Unit
Auth in Laravel

Introduction

Most of web application need to implement authentication and authorization system to protect user data

Authentication is verifying the **true identity of a user** or entity, while **authorization** determines **what a user can access** and ensures that a user or entity receives the right access or permissions in a system. Authentication is a prerequisite to authorization.

We have several ways to authenticate user

- Session based authentication
- Token based authentication (Sanctum, Passport)
- Auth Class based authentication
- Starter kit (jet stream and etc)
- Third party authentication (google, facebook)

Create new project

Create controller for user authentication

Login blade file

```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>Login Page</title>
    @include('cdn')
</head>
<body>
    <div class="container-fluid">
        <h1 class="bg-dark text-white p-5 text-center">Login Page</h1>

        @if (session("error"))
            <div class="alert alert-danger alert-dismissible">
                <button type="button" class="btn-close"></button>
                <b>Error : </b> {{ session("error") }}
            </div>
        @elseif (session("success"))
            <div class="alert alert-success alert-dismissible">
                <button type="button" class="btn-close"></button>
                <b>Success : </b> {{ session("success") }}
            </div>
        @endif

        <form action="loginprocess" method="post">
            @csrf
            <div class="my-3 form-floating">
                <input type="email" name="email" id="email" class="form-control"
```

```html
                        placeholder="Enter Email Address">
                <label class="form-label" for="email">Enter Email Address</label>
            </div>


            <div class="my-3 form-floating">
                <input type="password" name="password" id="password" class="form-
control"

                        placeholder="Enter Email Password">
                <label class="form-label" for="password">Enter Email
Password</label>
            </div>


            <div class="my-3">
                <input type="submit" value="Login" class="btn btn-primary">
                <input type="reset" value="Reset" class="btn btn-danger">
                <a href="/singup" class="btn btn-dark">Create Account</a>
            </div>
        </form>


        @if ($errors->any())
        <div class="alert alert-danger alert-dismissible">
            <button class="btn-close" data-bs-dismiss="alert"></button>
            <ul>
                @foreach ($errors->all() as $err)
                    <li>{{ $err }}</li>
                @endforeach
            </ul>
        </div>
    @endif
    </div>
</body>
</html>
```

Singup blade file

```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>Singup Page</title>
    @include("cdn")
</head>
<body>
    <div class="container-fluid">
        <h1 class="bg-dark text-white p-5 text-center">Singup Page</h1>


        <div class="alert d-none" id="messages"></div>


        <form action="/singupprocess" method="post">
            @csrf
            <div class="my-3 form-floating">
                <input type="text" name="name" id="name" class="form-control"
placeholder="Enter Username" value="{{ @old("name")}}">
                <label class="form-label" for="name">Enter Username</label>
            </div>


            <div class="my-3 form-floating">
                <input type="email" name="email" id="email" class="form-control"
placeholder="Enter Email Address" value="{{ @old("email")}}">
                <label class="form-label" for="email">Enter Email Address</label>
            </div>


            <div class="my-3 form-floating">
```

```html
                <input type="password" name="password" id="password" class="form-
control" placeholder="Enter Email Password">
                <label class="form-label" for="password">Enter Email
Password</label>
            </div>


            <div class="my-3 form-floating">
                <input type="password" name="password_confirmation"
id="cpassword" class="form-control" placeholder="Enter Confirm Password">
                <label class="form-label" for="cpassword">Enter Confirm
Password</label>
            </div>


            <div class="my-3">
                <input type="submit" value="Sing up" class="btn btn-primary">
                <input type="reset" value="Reset" class="btn btn-danger">
                <a href="/" class="btn btn-dark">Login</a>
            </div>
        </form>


        @if ($errors->any())
            <div class="alert alert-danger alert-dismissible">
                <button class="btn-close" data-bs-dismiss="alert"></button>
                <ul>
                    @foreach ($errors->all() as $err)
                        <li>{{ $err }}</li>
                    @endforeach
                </ul>
            </div>
        @endif
    </div>
</body>
</html>
```

Menu blade file

```html
<nav class="navbar navbar-expand-sm bg-dark navbar-dark">
    <ul class="navbar-nav">
        <li class="nav-item"><a class="nav-link" href="/home">Home</a></li>
        <li class="nav-item"><a class="nav-link" href="/about">About</a></li>
        <li class="nav-item"><a class="nav-link"
href="/feedback">Feedback</a></li>
        <li class="nav-item"><a class="nav-link" href="/contact">Contact</a></li>
        <li class="nav-item"><a class="nav-link" href="/logout">Logout</a></li>
    </ul>
</nav>
```

Errors blade file

```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>Error Page</title>
    @include("cdn")
</head>
<body>
    @include("menu")
    <div class="container-fluid">
        <h1 class="p-5 bg-danger text-white text-center">Error Page</h1>
    </div>
</body>
</html>
```

Home blade file

```
<!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>Home Page</title>
    @include("cdn")
</head>
<body>
    @include("menu")
    <x-greetings />
    <div class="container-fluid">
        <h1 class="p-5 bg-primary text-white text-center">Home Page</h1>
        <p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Blanditiis
quo laudantium perferendis adipisci veritatis illo nesciunt nulla enim unde
porro, eaque aut ea quaerat provident asperiores esse officiis! Ipsa, dolore!
        Tempore tempora at saepe quam consequatur odio. Architecto possimus
commodi eaque temporibus aperiam vel ea reprehenderit veritatis, modi aut,
tempore aliquid repellat quisquam enim sunt, amet eligendi in illo voluptate?
        Facere atque repellat praesentium nostrum, optio soluta at temporibus
perferendis! Impedit facilis ea aliquid quam minima molestiae atque quibusdam
quia nihil perspiciatis in corporis eos, quo iure nesciunt, enim optio?
        Maxime aliquam aut cupiditate autem ex adipisci, dolorem at deserunt
pariatur quis fugit nesciunt. Enim voluptatum facilis eaque atque, magni
accusantium fuga deleniti nesciunt voluptates voluptatem aliquam sapiente.
Officiis, sit.</p>
    </div>
</body>
</html>
```

About blade file

```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>About us Page</title>
    @include("cdn")
</head>
<body>
    @include("menu")
    <x-greetings />
    <div class="container-fluid">
        <h1 class="p-5 bg-primary text-white text-center">About us Page</h1>
        <p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Blanditiis
quo laudantium perferendis adipisci veritatis illo nesciunt nulla enim unde
porro, eaque aut ea quaerat provident asperiores esse officiis! Ipsa, dolore!
        Quis in sit alias veniam suscipit assumenda similique quisquam quidem
corporis repudiandae porro, quaerat nobis dolores libero cumque vitae rem quia
maxime dicta dolorem incidunt amet. Voluptatibus tempora dolorum eaque.
        Facere atque repellat praesentium nostrum, optio soluta at temporibus
perferendis! Impedit facilis ea aliquid quam minima molestiae atque quibusdam
quia nihil perspiciatis in corporis eos, quo iure nesciunt, enim optio?
        Maxime aliquam aut cupiditate autem ex adipisci, dolorem at deserunt
pariatur quis fugit nesciunt. Enim voluptatum facilis eaque atque, magni
accusantium fuga deleniti nesciunt voluptates voluptatem aliquam sapiente.
Officiis, sit.</p>
    </div>
</body>
</html>
```

Contact blade file

```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>Contact Page</title>
    @include("cdn")
</head>
<body>
    @include("menu")
    <x-greetings />
    <div class="container-fluid">
        <h1 class="p-5 bg-primary text-white text-center">Contact Page</h1>
        <p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Blanditiis
quo laudantium perferendis adipisci veritatis illo nesciunt nulla enim unde
porro, eaque aut ea quaerat provident asperiores esse officiis! Ipsa, dolore!
        Tempore tempora at saepe quam consequatur odio. Architecto possimus
commodi eaque temporibus aperiam vel ea reprehenderit veritatis, modi aut,
tempore aliquid repellat quisquam enim sunt, amet eligendi in illo voluptate?
        Facere atque repellat praesentium nostrum, optio soluta at temporibus
perferendis! Impedit facilis ea aliquid quam minima molestiae atque quibusdam
quia nihil perspiciatis in corporis eos, quo iure nesciunt, enim optio?
        Maxime aliquam aut cupiditate autem ex adipisci, dolorem at deserunt
pariatur quis fugit nesciunt. Enim voluptatum facilis eaque atque, magni
accusantium fuga deleniti nesciunt voluptates voluptatem aliquam sapiente.
Officiis, sit.</p>
    </div>
</body>
</html>
```

Feedback blade file

```
<!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>Feedback Page</title>
    @include("cdn")
</head>
<body>
    @include("menu")
    <x-greetings />
    <div class="container-fluid">
        <h1 class="p-5 bg-primary text-white text-center">Feedback Page</h1>
        <p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Blanditiis
quo laudantium perferendis adipisci veritatis illo nesciunt nulla enim unde
porro, eaque aut ea quaerat provident asperiores esse officiis! Ipsa, dolore!
        Quis in sit alias veniam suscipit assumenda similique quisquam quidem
corporis repudiandae porro, quaerat nobis dolores libero cumque vitae rem quia
maxime dicta dolorem incidunt amet. Voluptatibus tempora dolorum eaque.
        Facere atque repellat praesentium nostrum, optio soluta at temporibus
perferendis! Impedit facilis ea aliquid quam minima molestiae atque quibusdam
quia nihil perspiciatis in corporis eos, quo iure nesciunt, enim optio?
        Maxime aliquam aut cupiditate autem ex adipisci, dolorem at deserunt
pariatur quis fugit nesciunt. Enim voluptatum facilis eaque atque, magni
accusantium fuga deleniti nesciunt voluptates voluptatem aliquam sapiente.
Officiis, sit.</p>
    </div>
</body>
</html>
```

Greetings component blade file

```
<div class="bg-success p-5 text-white text-center">
    <p class="lead">
        Welcome {{ Auth::user()->email}},
    </p>
</div>
```

User model file

```php
<?php

namespace App\Models;

// use Illuminate\Contracts\Auth\MustVerifyEmail;
use Illuminate\Database\Eloquent\Factories\HasFactory;
use Illuminate\Foundation\Auth\User as Authenticatable;
use Illuminate\Notifications\Notifiable;

class User extends Authenticatable
{
    use HasFactory, Notifiable;

    /**
     * The attributes that are mass assignable.
     *
     * @var array<int, string>
     */
    protected $fillable = [
        'name',
        'email',
        'password',
    ];

    /**
     * The attributes that should be hidden for serialization.
     *
     * @var array<int, string>
     */
    protected $hidden = [
        'password',
```

```php
        'remember_token',
    ];


    /**
     * Get the attributes that should be cast.
     *
     * @return array<string, string>
     */
    protected function casts(): array
    {
        return [
            'email_verified_at' => 'datetime',
            'password' => 'hashed',
        ];
    }
}
```

UserAuthController file

```php
<?php
namespace App\Http\Controllers;
use App\Models\User;
use Illuminate\Http\Request;
use Illuminate\Support\Facades\Auth;

class UserAuthController extends Controller
{
    public function singUp(Request $request){
        $userData = $request->validate([
            "name" => "required",
            "email" => "required|email|unique:users,email",
            "password" => "required|confirmed"
        ]);

        $newUser = User::create($userData);

        return redirect("/")->with("success", "New User Created : with
".$newUser->email." EMail Address");
    }

    public function login(Request $request){
        $userCredentials = $request->validate([
            "email" => "required|email",
            "password" => "required"
        ]);

        if(Auth::attempt($userCredentials)){
            return redirect("/home");
        }else{
            return redirect("/")->with("error", "Invalid username or Password");
```

```php
        }
    }


    public function logOut(Request $request){
        Auth::logout();
        return redirect("/")->with("success", "Logout Successfully");
    }
}
```

Check Login Middleware

```php
<?php

namespace App\Http\Middleware;

use Closure;
use Illuminate\Http\Request;
use Illuminate\Support\Facades\Auth;
use Symfony\Component\HttpFoundation\Response;

class checkLogin
{
    /**
     * Handle an incoming request.
     *
     * @param  \Closure(\Illuminate\Http\Request):
(\Symfony\Component\HttpFoundation\Response)  $next
     */
    public function handle(Request $request, Closure $next): Response
    {
        if(Auth::check()){
            return $next($request);
        }else{
            return redirect("/")->with("error", "please login first");
        }


    }
}
```

Middleware registration

```
->withMiddleware(function (Middleware $middleware) {
        //
        $middleware->appendToGroup("authLogin",[
            checkLogin::class,
        ]);
    })
```

Web.php (Route file)

```php
<?php

use App\Http\Controllers\UserAuthController;
use Illuminate\Support\Facades\Route;

Route::get('/', function () {
    return view('login');
});

Route::get('/singup', function () {
    return view('singup');
});

Route::post("/singupprocess", [UserAuthController::class, "singUp"]);
Route::post("/loginprocess", [UserAuthController::class, "login"]);
Route::get("/logout", [UserAuthController::class, "logout"]);

Route::middleware("authLogin")->group(function(){
    Route::view("/home", "home");
    Route::view("/about", "about");
    Route::view("/feedback", "feedback");
    Route::view("/contact", "contact");
});
```