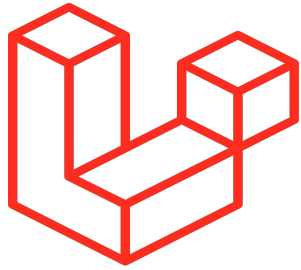


# Content

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



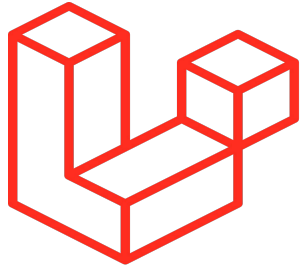
# Request Validation

- Request Life Cycle ([Check Taylor Otwell Talk At Laracon 2017 For More Deep Info About How Framework Works](#)):-

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 .

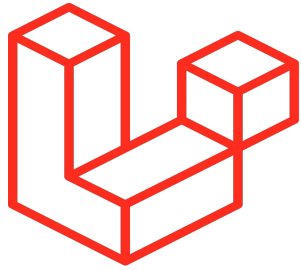
Finally we create instance of `kernel` to `register providers` and take user request and process it through `middlewares & handle exception` then return `response`



# 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 StorePostRequest`

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

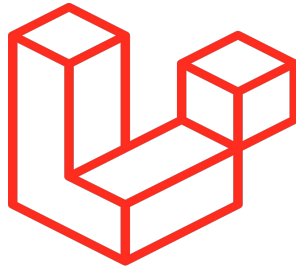
After that define your rules in **rules method** .

- validation rules :-

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

- custom validation messages in request file :-

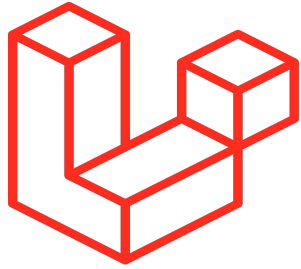
<https://laravel.com/docs/master/validation#customizing-the-error-messages>



# Laravel Auth

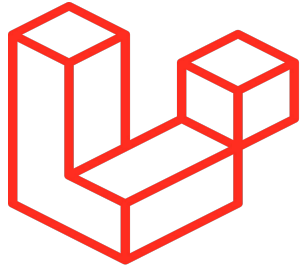
- Since Laravel 6.0 . auth scaffold has been moved to laravel/ui
- Read laravel docs , where it illustrates all you need better

<https://github.com/laravel/ui>

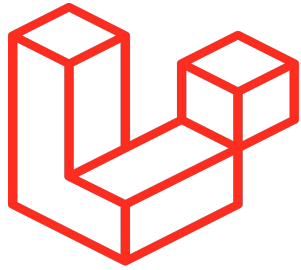
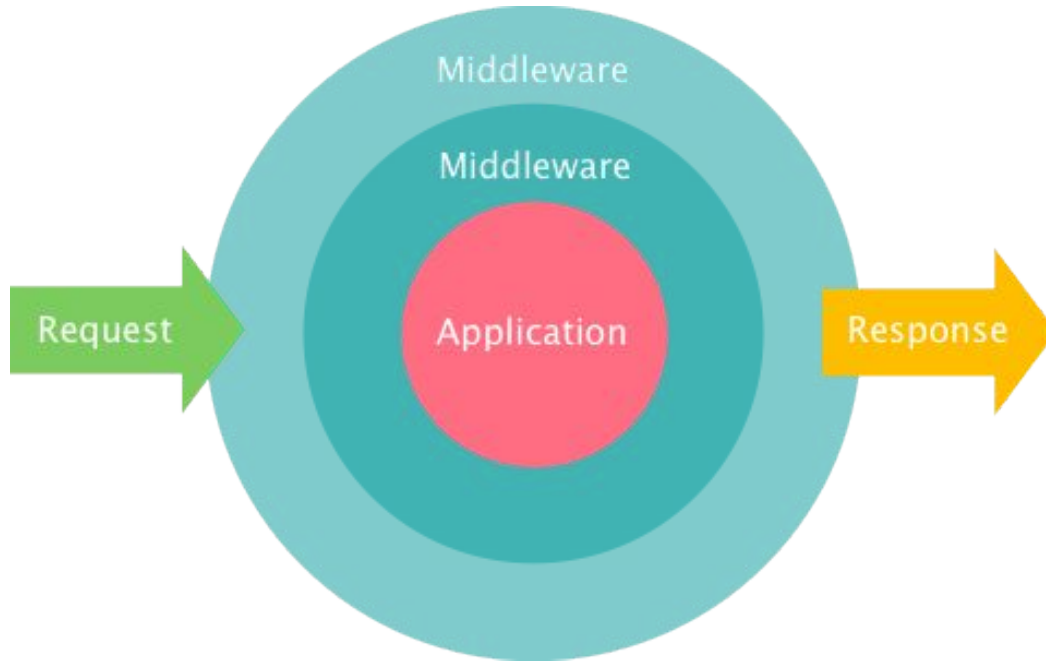


# Middleware

- 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 .



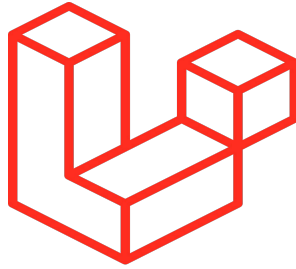
# Middleware





# 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** .



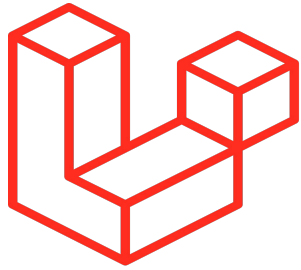
# Service Container

- Class User {

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

```
}
```

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

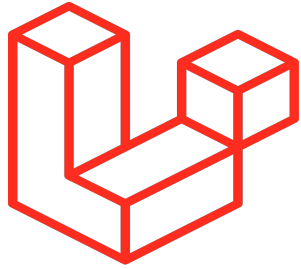


# Service Container

```
- 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 .
```

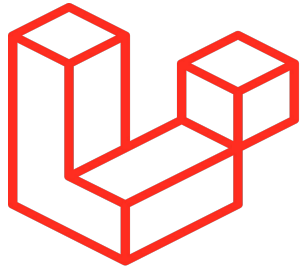


# Service Container

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

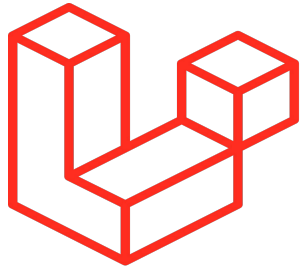
```
public function index (Request $request)  
  
{  
    dd($request);  
}
```

// 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>



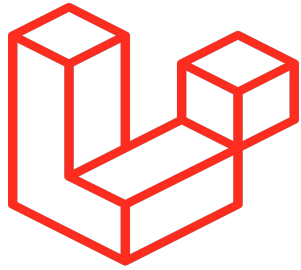
# Service Container

- Binding

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

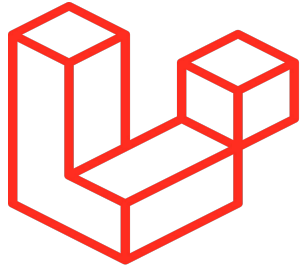
- Resolving

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



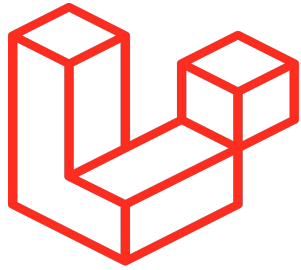
# Service Container

- **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

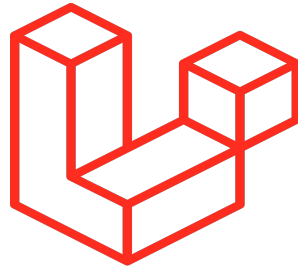
- In `config/app.php` see the `providers` array .
- Now try to play around with this package :-  
<https://github.com/barryvdh/laravel-debugbar>
- To know more about illuminate container check [Matt Stuffer](#) talk & [Christoph Rumpel](#) talk for more info





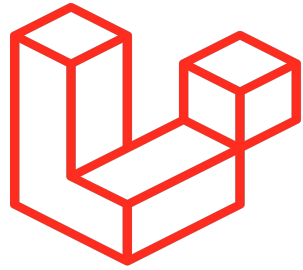
# Lab 3

- Add validation using form request files on **Store & Update**  
<https://laravel.com/docs/master/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/master/validation#quick-displaying-the-validation-errors>



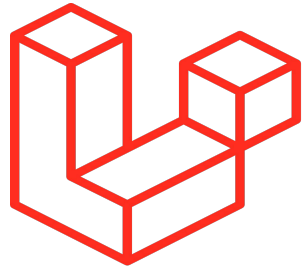
# Lab 3

- Use `php artisan ui:auth bootstrap -auth` , to scaffold the auth pages
- 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 3

- 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>  
Title Example    Slug Example  
Hello Laravel    hello-laravel
- Show the **slug** column In **Index** page
- Read what is **Queue job** and **database queue driver** then **create Queue Job** called **PruneOldPostsJob** that when dispatched it deletes posts that are created from 2 years ago .... [check mohamed said video to understand more](#)
- Read what is **Task Scheduling** then **schedule PruneOldPostsJob** to run daily at midnight
- 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 post we remove the old image**  
<https://laravel.com/docs/master/filesystem#file-uploads>  
Hint:- see if **Mutators** can make your code cleaner



# Lab 3 (Bonus)

- 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/master/validation#custom-validation-rules>
- Use this package to add **Tags** to post , the user will enter comma separated tags <https://github.com/spatie/laravel-tags>
- We need **Edit Profile page** ... where user can edit his name,email,password,profile picture .

For profile picture upload use this package

<https://spatie.be/docs/laravel-medialibrary/v9/introduction>

