

# Laravel Lumen

## Modul – 1

Database – Instalasi – Konfigurasi – Model –  
Route – Controller – Uji coba API (Postman)

# Database & Tabel

- Database: json
- Struktur tabel “wisata”

Nama	Jenis ?	Panjang/Nilai ?
id_wisata	INT ▼	2
kota	VARCHAR ▼	10
landmark	VARCHAR ▼	100
tarif	VARCHAR ▼	10

id\_wisata = primary\_key & Auto Increment

# Isi tabel

KOTA	LANDMARK	TARIF
SEMARANG	LAWANG SEWU	20000
YOGYAKARTA	PRAMBANAN	35000
MAGELANG	BOROBUDUR	45000
SURAKARTA	PGS	GRATIS

# Database 'json'

← Server: 127.0.0.1 » Database: json

Structure SQL Search Query Export Import

**Filters**

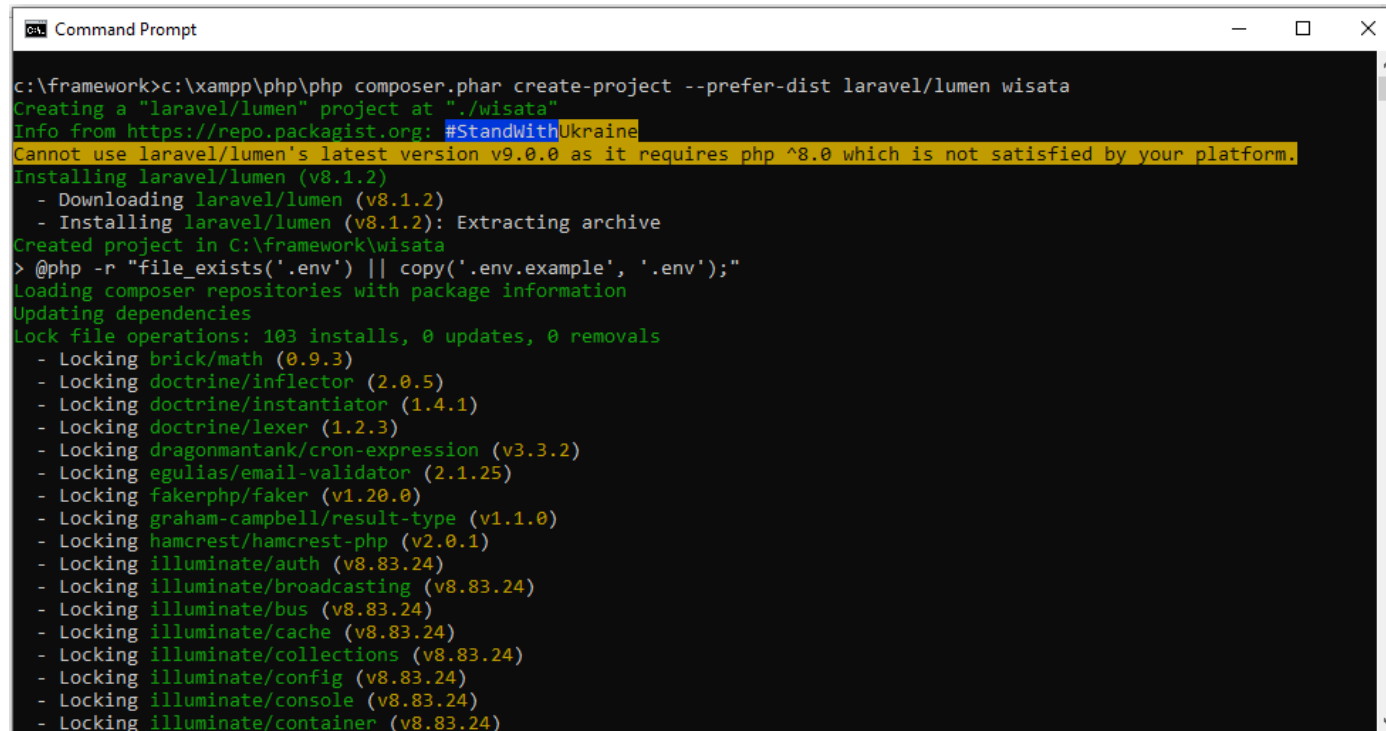
Containing the word:

	Table ▲	Action
<input type="checkbox"/>	users	★  Browse  Structure  Search  Insert  Empty  D
<input type="checkbox"/>	wisata	★  Browse  Structure  Search  Insert  Empty  D
2 tables		Sum

↑ ☐ Check all With selected:

# instalasi

- `c:\xampp\php\php composer.phar create-project --prefer-dist laravel/lumen wisata`



```
Command Prompt
c:\framework>c:\xampp\php\php composer.phar create-project --prefer-dist laravel/lumen wisata
Creating a "laravel/lumen" project at ".\wisata"
Info from https://repo.packagist.org: #StandWithUkraine
Cannot use laravel/lumen's latest version v9.0.0 as it requires php ^8.0 which is not satisfied by your platform.
Installing laravel/lumen (v8.1.2)
- Downloading laravel/lumen (v8.1.2)
- Installing laravel/lumen (v8.1.2): Extracting archive
Created project in C:\framework\wisata
> @php -r "file_exists('.env') || copy('.env.example', '.env');"
Loading composer repositories with package information
Updating dependencies
Lock file operations: 103 installs, 0 updates, 0 removals
- Locking brick/math (0.9.3)
- Locking doctrine/inflector (2.0.5)
- Locking doctrine/instantiator (1.4.1)
- Locking doctrine/lexer (1.2.3)
- Locking dragonmantank/cron-expression (v3.3.2)
- Locking egulias/email-validator (2.1.25)
- Locking fakerphp/faker (v1.20.0)
- Locking graham-campbell/result-type (v1.1.0)
- Locking hamcrest/hamcrest-php (v2.0.1)
- Locking illuminate/auth (v8.83.24)
- Locking illuminate/broadcasting (v8.83.24)
- Locking illuminate/bus (v8.83.24)
- Locking illuminate/cache (v8.83.24)
- Locking illuminate/collections (v8.83.24)
- Locking illuminate/config (v8.83.24)
- Locking illuminate/console (v8.83.24)
- Locking illuminate/container (v8.83.24)
```

# Konfigurasi APP\_URL (.env)

wisata >  .env

```
1 APP_NAME=Lumen
2 APP_ENV=local
3 APP_KEY=
4 APP_DEBUG=true
5 APP_URL=http://localhost:8000
6 APP_TIMEZONE=UTC
7
```

# Konfigurasi database (.env)

10

11 DB\_CONNECTION=mysql

12 DB\_HOST=127.0.0.1

13 DB\_PORT=3306

14 DB\_DATABASE=json

15 DB\_USERNAME=root

16 DB\_PASSWORD=

# Aktivasi fungsi Eloquent dan Facades file bootstrap/app.php

- Uncomment baris berikut:

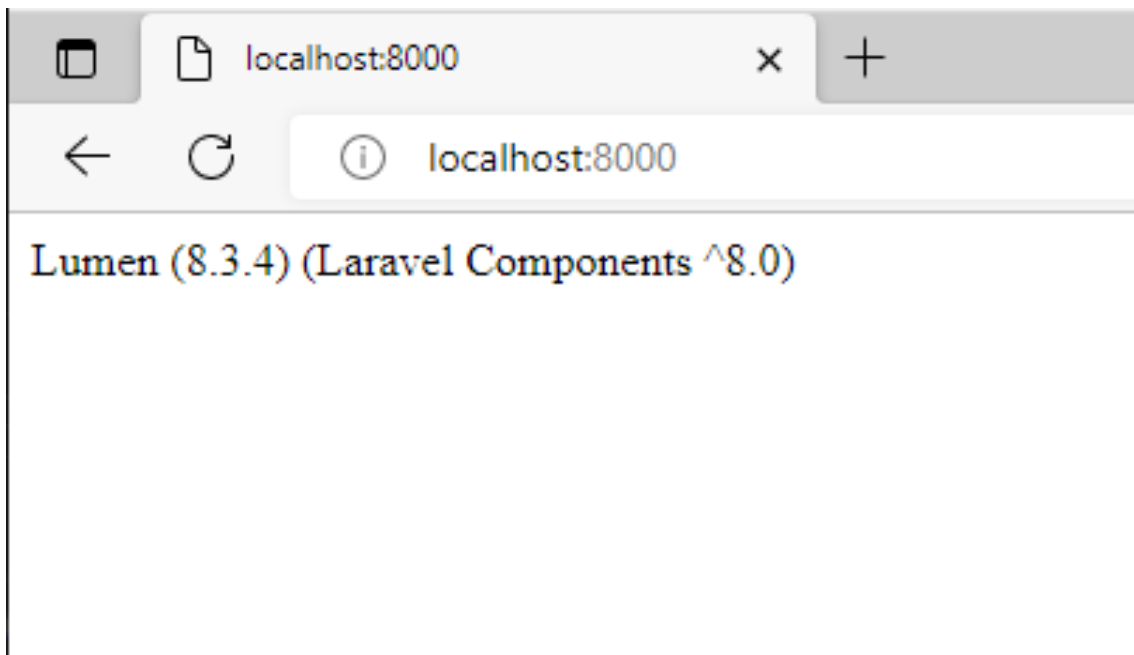
```
22  $app = new Laravel\Lumen\Application(  
23  |      dirname(__DIR__)  
24  );  
25  
26  $app->withFacades();  
27  
28  $app->withEloquent();
```

---



# Menjalankan server

```
c:\framework\wisata>c:\xampp\php\php -S localhost:8000 -t public  
[Sun Sep 25 05:26:25 2022] PHP 7.4.29 Development Server (http://localhost:8000) started
```



# Buat model 'Wisata'

wisata > app > Models > Wisata.php

```
1  <?php
2  namespace App\Models;
3  use Illuminate\Database\Eloquent\Model;
4
5  class Wisata extends Model
6  {
7      protected $table = 'wisata';
8      protected $primaryKey = 'id_wisata';
9      public $timestamps = false;
10
11     /**
12      * The attributes that are mass assignable.
13      *
14      * @var array
15      */
16     protected $fillable = [
17         'kota', 'landmark', 'tarif'
18     ];
19
20     /**
21      * The attributes excluded from the model's JSON form.
22      *
23      * @var array
24      */
25     protected $hidden = [];
26 }
```

# Set up Routes

```
15
16 $router->get('/', function () use ($router) {
17     return $router->app->version();
18 });
19
20 $router->group(['prefix' => 'api'], function () use ($router) {
21     $router->get('wisata', ['uses' => 'WisataController@showAll']);
22     $router->get('wisata/{id}', ['uses' => 'WisataController@showOne']);
23     $router->post('wisata', ['uses' => 'WisataController@create']);
24     $router->delete('wisata/{id}', ['uses' => 'WisataController@delete']);
25     $router->put('wisata/{id}', ['uses' => 'WisataController@update']);
26 });
27
```

# Create Controller 'WisataController.php'

wisata > app > Http > Controllers >  WisataController.php

```
1  <?php
2
3  namespace App\Http\Controllers;
4
5  use Illuminate\Http\Request;
6  use App\Models\Wisata;
7
8  class WisataController extends Controller
9  {
10     public function showAll()
11     {
12         return response()->json(Wisata::all());
13     }
14
15     public function showOne($id)
16     {
17         return response()->json(Wisata::find($id));
18     }
19 }
```

# Controller 'WisataController.php' (lanjut)

```
19
20     public function create(Request $request)
21     {
22         $Wisata = Wisata::create($request->all());
23
24         return response()->json($Wisata, 201);
25     }
26
27     public function update($id, Request $request)
28     {
29         $Wisata = Wisata::findOrFail($id);
30         $Wisata->update($request->all());
31
32         return response()->json($Wisata, 200);
33     }
34
35     public function delete($id)
36     {
37         Wisata::findOrFail($id)->delete();
38         return response('Deleted Successfully', 200);
39     }
40
41 }
```

# Tampilan request GET: api/wisata

The screenshot shows a REST client interface. At the top, the method is set to GET and the URL is http://localhost:8000/api/wisata. Below this, there are tabs for Params, Authorization, Headers (6), Body, Pre-request Script, Tests, and Settings. The 'Body' tab is selected, showing a response status of 200 OK. Within the 'Body' tab, there are sub-tabs for Pretty, Raw, Preview, and Visualize, with 'Pretty' selected. The response body is displayed as a JSON array with two objects, each representing a tourist location with fields for id\_wisata, kota, landmark, and tarif.

```
1 [
2   {
3     "id_wisata": 1,
4     "kota": "SEMARANG",
5     "landmark": "LAWANG SEWU",
6     "tarif": "200000000"
7   },
8   {
9     "id_wisata": 2,
10    "kota": "YOGYAKARTA",
11    "landmark": "PRAMBANAN",
12    "tarif": "35000"
13  },
14 ]
```

# Tampilan request GET: api/wisata/{id}

GET

⌵

http://localhost:8000/api/wisata/1

Params

Authorization

Headers (6)

Body

Pre-request Script

Tests

Settings

Body

Cookies

Headers (7)

Test Results

⌚

200 OK

⌵

Pretty

Raw

Preview

Visualize

JSON ⌵

≡

1

{

2

"id\_wisata": 1,

3

"kota": "SEMARANG",

4

"landmark": "LAWANG SEWU",

5

"tarif": "200000000"

6

}

# Tampilan request POST: api/wisata/

POST

http://localhost:8000/api/wisata/

Params

Authorization

Headers (8)

**Body**

Pre-request Script

Tests

Settings

☐ none

☒ form-data

☐ x-www-form-urlencoded

☐ raw

☐ binary

☐ GraphQL

<input checked="" type="checkbox"/>	kota	semarang	
<input checked="" type="checkbox"/>	landmark	pagoda	
<input checked="" type="checkbox"/>	tarif	25000	

Body

Cookies

Headers (7)

Test Results

201 Created

Pretty

Raw

Preview

Visualize

JSON

```
1  {
2    "kota": "semarang",
3    "landmark": "pagoda",
4    "tarif": "25000",
5    "id_wisata": 45
6  }
```



# Tampilan request PUT: api/wisata/{id}

PUT

http://localhost:8000/api/wisata/45

Params

Authorization

Headers (8)

Body

Pre-request Script

Tests

Settings

none

form-data

x-www-form-urlencoded

raw

binary

GraphQL

<input checked="" type="checkbox"/>	kota	semarang	
<input checked="" type="checkbox"/>	landmark	pagoda Avalokitesvara	
<input checked="" type="checkbox"/>	tarif	35000	

Body

Cookies

Headers (7)

Test Results

Pretty

Raw

Preview

Visualize

JSON

```
1 {
2   "id_wisata": 45,
3   "kota": "semarang",
4   "landmark": "pagoda Avalokitesvara",
5   "tarif": "35000"
6 }
```

# Tampilan request DELETE: api/wisata/{id}

DELETE

▼

http://localhost:8000/api/wisata/45

Params

Authorization

Headers (6)

Body

Pre-request Script

Tests

Settings

☒ none

☐ form-data

☐ x-www-form-urlencoded

☐ raw

☐ binary

☐ GraphQL

This request does not have a body

Body

Cookies

Headers (7)

Test Results

200 OK

Pretty

Raw

Preview

Visualize

HTML ▼

≡

1

Deleted Successfully