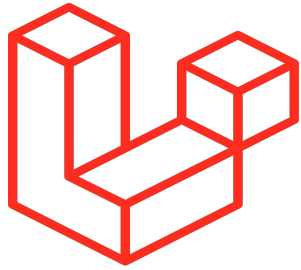


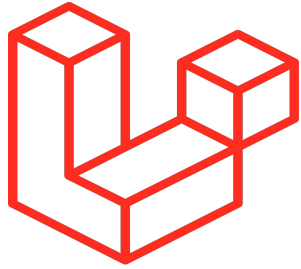
Content

- **DB Facade & Eloquent**
- **Database Factory**
- **Database Seeds**
- **Artisan Tinker**



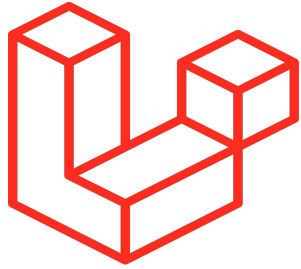
DB Facade & Eloquent

- `$post = DB::table('posts')->find(20);` //finds a row with id = 20
- `$posts = DB::table('posts')->get();` //get all rows in posts table
- `$singlePost = DB::table('posts')->where('slug', 'FirstPost')->first();` //where conditions to query
- `$firstPost = DB::table('posts')->first();` //gets the first row



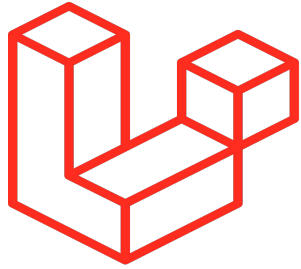
DB Facade & Eloquent

- `DB::table('posts')->insert(['title' => 'first post title' , 'desc' => 'first post desc ']);` *//inserting a row*
- `DB::table('posts')->where('id' , 1)->delete();` *//deletes a row*
- `DB::table('posts')->where('id' , 1)->update(['title' => 'changed title post ']);`
//update the post title only



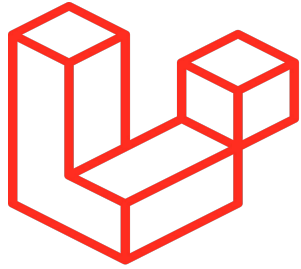
DB Facade & Eloquent

- Laravel ORM is called **Eloquent**
- Database configuration in **.env** file or from **config/database.php**.
- Laravel **migration** helps in making database persistent across multiple machines .
- **DB facade** used to form query builder object



DB Facade & Eloquent

- `php artisan make:model Post` //create a new model class
- Laravel by default gets the **plural name** of model as a table name and makes query based on that
- `Post::all()` //will search in **posts table** and get all rows
- `Post::create(['title' => 'first post' , 'desc' => 'desc post']);`
//this will give a **MassAssignmentException** unless you override **\$fillable**



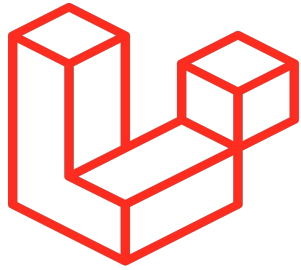
DB Facade & Eloquent

- `Post::find(25)->update(['title' => 'update post title'])`

//updates title for post with id 25

- `Post::where('votes', 23)->delete()`

//deletes any post have votes with 23



DB Facade & Eloquent

- To define a relation in Post model you will define a function in the class for example i want to say post have many sections .

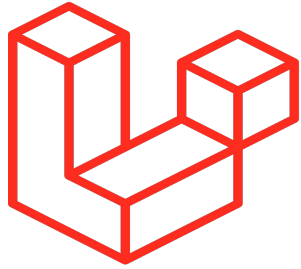
//in Post model class

```
public function sections ()
```

```
{ return $this->hasMany(Section::class);}
```

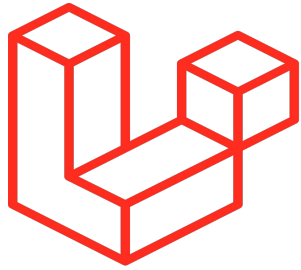
// in controller for example

```
$postSections = Post::find(23)->sections;
```



DB Facade & Eloquent

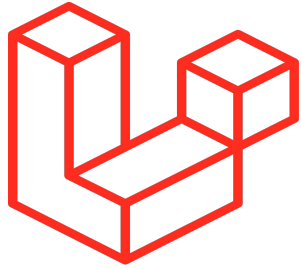
- Remember that query results are **collection** objects
- More at Eloquent
<https://laravel.com/docs/master/eloquent#introduction>
- More at Collections
<https://laravel.com/docs/master/collections#available-methods>



Database Factory

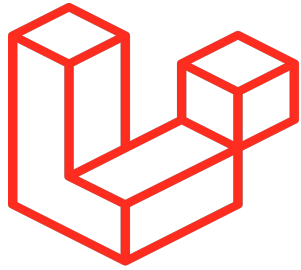
- Laravel model factories and seeders make it painless to create test database records using your application's Eloquent models and relationships
- `php artisan make:factory PostFactory`

<https://laravel.com/docs/master/database-testing#concept-overview>



Database Seeds

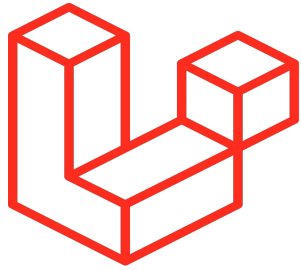
- Use model factories to conveniently generate large amounts of database records.
- `php artisan make:seeder PostSeeder`
- Inside PostSeeder we will use PostFactory
<https://laravel.com/docs/master/seeding#using-model-factories>



Artisan Tinker

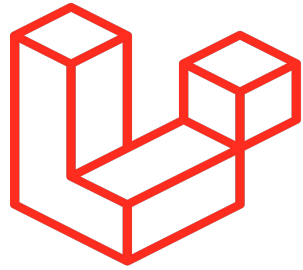
- Tinker allows you to interact with your entire Laravel application on the command line, including your Eloquent models, jobs, events, and more. To enter the Tinker environment, run the `tinker` Artisan command:
- `php artisan tinker`

<https://laravel.com/docs/master/artisan#usage>



Lab 2

- Create migrations & model for the necessary db posts table
- make sure **CRUD** operation on **Posts** are stored in the DB
- When i Click on **Delete** you must show a warning before deleting and i choose between **yes** to confirm Delete or **no ... and you must use Route::delete**
- In **Index & Show** page ,make sure the **Created At** is formatted , so read carbon documentation <https://carbon.nesbot.com/docs/>
- In **Edit Or Create** Post Creator Field must be drop down list of users
- Create **PostSeeder & PostFactory** class so that when i run **php artisan db:seed** it seeds posts table with 500 records
- Add **pagination** to Index page [Read About Pagination](#) then [display pagination links](#)
- Add CURD **comments** inside show post page using **polymorphic** relation <https://laravel.com/docs/master/eloquent-relationships#polymorphic-relationships> ... don't overengineer this one and use ajax requests ... just simple form submissions



Lab 2 (Bonus)

- Add **restore** button on index page to **restore deleted** posts you will need to use **soft delete**
<https://laravel.com/docs/master/eloquent#soft-deleting>
- create **Accessor Method inside Post Model** that returns human readable carbon to be used in posts/{id}, for example i want \$post->human_readable_date will result in the formatted carbon date that is rendered in show post page
<https://laravel.com/docs/master/eloquent-mutators#defining-an-accessor>
- Add **View Ajax** Button to posts page , that opens **Bootstrap Modal** , showing post info (title , description , username, useremail) using **ajax request** ([check laravel responsable interface in docs to make your code cleaner](#))
- Use [livewire](#) to make your comments doesn't refresh the page when making CRUD

first check [this video](#) to understand what is livewire

then check this [livewire comments component](#) video in case it may be helpful

Disclaimer: livewire is so powerful to give you the feel of SPA without the complexity of frontend frameworks . but it has some limitations we can discuss this more in next lecture

