

Web engineering lab

1. Clone the project

git clone <https://github.com/>

2. Install dependencies

composer install

3. Configuration environment

Create a ".env" file and

Copy the ".env.example" file to a ".env" file

4. Change the .env file

```
DB_CONNECTION=mysql
DB_HOST=127.0.0.1
DB_PORT=3306
DB_DATABASE=your_database_name
DB_USERNAME=your_username
DB_PASSWORD=your_password
```

5. Generate key

php artisan key:generate

6. If we want to create a database from here then name a database name in

DB_DATABASE= your_database_name and then

Php artisan migrate

7. Now create a table here

php artisan make:migration create_books_table

(it will add in migration table and a table name books will create in database.)

8. Edit this migration books table

```

$table->id();
    $table->string('title'); // Book title
    $table->string('author',length:255);
    $table->string('isbn',length:13); // Author name
    $table->decimal('price', 8, 2)->nullable(); // Book price
    $table->integer('stock')->default(0); // Stock quantity
    $table->timestamps();
(php artisan migrate) (it will go to the database)

```

9. Now data seed

1. First create model and factory for fake data generate
 php artisan make:model Book -f

2. Update Updated BookFactory with faker

```

public function definition(): array
{
    return [
        'title' => $this->faker->sentence(3), // Random book title
        'author' => $this->faker->name(), // Random author name
        'isbn' => $this->faker->isbn13(), // Random
        'price' => $this->faker->randomFloat(2,10,500),
        'stock' => $this->faker->numberBetween(5,100),
    ];
}

```

3. Update seeder, for how many data for seed

```

public function run(): void
{
    User::truncate(); //Delete previous data of database
    User::factory(5)->create();
    Book::truncate();
    Book::factory(2000)->create();
}
(php artisan db:seed) (this is for fake data)

```

10. Now this is time for controller:

1. Generate a controller

php artisan make:controller BookController

3 step is need mainly:

- a. BookController
- b. Route
- c. View

a. For index and show

Work on BookController:

```
class BookController extends Controller
{
    //index controller
    public function index(){
        $books = Book::all();
        return view("books.index")
            ->with('books',$books);
    }

    //for showing book information
    public function show($id){
        $book = Book::find($id);
        return view('books.show')
            ->with('book',$book);
    }
}
```

b. Works on route(web.php)

```
//for index controller
Route::get('/', [BookController::class, 'index']) -> name('books.index');
```

```
//for showing book information
Route::get('books/show/{id}', [BookController::class, 'show'])->name('books.show');
```

c. Create view(resources/views/books)

//For index

php artisan make:view books.index

```
``html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <meta http-equiv="X-UA-Compatible" content="ie=edge">
  <title>Book List</title>
</head>
<body>
  <h2>Book List</h2>
  <table class='table table-striped'>
    <tr>
      <th>ID </th>
      <th>Title</th>
      <th>Author</th>
      <th>ISBN</th>
      <th>Stock</th>
      <th>Price</th>
      <th>Action</th>

    </tr>

    @foreach ($books as $book)
      <tr>
        <td>{{ $book->id }}</td>
        <td>{{ $book->title }}</td>
        <td>{{ $book->author }}</td>
        <td>{{ $book->isbn }}</td>
        <td>{{ $book->stock }}</td>
        <td>{{ $book->price }}</td>
        <td>
          <a href="{{url('books/'. 'show/'. $book->id)}}"> View </a>
        </td>
      </tr>
    @endforeach

  </table>

</body>
</html>
```

//For show

php artisan make:view books.show

```
``html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <meta http-equiv="X-UA-Compatible" content="ie=edge">
  <title>Books</title>
</head>
<body>
  <p>
    <a href="{{url('books/')}}"> Back </a>
  </p>

  <h2>Book List</h2>
  <table width="25%" border="2">
    <tr>
      <th>ID </th>
      <td>{{ $book->id }}</td>
    </tr>

    <tr>
      <th>Title </th>
      <td>{{ $book->title }}</td>
    </tr>

    <tr>
      <th>Author</th>
      <td>{{ $book->author }}</td>
    </tr>

    <tr>
      <th>ISBN </th>
      <td>{{ $book->isbn }}</td>
    </tr>

    <tr>
      <th>Stock </th>
      <td>{{ $book->stock }}</td>
    </tr>

    <tr>
      <th>Price</th>
      <td>{{ $book->price }}</td>
    </tr>

  </table>

</body>
```

2. Paginator and bootstrap: use in index and show all:

Replace html code for

```
@extends('layout', ['title' => 'Home'])
```

```
@section('page-content')
```

(all code here)

```
@endsection
```

Now:

Edit ServiceProvider

```
use Illuminate\Pagination\Paginator;
public function boot(): void
{
    Paginator::useBootstrapFive();
}
```

Edit BookConstroller:

```
public function index(){
    $books = \App\Models\Book::paginate(15);
    return view("books.index")
        ->with('books',$books);
}
```

Edit index.blade again:

Above @endsection

```
{{ $books->links() }}
```

3. ADD book