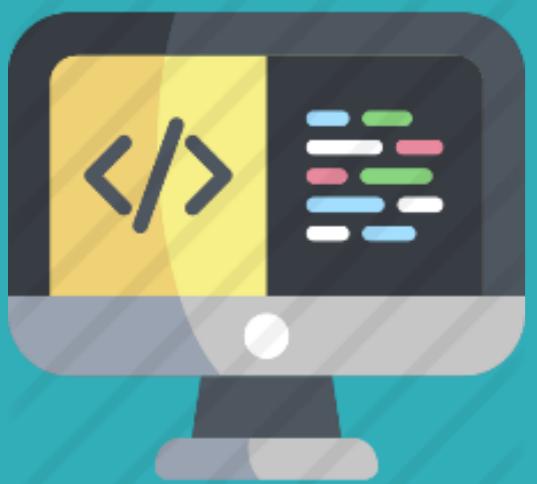
Komponen yang berfungsi menerima input (request) dan memberikan output (response) data.

MVC telah disediakan folder khusus di aplikasi laravel kecuali model.

- 1. Controller berada di folder app/Http/Controllers
- 2. View berada di folder resources/views
- View berfungsi untuk menaruh kode tampilan ke pengguna aplikasi. Di file view ini lah kita letakkan kode html, css dan javascript bukan di controller, route atau model. File view bisa mengakses variable yang dilempar dari controller action seperti pada bahasan Controller.
- Pada aplikasi Laravel baru, tersedia satu file view yaitu welcome.blade.php, silahkan dibuka pada resources/views/welcome.blade.php. File tersebut berisi kode html, css, javascript dan beberapa sintaks blade.
- 3. Khusus model tidak memiliki folder khusus, tetapi kita bisa meletakannya di folder app, atau di folder lainnya sesuai kebutuhan.

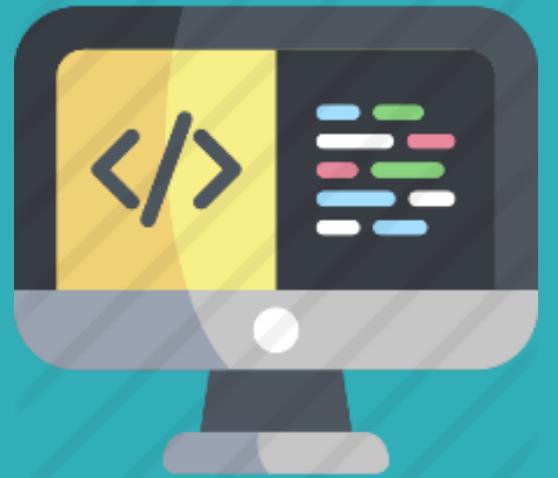


# Visualisasi MVC Laravel



# Penjelasan MVC

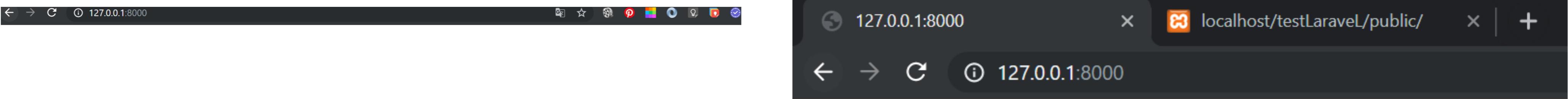
1. User mengakses aplikasi melalui route tertentu
2. Route tersebut oleh aplikasi telah dipetakan ke controller action
3. Controller action akan menggunakan model untuk mengakses data. Atau langsung mengembalikan view tanpa data (langsung ke step 5)
4. Model berinteraksi ke database untuk mendapatkan data atau menyimpan data
5. Setelah berhasil mendapatkan data melalui model, controller akan mengembalikan sebuah view
6. sekaligus data jika ada.
7. View tersebut pada akhirnya yang dilihat oleh user



The screenshot shows the VS Code interface with the following details:

- EXPLORER**: Shows the project structure under "TESTLARAVEL".
- OPEN EDITORS**: Shows three tabs: "welcome.blade.php", "web.php", and "index.blade.php".
- routes/web.php** content:

```
1 <?php
2 /*
3 -----
4 | Web Routes
5 -----
6 |
7 |
8 | Here is where you can register web routes for your application. These
9 | routes are loaded by the RouteServiceProvider within a group which
10 | contains the "web" middleware group. Now create something great!
11 |
12 */
13
14 Route::get('/', function () {
15     return view('welcome/index');
16 });
17
```

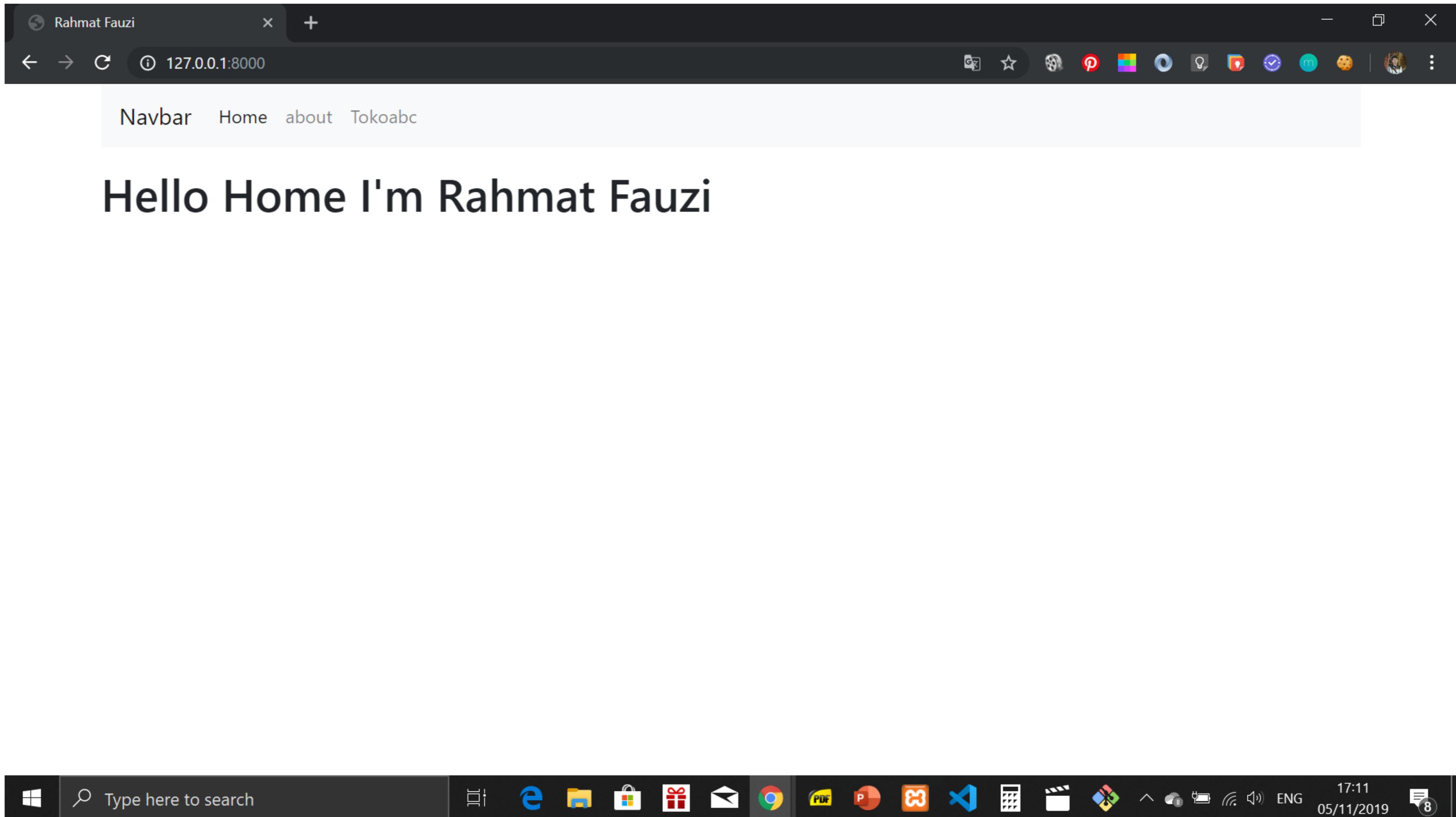



# Rahmat Fauzi

DOCS LARACASTS NEWS BLOG NOVA FORGE VAPOR GITHUB

## Hello Laravel, I'm Rahmat Fauzi

# Bikin View 2 Page ( Dengan Bootstrap)





# Arsitektur LARAVEL Controller

# Route tanpa Controller vs Route-Controller



```
Route::get('/', function () {
    return view('index');
});
Route::get('/about', function () {
    return view('about');
});
Route::get('/tokoabc', function () {
    return view('tokoabc');
});
```

```
Route::get('/get','PagesController@home');
Route::get('/about','PagesController@about');
```

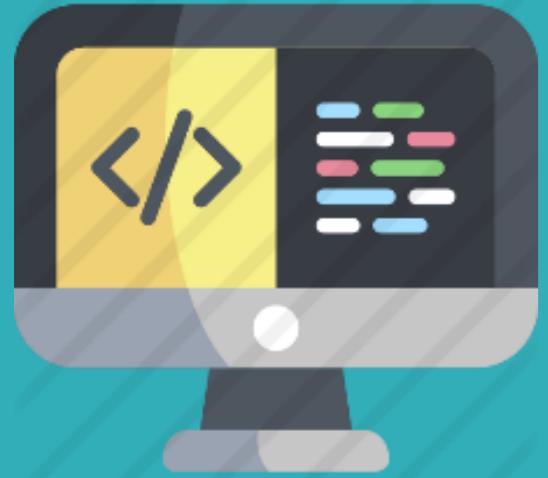
# Membuat Controller ( cara 1 )

Sumber : <https://laravel.com/docs/master/controllers#defineing-contollers>



```
PagesController.php ×  
app > Http > Controllers > PagesController.php > PagesController > about  
1  <?php  
2  
3  namespace App\Http\Controllers;  
4  
5  use App\Http\Controllers\Controller;  
6  use App\User;  
7  
8  class PagesController extends Controller  
9  {  
10  
11     public function home()  
12     {  
13         return view('index');  
14     }  
15  
16     public function about()  
17     {  
18         return view('about', ['nama'=>'Jokowi']);  
19     }  
20 }
```

# Membuat Controller ( cara 2 )

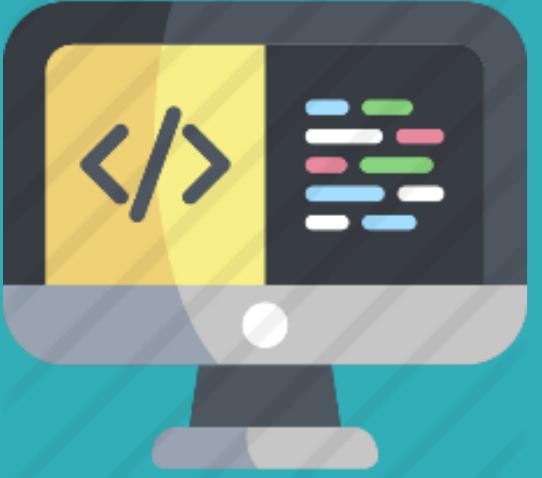


● ● ●

Melalui Terminal  
ketikan

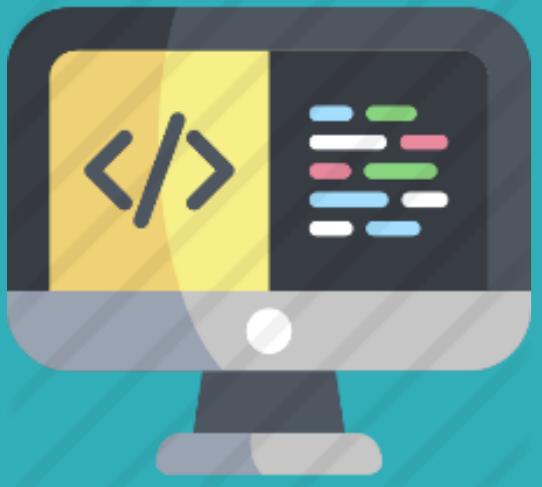
```
php artisan make:controller PagesController
```

# Membuat View - Controller ( terhubung DB)



Melalui Terminal  
ketikan

```
php artisan make:controller TokoabcController --resource
```



# Membuat View - Controller ( terhubung DB)

The screenshot shows a code editor interface with several tabs open:

- EXPLORER
- main.blade.php
- mahasiswa.blade.php
- web.php X
- MahasiswaController.php

The routes > web.php tab is active, displaying the following code:

```
routes > web.php
5 | Web Routes
6 |
7 |
8 | Here is where you can register web routes for your application. These
9 | routes are loaded by the RouteServiceProvider within a group which
10 | contains the "web" middleware group. Now create something great!
11 |
12 */
13
14 Route::get('/', 'PagesController@home');
15 Route::get('/about', 'PagesController@about');
16 Route::get('/tokoabc', 'TokoabcController@index');
17 Route::get('/mahasiswa', 'MahasiswaController@show');
18
19
```

Below the code editor, there are tabs for PROBLEMS, OUTPUT, DEBUG CONSOLE, and TERMINAL. The TERMINAL tab shows a Windows PowerShell session:

```
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\xampp\htdocs\testLaravel> php artisan make:controller MahasiswaController --resource
Controller created successfully.
PS C:\xampp\htdocs\testLaravel> php artisan make:controller TokoabcController --resource
Controller created successfully.
PS C:\xampp\htdocs\testLaravel> []
```



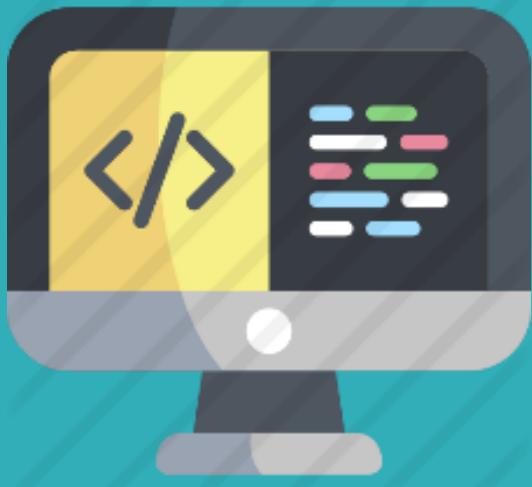
# Membuat View - Controller ( terhubung DB)

← → ⌛ ⓘ 127.0.0.1:8000/mahasiswa

Navbar Home about tokoabc mahasiswa

## Hello Daftar mahasiswa

NO	NAMA	NIM	JURUSAN	EMAIL	AKSI
1	Putu	1213141516	Teknik Industri	putu@student.telkomuniversity.ac.id	<a href="#">Edit</a> <a href="#">Delete</a>
2	Anton	1213141519	Sistem Informasi	anton@student.telkomuniversity.ac.id	<a href="#">Edit</a> <a href="#">Delete</a>
3	Dimas	1213141590	Teknik Elektro	dimas@student.telkomuniversity.ac.id	<a href="#">Edit</a> <a href="#">Delete</a>



# Membuat View - Controller ( terhubung DB)

localhost/phpmyadmin/tbl\_structure.php?db=laravel&table=mahasiswa

phpMyAdmin

Struktur tabel Tampilan hubungan

#	Nama	Jenis	Penyortiran	Atribut	Tak Ternilai	Bawaan	Komentar	Ekstra	Tindakan
1	<b>id</b>	int(11)			Tidak	Tidak ada		AUTO_INCREMENT	Ubah  Hapus  Lainnya
2	<b>nama</b>	varchar(255)	latin1_swedish_ci		Tidak	Tidak ada			Ubah  Hapus  Lainnya
3	<b>NIM</b>	int(100)			Tidak	Tidak ada			Ubah  Hapus  Lainnya
4	<b>jurusan</b>	varchar(100)	latin1_swedish_ci		Tidak	Tidak ada			Ubah  Hapus  Lainnya
5	<b>email</b>	varchar(100)	latin1_swedish_ci		Tidak	Tidak ada			Ubah  Hapus  Lainnya

Pilih Semua Dengan pilihan: Jelajahi Ubah Hapus Utama Unik Indeks Teks penuh Add to central columns Remo

Cetak Usulkan struktur tabel Lacak tabel Move columns Normalisasi

Tambahkan 1 kolom setelah email Kirim

Indeks

Tindakan	Nama kunci	Jenis	Unik	Dipadatkan	Kolom	Kardinalitas	Penyortiran	Tak Ternilai	Komentar
Ubah  Hapus	PRIMARY	BTREE	Ya	Tidak	id	0	A	Tidak	



# Configurasi Env ( terhubung DB)

```
⚙ .env
1 APP_NAME=Laravel
2 APP_ENV=local
3 APP_KEY=base64:zD9aJ8uoIQzE9E1Kh8/NZpv/5TLeAQI94jr4IYB4Qcg=
4 APP_DEBUG=true
5 APP_URL=http://localhost
6
7 LOG_CHANNEL=stack
8
9 DB_CONNECTION=mysql
10 DB_HOST=127.0.0.1
11 DB_PORT=3306
12 DB_DATABASE=laravel
13 DB_USERNAME=root
14 DB_PASSWORD=
15
16 BROADCAST_DRIVER=log
17 CACHE_DRIVER=file
18 QUEUE_CONNECTION=sync
19 SESSION_DRIVER=file
20 SESSION_LIFETIME=120
21
22 REDIS_HOST=127.0.0.1
23 REDIS_PASSWORD=null
24 REDIS_PORT=6379
25
```



# CRUD Di Bagian **Controller**

```
<?php

namespace App\Http\Controllers;

use Illuminate\Http\Request;
use Illuminate\Support\Facades\DB;

class MahasiswaController extends Controller
{

    public function index()
    {
        $mahasiswa = DB::table('mahasiswa')->get();

        return view('mahasiswa.index', ['mahasiswa' =>$mahasiswa]);
    }

    public function create()
    {
        //
    }

    public function store(Request $request)
    {
        //
    }

    public function show($id)
    {
        //
    }

    public function edit($id)
    {
        //
    }

    public function update(Request $request, $id)
    {
        //
    }

    public function destroy($id)
    {
        //
    }
}
```



# CRUD Di Bagian **View**

```
● ● ●

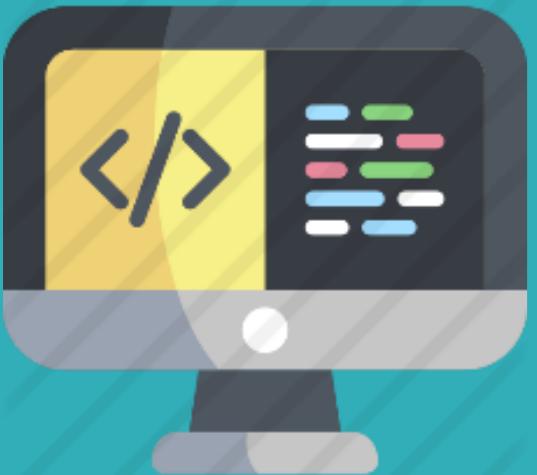
@extends('layout/main')

@section('title','Daftar Mahasiswa')

@section('container')
    <div class="container">
        <div class="row">
            <div class="col-10">

                <h1 class="mt-3">Hello Daftar mahasiswa</h1>
                <table class="table">
                    <thead class="thead-dark">
                        <tr>
                            <th scope="col">NO</th>
                            <th scope="col">NAMA</th>
                            <th scope="col">NIM</th>
                            <th scope="col">JURUSAN</th>
                            <th scope="col">EMAIL</th>
                            <th scope="col">AKSI</th>
                        </tr>
                    </thead>
                    <tbody>
                        @foreach( $mahasiswa as $mhs )
                        <tr>
                            <th scope="row">{{$loop->iteration}}</th>
                            <td>{{$mhs->nama}}</td>
                            <td>{{$mhs->NIM}}</td>
                            <td>{{$mhs->jurusan}}</td>
                            <td>{{$mhs->email}}</td>
                            <td>
                                <a href="" class="badge badge-success">Edit</a>
                                <a href="" class="badge badge-danger">Delete</a>
                            </td>
                        </tr>
                        <tr>
                            @endforeach
                        </tbody>
                    </table>

                </div>
            </div>
        </div>
    @endsection
```



A screenshot of a web browser window showing a list of student data. The URL in the address bar is 127.0.0.1:8000/mahasiswa. The page title is "Hello Daftar mahasiswa". The navigation menu includes "Navbar", "Home", "about", "tokoabc", and "mahasiswa". The main content is a table with two rows of student information.

NO	NAMA	NIM	JURUSAN	EMAIL	AKSI
1	rudi sanjaya	1213141516	sistem informasi	rudi@student.telkomuniversity.ac.id	<a href="#">Edit</a> <a href="#">Delete</a>
2	annisa	1214151617	teknik elektro	annisa@student.telkomuniversity.ac.id	<a href="#">Edit</a> <a href="#">Delete</a>

## Data Mahasiswa dari database MySQL



# MIGRASI LARAVEL



# DEFINISI MIGRASI DATABASE LARAVEL

Migration berfungsi sebagai **version control database**. Dengan migration kita bisa **membuat, mengubah atau menghapus** struktur tabel dan field database tanpa harus membuka aplikasi GUI database management.

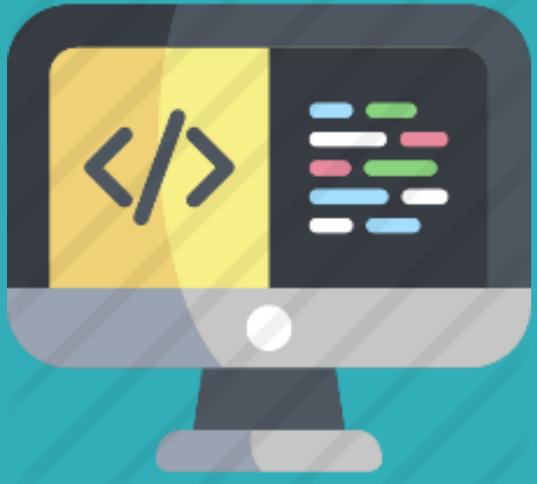


# CARA MIGRATE DATABASE

Buka Terminal di Visual Studio Code, lalu ketikan  
**Php artisan migrate**

```
PS C:\xampp\htdocs\testLaravel> php artisan migrate
Migration table created successfully.
Migrating: 2014_10_12_000000_create_users_table
Migrated: 2014_10_12_000000_create_users_table (0.06 seconds)
Migrating: 2014_10_12_100000_create_password_resets_table
Migrated: 2014_10_12_100000_create_password_resets_table (0.05 seconds)
Migrating: 2019_08_19_000000_create_failed_jobs_table
Migrated: 2019_08_19_000000_create_failed_jobs_table (0.02 seconds)
PS C:\xampp\htdocs\testLaravel>
```

sedangkan  
**Php artisan migrate:rollback** ( untuk menghapus migrasi )



# CARA MIGRATE DATABASE

Jika berhasil, kita bisa mengecheck hasil migrasi di localhost database

Server: 127.0.0.1 » Basis data: laravel

Struktur SQL Cari Kueri Ekspor Impor Operasi Hak Akses Routine Event Trigger

Mengandung kata:

Tabel	Tindakan	Baris	Jenis	Penyortiran	Ukuran	Beban
failed_jobs	★ Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	0	InnoDB	utf8mb4_unicode_ci	16 KB	-
mahasiswa	★ Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	2	InnoDB	latin1_swedish_ci	16 KB	-
migrations	★ Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	3	InnoDB	utf8mb4_unicode_ci	16 KB	-
password_resets	★ Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	0	InnoDB	utf8mb4_unicode_ci	16 KB	-
users	★ Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	0	InnoDB	utf8mb4_unicode_ci	16 KB	-
5 tabel	Jumlah	5	InnoDB	latin1_swedish_ci	80 KB	0 B



# JIKA GAGAL MIGRASI

Buka File **AppServiceProvider.php**. Tambahkan code seperti baris ke 4 dan 23

```
AppServiceProvider.php X
app > Providers > AppServiceProvider.php > ...
1  <?php
2  namespace App\Providers;
3  use Illuminate\Support\ServiceProvider;
4  use Illuminate\Support\Facades\Schema;
5  class AppServiceProvider extends ServiceProvider
6  {
7      /**
8       * Register any application services.
9       *
10      * @return void
11     */
12    public function register()
13    {
14        //
15    }
16    /**
17     * Bootstrap any application services.
18     *
19     * @return void
20     */
21    public function boot()
22    {
23        Schema::defaultStringLength(191);
24    }
25 }
```



# MEMBUAT MIGRASI TABEL SENDIRI

**Misalkan:**

Php artisan make:migration create\_tokoabc\_table



# MEMBUAT MIGRASI TABEL SENDIRI

```
EXPLORER
OPEN EDITORS
TESTLARAVEL
EventServiceProvider.php
RouteServiceProvider.php
User.php
bootstrap
config
database
factories
migrations
2014_10_12_000000_create_users_table.php
2014_10_12_100000_create_password_resets_table...
2019_08_19_000000_create_failed_jobs_table.php
2019_11_05_235649_create_tokoabc_table.php
seeds
.gitignore
public
resources
js
lang
sass
views
layout
mahasiswa
index.blade.php
OUTLINE

2019_11_05_235649_create_tokoabc_table.php ×
database > migrations > 2019_11_05_235649_create_tokoabc_table.php > CreateTokoabcTable

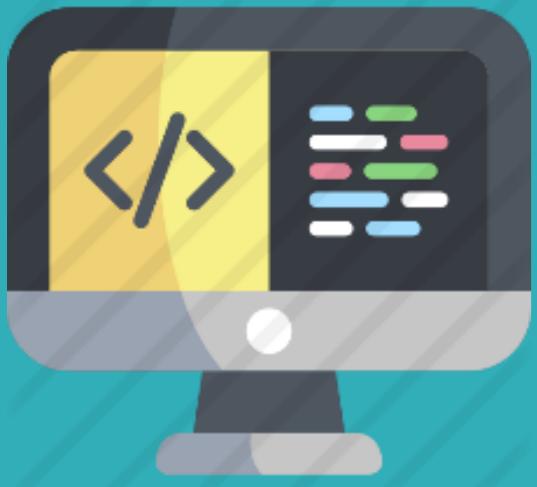

```

9  /**
10  * Run the migrations.
11  *
12  * @return void
13  */
14 public function up()
15 {
16     Schema::create('tokoabc', function (Blueprint $table) {
17         $table->bigIncrements('id');
18         $table->string('kodebarang')->unique();
19         $table->string('namabarang');
20         $table->char('hargajual',100);
21         $table->char('stokbarang',100);
22         $table->timestamps();
23     });
24 }
25
26 /**
27 * Reverse the migrations.
28 *
29 * @return void
30 */
31 public function down()
32 {
33     Schema::dropIfExists('tokoabc');
34 }
35
36

```


```

Jika berhasil tambahkan  
data di file **tokoabc**



# MEMBUAT MIGRASI TABEL SENDIRI

Lakukan proses Create Migrasi ulang,  
Ph artisan migrate  
Dan hasilnya akan muncul di localhost database

Tabel	Tindakan	Baris	Jenis	Penyortiran	Ukuran	Beban
failed_jobs	★ Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	0	InnoDB	utf8mb4_unicode_ci	16 KB	-
mahasiswa	★ Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	2	InnoDB	latin1_swedish_ci	16 KB	-
migrations	★ Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	4	InnoDB	utf8mb4_unicode_ci	16 KB	-
password_resets	★ Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	0	InnoDB	utf8mb4_unicode_ci	16 KB	-
tokoabc	★ Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	0	InnoDB	utf8mb4_unicode_ci	16 KB	-
users	★ Jelajahi Struktur Cari Tambahkan Kosongkan Hapus	0	InnoDB	utf8mb4_unicode_ci	16 KB	-
6 tabel	Jumlah	6	InnoDB	latin1_swedish_ci	96 KB	0 B



Thank You  
Any Question ?



# Daftar Referensi

1. Modul Praktikum WAD SI FRI
2. Modul Praktikum WAD Teknik Informatika FIF
3. Petanikode.com
4. Youtube.com/webprogrammingUNPAS