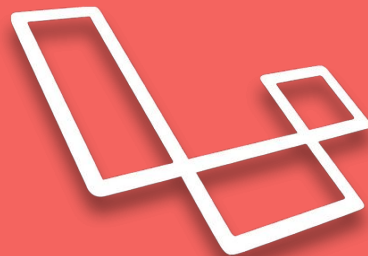


Content

- Request Validation
- Laravel Auth
- Middleware
- Service Container
- Working With Third Party Packages



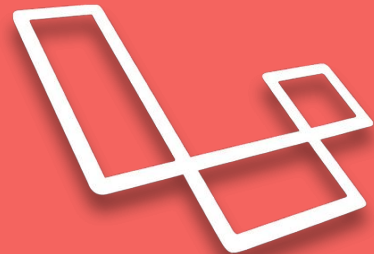
Request Validation

- Request Life Cycle :-

See [index.php](#) first it loads the [composers's autoload file](#) .

Then we bootstrap laravel [application container](#) and register some basic service providers like [Log Service provider](#) look at [Illuminate/Foundation/Application.php](#) constructor method .

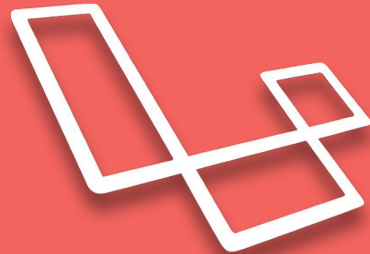
Finally we create instance of [kernel](#) to [register providers](#) and take user request and process it through [middlewares & handle exception](#) then return [response](#)



Request Validation

- In Controller :-

```
        $this->validate( $request , [
            'title' => 'required' ,
            'desc' => 'required|max:255'
        ] ,
        [
            'title.required' => 'title is required to be filled ' ,
            'desc.max' => 'description max num of chars is 255 '
        ]
    );
```



Request Validation

- Another way with request file :-
`php artisan make:request PostsStoreRequest`

Then in **authorize method** make it return **true** .

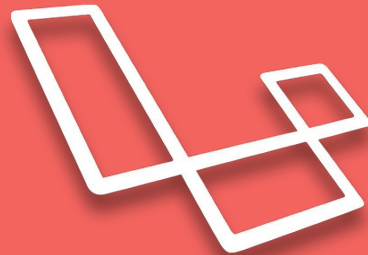
After that define your rules in **rules method** .

- validation rules :-

<https://laravel.com/docs/master/validation#available-validation-rules>

- custom validation messages in request file :-

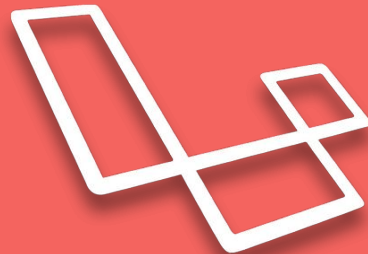
<https://laravel.com/docs/master/validation#customizing-the-error-messages>



Laravel Auth

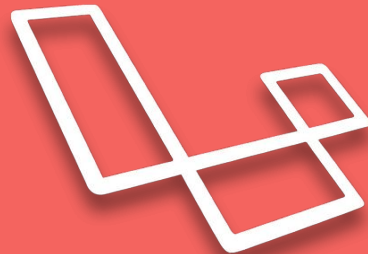
- Read laravel docs , where it illustrates all you need better

<https://laravel.com/docs/master/authentication#authentication-quickstart>

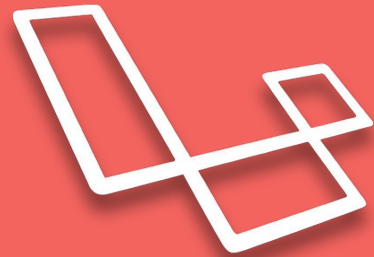
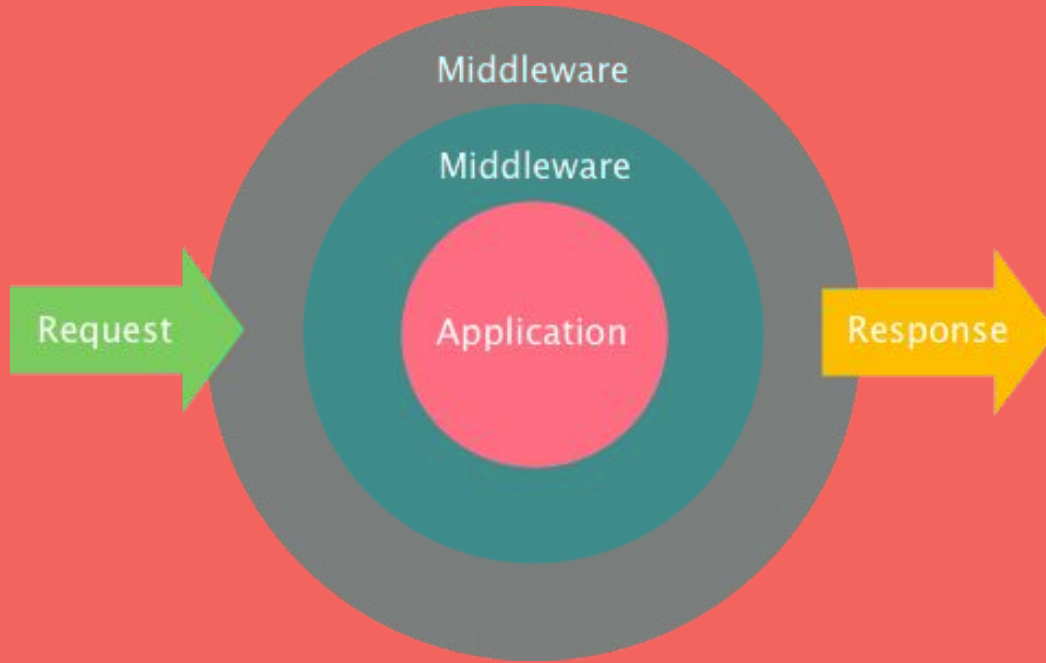


Middleware

- It's a series of layers around the application , **every request passes through middlewares** .
- Middlewares can **inspect the request to decorate or reject it**
- Also middlewares can **decorate the response** .
- register the middlewares in **app/Http/Kernel.php**
- **handle(\$request , ..)** method where you handle the request and choose to pass it for the next middleware or not .

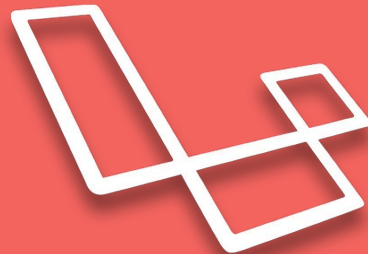


Middleware



Service Container

- Other names for service container
(**IOC container** , **DI container** , **Application container**)
- **Dependency Injection (DI) :-**
Instead to make object instantiate it's dependencies **internally** , it will be passed from **outside** .



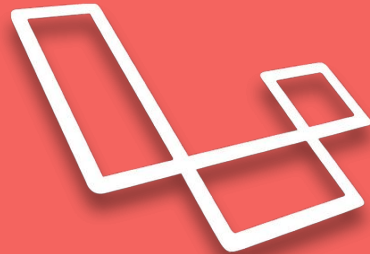
Service Container

- Class User {

```
function __construct ()  
{  
    $mysqlConnection = new Mysql();  
}
```

```
}
```

`$user = new User();` // in this way object instantiated it's dependencies internally

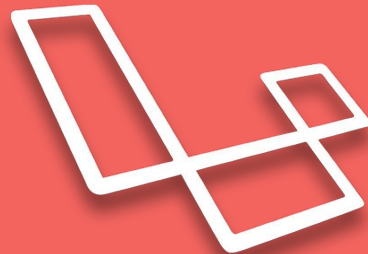


Service Container

```
- Class User {  
    protected $dbConnection;  
    //DB is an interface to easily switch between different db drivers  
    function __construct (DB $db)  
    {  
        $this->dbConnection = $db;  
    }  
}
```

```
$mysqlConnection = new Mysql();
```

```
$user = new User( $mysqlConnection ); // the user object dependencies  
are passed from outside .
```



Service Container

- Service container in laravel responsible for **binding & resolving & AutoWiring**
- Try this in controller :-

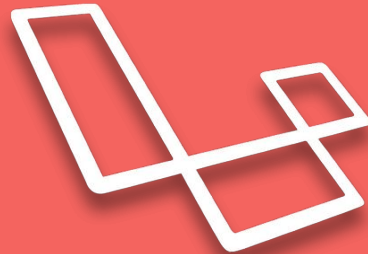
```
public function index (Request $request)
```

```
{
```

```
    dd($request);
```

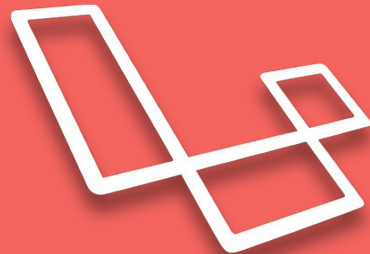
```
}
```

// so how does the \$request prints an object without instantiating it !!?



Service Container

- In the previous example , the **illuminate container** see if the class or method needs a dependencies it will make **AutoWiring**
- **AutoWiring** :- means if the class or method have dependencies **type hinted** , then it will use **reflection** to get the **type hinted instance** .
- what is reflection :-
<http://php.net/manual/en/book.reflection.php>



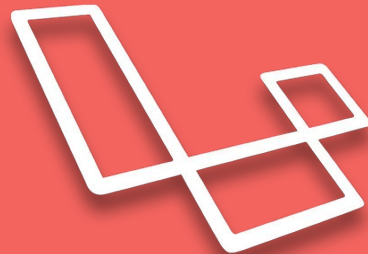
Service Container

- Binding

```
app()->bind( Car::class , function() {  
    return new LamboCar();  
}  
);
```

- Resolving

`app(Car::class)` // means when someone asks for instance from `Car::class` it will return new `LamboCar` instance .



Service Container

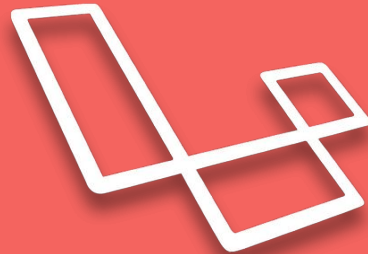
- **Service Providers :-**

This is the class where you bind services to the laravel app.

- `php artisan make:provider TestProvider`

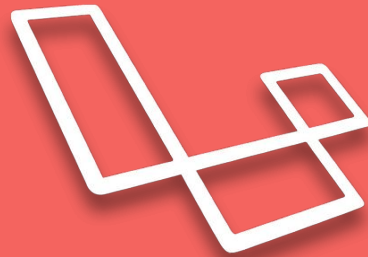
- **register()** :- this is where you bind things into container

- **boot()** :- called after all register methods in other providers have been called . **//this is where you register events listeners or routes and do any behaviour .**



Service Container

- In `config/app.php` see the `providers` array .
- Now try to play around with this package :-
<https://github.com/barryvdh/laravel-debugbar>
- To know more about illuminate container check [**Matt Stuffer**](#) talk
<https://laracon.net/2017>

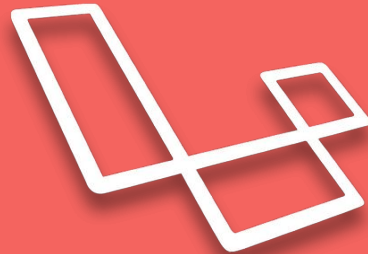


Lab 2

- Add validation using form request files on **Create & Update**
<https://laravel.com/docs/5.6/validation#creating-form-requests>
- Title & description are required , minimum length for **title** is **3 chars** and **unique**, for **description** the minimum length is **10 chars** ,**make sure when updating post without changing Title it still works**

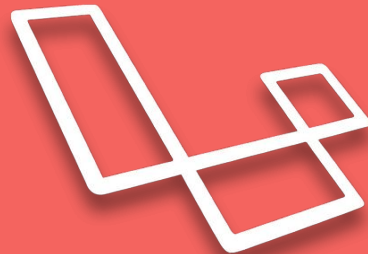
Also make sure that **no one hacks you** and send an **id of post creator** that doesn't exist in the database

- Make sure to **display error messages** of failed validation
<https://laravel.com/docs/5.6/validation#quick-displaying-the-validation-errors>



Lab 2

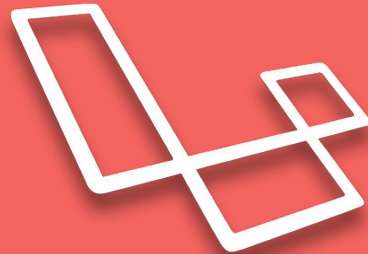
- Use `php artisan:make auth` , to scaffold the auth page
- Modify on the current `navbar` , and make it use the laravel default auth navbar , and also we need the link to `All Posts` (Do whatever you see suits the case)
- Add `Authentication middleware` on all posts routes , and make anyone who isn't authenticated to `redirect back to login page`



Lab 2

- Make our post have **slug** , using this package (the **slug** will be generated from the post **title** , users aren't allowed to fill slug or send it in the request , search for **`$request->validated()`** or **`$request->only()`**
(Read the package documentation carefully)
<https://github.com/cviebrock/eloquent-sluggable>
- Show the **slug** column In **Index** page

For Bonus Choose one



Lab 2 (Bonus 1)

- Upload **image** to post , and validate extensions are only (.jpg, .png) , and use **Storage** to store and show images also when updating post we remove the old image, and when deleting we remove the image also

Hint:- see if **Mutators** can make your work easier

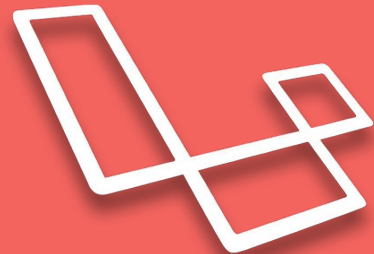
<https://laravel.com/docs/5.6/filesystem#file-uploads>

- Add **comments** to post using **polymorphic** relation and **don't use any packages** , also we need to **show who commented on post**

<https://laravel.com/docs/5.6/eloquent-relationships#polymorphic-relations>

- Use this package to add **Tags** to post , the user will enter comma separated tags

<https://github.com/spatie/laravel-tags>



Lab 2 (Bonus 2)

- Make **custom validation rule** , that makes sure the user is only allowed to create **3** posts and if he exceeded this number we show a validation error message
<https://laravel.com/docs/5.6/validation#custom-validation-rules>
- Add **View Ajax** Button that opens **Bootstrap Modal** , showing post info (title , description , slug , username, useremail) using **ajax request** (check laravel responsible interface in docs to make your code cleaner)
- Add **restore** button on index page to **restore deleted** posts you will need to use **soft delete**
<https://laravel.com/docs/5.6/eloquent#soft-deleting>

