# Laravel 8 - CRUD application tutorial with Example

## **Step - 1 : Install Laravel 8**

In the very first step, we need to create laravel 8 application in your local system using the following composer command in your terminal.

composer create-project --prefer-dist laravel/laravel laravel8crudapplication

## **Step - 2 : Database Configuration**

now, just open your laravel applications. env file and make the following database related changes in it.

DB\_CONNECTION=mysql

DB\_HOST=127.0.0.1

DB\_PORT=3306

DB\_DATABASE=laravelcrud // your database name

DB\_USERNAME=root // your database user name

DB\_PASSWORD=root // your database password

## **Step - 3 : Create Migration**

Now, need to create migration using the following artisan command in your project root directory.

php artisan make:migration create\_post\_tbl --create=posts

after running this command you see one migration file in the "database/migrations" folder. open it and make the following changes in it.

use Illuminate\Database\Migrations\Migration;

use Illuminate\Database\Schema\Blueprint;

use Illuminate\Support\Facades\Schema;

class CreatePostTbl extends Migration

{

/\*\*

\* Run the migrations.

\*

\* @return void

\*/

public function up()

{

Schema::create('posts', function (Blueprint $table) {

$table->id();

$table->string('title');

$table->text('description');

$table->timestamps();

});

}

/\*\*

\* Reverse the migrations.

\*

\* @return void

\*/

public function down()

{

Schema::dropIfExists('posts');

}

}

then run the following command for run migration

php artisan migrate

## **Step - 4 : Add Resource Route**

Here, we need to create a resource route for our posts CRUS example. so, open your "routes/web.php" file and add the post resource route.

use Illuminate\Support\Facades\Route;

use App\Http\Controllers\PostController;

Route::resource('posts', PostController::class);

## **Step - 5 : Add Controller and Model**

In this step, we will create our "PostController" and "Post" model using the following artisan command in terminal.

php artisan make:controller PostController --resource --model=Post

After, run the above artisan command then "app/Http/Controllers/PostController.php". file and "app/Models/Post.php" file created in laravel 8 application.

In this controller will create seven methods by default as the below methods:

* 1)index()
* 2)create()
* 3)store()
* 4)show()
* 5)edit()
* 6)update()
* 7)destroy()

Now, open the "PostController.php" file and just copy past the following code into it.

<?php

namespace App\Http\Controllers;

use App\Models\Post;

use Illuminate\Http\Request;

class PostController extends Controller

{

    /\*\*

     \* Display a listing of the resource.

     \*

     \* @return \Illuminate\Http\Response

     \*/

    public function index()

    {

        $data = Post::latest()->paginate(5);

        return view('posts.index',compact('data'))

            ->with('i', (request()->input('page', 1) - 1) \* 5);

    }

    /\*\*

     \* Show the form for creating a new resource.

     \*

     \* @return \Illuminate\Http\Response

     \*/

    public function create()

    {

        return view('posts.create');

    }

    /\*\*

     \* Store a newly created resource in storage.

     \*

     \* @param  \Illuminate\Http\Request  $request

     \* @return \Illuminate\Http\Response

     \*/

    public function store(Request $request)

    {

         $request->validate([

            'title' => 'required',

            'description' => 'required',

        ]);

        Post::create($request->all());

        return redirect()->route('posts.index')

                        ->with('success','Post created successfully.');

    }

    /\*\*

     \* Display the specified resource.

     \*

     \* @param  \App\Models\Post  $post

     \* @return \Illuminate\Http\Response

     \*/

    public function show(Post $post)

    {

        return view('posts.show',compact('post'));

    }

    /\*\*

     \* Show the form for editing the specified resource.

     \*

     \* @param  \App\Models\Post  $post

     \* @return \Illuminate\Http\Response

     \*/

    public function edit(Post $post)

    {

        return view('posts.edit',compact('post'));

    }

    /\*\*

     \* Update the specified resource in storage.

     \*

     \* @param  \Illuminate\Http\Request  $request

     \* @param  \App\Models\Post  $post

     \* @return \Illuminate\Http\Response

     \*/

    public function update(Request $request, Post $post)

    {

        $request->validate([

            'title' => 'required',

            'description' => 'required',

        ]);

        $post->update($request->all());

        return redirect()->route('posts.index')

                        ->with('success','Post updated successfully');

    }

    /\*\*

     \* Remove the specified resource from storage.

     \*

     \* @param  \App\Models\Post  $post

     \* @return \Illuminate\Http\Response

     \*/

    public function destroy(Post $post)

    {

        $post->delete();

        return redirect()->route('posts.index')

                        ->with('success','Post deleted successfully');

    }

}

Ok, so after run bellow command you will find "app/Models/Post.php" and put bellow content in Post.php file:

<?php

namespace App\Models;

use Illuminate\Database\Eloquent\Factories\HasFactory;

use Illuminate\Database\Eloquent\Model;

class Post extends Model

{

    use HasFactory;

    protected $fillable = [

        'title', 'description'

    ];

}

## **Step - 6 : Add Blades Files**

In the last step, we need to create all the blade files for post listing, post creates, post an update, so, create the four-blade file in our laravel application.

* 1) resources/views/posts/layout.blade.php
* 2) resources/views/posts/index.blade.php
* 3) resources/views/posts/create.blade.php
* 4) resources/views/posts/edit.blade.php
* 5) resources/views/posts/show.blade.php

resources/views/posts/layout.blade.php

<!DOCTYPE html>

<html>

<head>

    <title>Laravel 8 CRUD Application - laravelcode.com</title>

    <link href="https://cdnjs.cloudflare.com/ajax/libs/twitter-bootstrap/4.0.0-alpha/css/bootstrap.css" rel="stylesheet">

</head>

<body>

<div class="container">

    @yield('content')

</div>

</body>

</html>

resources/views/posts/index.blade.php

@extends('posts.layout')

@section('content')

    <div class="row" style="margin-top: 5rem;">

        <div class="col-lg-12 margin-tb">

            <div class="pull-left">

                <h2>Laravel 8 CRUD Example from scratch - laravelcode.com</h2>

            </div>

            <div class="pull-right">

                <a class="btn btn-success" href="{{ route('posts.create') }}"> Create New Post</a>

            </div>

        </div>

    </div>

    @if ($message = Session::get('success'))

        <div class="alert alert-success">

            <p>{{ $message }}</p>

        </div>

    @endif

    <table class="table table-bordered">

        <tr>

            <th>No</th>

            <th>Name</th>

            <th>Details</th>

            <th width="280px">Action</th>

        </tr>

        @foreach ($data as $key => $value)

        <tr>

            <td>{{ ++$i }}</td>

            <td>{{ $value->title }}</td>

            <td>{{ \Str::limit($value->description, 100) }}</td>

            <td>

                <form action="{{ route('posts.destroy',$value->id) }}" method="POST">

                    <a class="btn btn-info" href="{{ route('posts.show',$value->id) }}">Show</a>

                    <a class="btn btn-primary" href="{{ route('posts.edit',$value->id) }}">Edit</a>

                    @csrf

                    @method('DELETE')

                    <button type="submit" class="btn btn-danger">Delete</button>

                </form>

            </td>

        </tr>

        @endforeach

    </table>

    {!! $data->links() !!}

@endsection

resources/views/posts/create.blade.php

@extends('posts.layout')

@section('content')

<div class="row">

    <div class="col-lg-12 margin-tb">

        <div class="pull-left">

            <h2>Add New Product</h2>

        </div>

        <div class="pull-right">

            <a class="btn btn-primary" href="{{ route('posts.index') }}"> Back</a>

        </div>

    </div>

</div>

@if ($errors->any())

    <div class="alert alert-danger">

        <strong>Whoops!</strong> There were some problems with your input.<br><br>

        <ul>

            @foreach ($errors->all() as $error)

                <li>{{ $error }}</li>

            @endforeach

        </ul>

    </div>

@endif

<form action="{{ route('posts.store') }}" method="POST">

    @csrf

     <div class="row">

        <div class="col-xs-12 col-sm-12 col-md-12">

            <div class="form-group">

                <strong>Title:</strong>

                <input type="text" name="title" class="form-control" placeholder="Enter Title">

            </div>

        </div>

        <div class="col-xs-12 col-sm-12 col-md-12">

            <div class="form-group">

                <strong>Description:</strong>

                <textarea class="form-control" style="height:150px" name="description" placeholder="Enter Description"></textarea>

            </div>

        </div>

        <div class="col-xs-12 col-sm-12 col-md-12 text-center">

                <button type="submit" class="btn btn-primary">Submit</button>

        </div>

    </div>

</form>

@endsection

resources/views/posts/edit.blade.php

@extends('posts.layout')

@section('content')

    <div class="row">

        <div class="col-lg-12 margin-tb">

            <div class="pull-left">

                <h2>Edit Product</h2>

            </div>

            <div class="pull-right">

                <a class="btn btn-primary" href="{{ route('posts.index') }}"> Back</a>

            </div>

        </div>

    </div>

    @if ($errors->any())

        <div class="alert alert-danger">

            <strong>Whoops!</strong> There were some problems with your input.<br><br>

            <ul>

                @foreach ($errors->all() as $error)

                    <li>{{ $error }}</li>

                @endforeach

            </ul>

        </div>

    @endif

    <form action="{{ route('posts.update',$post->id) }}" method="POST">

        @csrf

        @method('PUT')

         <div class="row">

            <div class="col-xs-12 col-sm-12 col-md-12">

                <div class="form-group">

                    <strong>Title:</strong>

                    <input type="text" name="title" value="{{ $post->title }}" class="form-control" placeholder="Title">

                </div>

            </div>

            <div class="col-xs-12 col-sm-12 col-md-12">

                <div class="form-group">

                    <strong>Description:</strong>

                    <textarea class="form-control" style="height:150px" name="description" placeholder="Detail">{{ $post->description }}</textarea>

                </div>

            </div>

            <div class="col-xs-12 col-sm-12 col-md-12 text-center">

              <button type="submit" class="btn btn-primary">Submit</button>

            </div>

        </div>

    </form>

@endsection

resources/views/posts/show.blade.php

@extends('posts.layout')

@section('content')

    <div class="row">

        <div class="col-lg-12 margin-tb">

            <div class="pull-left">

                <h2> Show Product</h2>

            </div>

            <div class="pull-right">

                <a class="btn btn-primary" href="{{ route('posts.index') }}"> Back</a>

            </div>

        </div>

    </div>

    <div class="row">

        <div class="col-xs-12 col-sm-12 col-md-12">

            <div class="form-group">

                <strong>Title:</strong>

                {{ $post->title }}

            </div>

        </div>

        <div class="col-xs-12 col-sm-12 col-md-12">

            <div class="form-group">

                <strong>Description:</strong>

                {{ $post->description }}

            </div>

        </div>

    </div>

@endsection

Now, run your application using the following artisan command in the application root directory.

php artisan serve

and now open your browser and just type the following URL in it. and then check all the functionality is working fine or not.

http://localhost:8000/posts

REFERENCE:

https://www.laravelcode.com/post/laravel-8-crud-application-tutorial-with-example