Web Development Lab: Layout

The layout file is a master Blade template that provides a **common structure for the website's pages**. It usually contains **elements** that are **consistent** across **multiple views**, such as the **header**, **footer**, and **navigation bar**. This approach helps maintain a **uniform look** and feel throughout the website and avoids repetitive code.

Each view file that extends the layout uses @extends to inherit the structure and @section to insert specific content into the placeholders defined in the layout file.

layout.blade.php

```
💏 Layout.blade.php 🗙
resources > views > Components > 💝 Layout.blade.php
        <!DOCTYPE html>
        <html lang="{{ str_replace(search: '_', replace: '-', subject: app()->getLocale()) }}">
            <meta charset="UTF-8">
             <meta name="viewport" content="width=device-width, initial-scale=1.0">
             <meta name="csrf-token" content="{{ csrf_token() }}">
            <title>{{    $title ?? 'Jet\'s Gaming Hub' }}</title>
<link href="{{    asset(path: 'css/app.css') }}" rel="stylesheet">
            @stack('styles')
        <body class="@yield(section: 'body-class')">
        <header>
             <div class="header-container">
                  <h1>Jet's Gaming Hub</h1>
                      @if(session(key: 'username') && session(key: 'username') !== 'Guest')
                           <span>Welcome, {{ session(key: 'username') }}</span>
<a href="{{ url(path: '/logout') }}">Logout</a>
                      @elseif(!request()->is(patterns: '/'))
                           <span>Welcome, Guest</span>
                      <a href="{{ url(path: '/') }}">Homepage</a>
<a href="{{ url(path: '/gallery') }}">Gallery</a>
<a href="{{ url(path: '/review') }}">Reviews</a>
                      <a href="{{ url(path: '/contact') }}">Contact</a>
        <main class="@yield(section: 'main-class')">
        <footer>
             <div class="footer-container">
               © 2024 Jet's Gaming Hub. All rights reserved.
        </footer>
        @stack('scripts')
```

```
<meta name="csrf-token" content="{{ csrf_token() }}">
```

Adds a CSRF (Cross-Site Request Forgery) token meta tag to help with form security. The token is generated by csrf_token().

```
<title>{{    $title ?? 'Jet\'s Gaming Hub' }}</title>
```

> Sets the page title. If the **\$title** variable is not provided, it defaults to "**Jet's Gaming Hub**".

```
<link href="{{ asset(path: 'css/app.css') }}" rel="stylesheet">
@stack('styles')
```

In this layout, app.css is included as the default stylesheet. The @stack('styles') directive enables child views to add their own styles, which will be rendered in addition to the default styles defined in app.css. This way, individual pages can be customized without modifying the default stylesheet.

```
<link href="{{ asset(path: 'css/app.css') }}" rel="stylesheet">
@stack('styles')
```

App.css is included as the default stylesheet. The @stack('styles') directive enables child views to add their own styles, which will be rendered in addition to the default styles defined in app.css. This way, individual pages can be customized without modifying the default stylesheet.

<body class="@yield(section: 'body-class')">

Sets the class attribute of the <body> element. The @yield('body-class') directive allows child views to provide a class for the <body> element if needed.

If a valid username is stored in the session and it's not "Guest", it displays a welcome message with the username and provides a logout link.

```
<main class="@yield(section: 'main-class')">
    @yield(section: 'content')
</main>
```

Sets the class attribute of the <main> element. The **@yield(main-class')** directive allows child views to provide a class for the <main> element if needed.

@stack('scripts')

Allows child views to push additional scripts into a stack that will be included before the closing </body> tag.

login.blade.php

@extends(view: 'Components.Layout')

> Tells Laravel that this view should use the layout defined in Components/Layout.blade.php.

```
@php
    $title = 'Login';
@endphp
```

Sets a variable \$title to 'Login', which is used in the layout to set the page title.

Adds the CSS file login.css to the stack of styles. This file will be included in the final HTML output. It's used to add styles specific to this page.

```
@section(section: 'main-class', content: 'login')
```

> Sets a CSS class login for the <main> tag in the layout. This can be used to apply specific styles for this page.

@section(section: 'content')

Opens the content section, which is intended to be inserted into a corresponding
 @yield('content') in the layout.

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(p) Discover the latest and greatest in gasingly/p>

(div class="link-container")

(p) Obor't have an account/(p)

(q): (div)

(di
```

The page-specific content.

@csrf

Adds a CSRF token to a form to protect against cross-site request forgery.

@endsection

Marks the end of the content block. Everything between **@section** and **@endsection** will be inserted into the layout where **@yield('content')** is placed.

Adds the script.js file to the stack of scripts. This file will be included in the final HTML output, which allows to include JavaScript functionality specific to this page.

register.blade.php

```
### Processors | P
```

*Other parts that are the same with those from login.blade.php wiill not be included to avoid redundancy.

```
@php
    $title = 'Register';
@endphp
```

> Sets a variable **\$title** to **Register**, which is used in the layout to set the page title.

```
@push('styles')
      k href="{{ asset(path: 'css/register.css') }}" rel="stylesheet">
@endpush
```

Adds the CSS file **register.css** to the stack of styles. This file will be included in the final HTML output. It's used to add styles specific to this page.

```
@section(section: 'main-class', content: 'register')
```

> Sets a CSS class **register** for the <main> tag in the layout. This can be used to apply specific styles for this page.

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```

user.blade.php

```
@php
    $title = 'Welcome User';
@endphp
```

- > Sets a variable **\$title** to **Welcome User**, which is used in the layout to set the page title.
- ➤ Does not have a link for the stylesheet, which means that the default stylesheet (app.css) is used.

```
<h1>Welcome, {{ $username }}</h1>
Enjoy exploring the gaming hub!
<button class="button" onclick="location.href='{{ url(path: '/gallery') }}'">Explore Gallery</button>

Page-specific content.
```

gallery.blade.php

```
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                es > views > 😭 gallery.blade.php
@extends(view: 'Components.layout')
                 @php
$title = 'Gallery of Games';
                                                               <h1>Gallery of Games</h1>
Explore some very great set of games.
                                                                <img src="{{ asset(path: 'img/gtav.jpg')}}}" alt="Grand Theft Auto V" class="game-img">
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                                                                                                  <h2>Grand Theft Auto V</h2>
                                                                                                            Grand Theft Auto V is a 2013 action-adventure game developed by Rockstar North and published by
                                                                                                             Rockstar Games.
                                                                                                              It is the seventh main entry in the Grand Theft Auto series, following 2008's Grand Theft Auto IV, and the fifteenth instalment overall.
                                                                                                           Set within the fictional state of San Andreas, based on Southern California, the single-player story follows three protagonists—retired bank robber
Michael De Santa (Ned Luke), street gangster Franklin Clinton (Shawn Fonteno), and drug dealer and gunrunner Trevor Philips (Steven Ogg), and their attempts to commit heists while under pressure from a corrupt government agency and powerful criminals. Players freely roam San Andreas's open world countryside and fictional city of Los Santos, based on Jee Angelos.
                                                                                                             based on Los Angeles.
                                                                                                   <button onclick="window.location.href='{{ url(path: 'review') }}'">See review</button>
                                                                          <div class="game-item ">
     <img src="{{ asset(path: 'img/valo.jpg') }}" alt="Valorant" class="game-img">
                                                                                                 <h2>Valorant</h2>
                                                                                                         VALORANT is a free-to-play first-person tactical shooter video game being developed and published by Riot Games.
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                                                                                                          It was announced on October 15, 2019 under the codename "Project A", until it was officially revealed as VALORANT on March 2, 2020. It was officially released on June 2nd, 2020 for PC. By the time VALORANT reached its first anniversary, the game had 14 million active monthly players and Riot announced the game would soon be coming to mobile platforms, with console
                                                                                                            platforms also being explored but not as high a priority.

Of the two platforms however, it was console that arrived first with a limited beta starting on
                                                                                                          VALORANT takes place on a version of Earth in the near future following an event known as First Light. This event spans the entire globe, leading to big transformations to life, technology,
                                                                                                            and how governments operate. % \begin{center} \end{center} \begin{center} \end{cente
                                                                                                            However, select people across the globe start to gain abilities stemming from this massive event. These gifted individuals are called Radiants.

In response to First Light, a shadow organization founds the VALORANT Protocol, which pulls
                                                                                                          together agents from all over the world. These Agents consist of Radiants and other individuals equipped with Radiant technology.

Due to the backstories of these characters, the VALORANT team features interesting dynamics as the individuals not only sometimes know each other, but they also come from a wide spectrum of
                                                                                                            backgrounds ranging from crime to the military.
                                                                                                 <button onclick="window.location.href='{{ url(path: 'review') }}'">See review</button>
                                                                       <div class="game-item">
     <img src="{{ asset(path: 'img/re4.jpg') }}" alt="Resident Evil 4" class="game-img">
                                                                                             <h2>Resident Evil 4</h2>
                                                                                                       Resident Evil 4 is a 2005 survival horror game developed and published by Capcom for the
                                                                                                       Players control the special agent Leon S. Kennedy on a mission to rescue the US president's daughter, Ashley Graham, who has been kidnapped by a religious cult in rural Spain.

Leon fights hordes of enemies infected by a mind-controlling parasite and reunites with the spy
                                                                                                       In a departure from the fixed camera angles and slower gameplay of previous Resident Evil games, Resident Evil 4 features a dynamic camera system and action-oriented gameplay.
                                                                                             cbutton onclick="window.location.href='{{ url(path: '/review') }}'">See review</button>
```

```
@php
    $title = 'Gallery of Games';
@endphp
```

- > Sets a variable **\$title** to **Gallery of Games**, which is used in the layout to set the page title.
- ➤ Does not have a link for the stylesheet, which means that the default stylesheet (app.css) is used.

```
@section(section: 'main-class', content: 'main-content')
```

> Sets a CSS class main-content for the <main> tag in the layout. This can be used to apply specific styles for this page.

```
<h1>Welcome, {{ $username }}</h1>
Enjoy exploring the gaming hub!
<button class="button" onclick="location.href='{{ url(path: '/gallery') }}'">Explore Gallery</button>
Page-specific content.
```

```
@section(section: 'body-class', content: 'font-sans antialiased dark:bg-black dark:text-white/50')
```

Sets the class attribute of the <body> element. The @yield('body-class') directive allows child views to provide a class for the <body> element.

review.blade.php

```
As a fan of gaming, I think that it would be difficult to have not heard of the Grand Theft Auto
                                                 The franchise has many games under it's belt, and while controversial, it still remains the modern go to game for the majority of the gaming community.

The latest in the franchise, Grand Theft Auto V, is Rockstar Games love letter to all the fans
                                                of the franchise.
                                               The game is groundbreaking in its innovation and was ahead of its time.

Due to this, the game had an immense popularity leading up to and on its release day.

Does it live up to the hype? Lets find out.
                                                Personally, I am a huge fan of open-world games and GTA V did not disappoint. The game is very amazing graphically and gameplay wise. The game has many things for the player to do which makes its replay value higher.
                                                 Add to that the amazing story and cast of characters just makes the game rich in development.
                              <h2>Valorant</h2>
                                                I am a huge fan of first-person shooter games, dating back all the way to the Left 4 Dead and
                                               even Half-Life games.

Valorant was a breath of fresh air for me because of its unique gameplay.

Unlike its counterparts like Counter Strike and Call of Duty, Valorant has unique abilities and
                                                It is similar to Overwatch but more tactical shooter an less power dominated games. Valorant is fun and challenging for new players and veterans of the game. There is much to learn about the system but once you do I can guarantee that you are gonna enjoy
                                                the game.
                                                The game is more enjoyable with friends so that the fun can be limitless.

The bad sides of this game are present, like cheaters, toxic players and more but that doesn't outweigh all the good that is does.
                               <div class="game-item">
     <img src="{{ asset(path: 'img/re4.jpg') }}" alt="Resident Evil 4" class="game-img">
                                           <h2>Resident Evil 4</h2>
                                                The resident evil games have become one of my favorite game series lately.
                                                 Although, I have only played the remake versions of these ga
                                                 The one game where I played both original and remake though is Resident Evil 4 and I must say
                                                 that the original game might be considered a masterpiece.
                                                The game is very enjoyable and its story is very good.
The cast of characters also add depth to this game as to not make it generic.
                                                The lead character Leon S. Kennedy has charm and a cool personality so scenes with him are never
                                                boring.
                                                 The set pieces in this game are fantastic from a village, castle and a island you will always be
                                                amazed at the environment of this game.

That says a lot considering this game came out so long ago.

Overall, this game takes my excitement and keeps going until the end where you can appreciate
                                                the game even more.
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       @endsection
```

```
@php
    $title = 'Game Reviews';
@endphp
```

- > Sets a variable **\$title** to **Game Reviews**, which is used in the layout to set the page title.
- Everything between **@section** and **@endsection** is the page-specific content that will be inserted into the corresponding **@yield** section in the layout.

contact.blade.php

```
### discrimin(section: 'content')

| discrimin-h-screen flex items-center justify-center bg-gradient-to-b from-transparent via-white to-white dark:via-zinc-900 dark:to-zinc-900">
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| discrimin-h-screen flex items-center justify-center bg-gradient-to-b from-input" required>
| dabel for="nemail" class="form-label">
| dabel for="nemail class="form-la
```

```
@php
$title = 'Contact Us';
@endphp
```

> Sets a variable **\$title** to **Contact Us**, which is used in the layout to set the page title.

```
@push('styles')
      link href="{{ asset(path: 'css/contact.css') }}" rel="stylesheet">
@endpush
```

Adds the CSS file **contact.css** to the stack of styles. This file will be included in the final HTML output. It's used to add styles specific to this page.

```
@section(section: 'body-class', content: 'contact')
```

Sets a CSS class **contact** for the <body> tag in the layout. This can be used to apply specific styles for this page.

Routing Setup

web.php

```
utes > 🤲 web.php
     <?php
     use Illuminate\Support\Facades\Route;
       use Illuminate\Support\Facades\Session;
       Route::get('/', function (): mixed {
           if (Session::has('username') && Session::get('username') !== 'Guest')
    return redirect('/user');
              return view('login');
       Route::get('/register', function (): mixed {
    return view('register');
       Route::get('/gallery', function (): mixed {
    return view('gallery');
       // Route to display the review page
Route::get('/review', function (): mixed {
             return view('review');
       Route::get('/contact', function (): mixed {
             return view('contact');
       Route::get(uri: '/user', action: function (): Factory|View {
    // Get the username from the request or default to 'Guest'
    $username = request()->input(key: 'username', default: 'Guest');
             // Validate username to ensure it only contains alphabetic characters if (!preg_match(pattern: '/^[A-Za-z]+\$/', subject: \$username)) {
                    $username = 'Guest';
             // Store the username in session
Session::put(key: 'username', value: $username);
             // Return the user view with the username
return view(view: 'user', data: ['username' => $username]);
       // Route to handle user login or registration submission
Route::post(uri: '/user', action: function (): Factory|View {
    // Get the username from the request or default to 'Guest'
              $username = request()->input(key: 'username', default: 'Guest');
              // Validate username to ensure it only contains alphabetic characters
if (!preg_match(pattern: '/^[A-Za-z]+$/', subject: $username)) {
                    $username = 'Guest';
             // Store the username in session
Session::put(key: 'username', value: $username);
             // Return the user view with the username
return view(view: 'user', data: ['username' => $username]);
       Route::get(uri: '/logout', action: function (): Redirector | RedirectResponse {
    // Clear the username from session
    Session::forget(keys: 'username');
             // Redirect to the homepage or login page
return redirect(to: '/');
```

```
Route::get(uri: '/', action: function (): Factory|Redirector|RedirectR... {
    if (Session::has(key: 'username') && Session::get(key: 'username') !== 'Guest') {
        return redirect(to: '/user');
    }
    return view(view: 'login');
});
```

- This route listens for GET requests to the homepage (/).
- It first checks if the session has a username stored and if the username is **not 'Guest'**. If these conditions are met, the user is redirected to the **/user** page.
- If there is **no valid username** in the session or the user is **'Guest'**, the login view (**login.blade.**php) is returned.

```
Route::get(uri: '/register', action: function (): Factory|View {
    return view(view: 'register');
});
```

This route listens for **GET** requests to the **/register** path and rreturns the registration view (**register.blade.php**).

```
Route::get(uri: '/gallery', action: function (): Factory|View {
    return view(view: 'gallery');
});
```

This route listens for **GET** requests to the **/gallery** path and returns the gallery view (**gallery.blade.php**).

```
Route::get(uri: '/review', action: function (): Factory|View {
    return view(view: 'review');
});
```

This route listens for **GET** requests to the **/review** path and returns the review view (**review.blade.php**).

```
Route::get(uri: '/contact', action: function (): Factory|View {
    return view(view: 'contact');
});
```

This route listens for **GET** requests to the **/contact** path and returns the contact view (**contact.blade.php**).

```
Route::get(uri: '/user', action: function (): Factory|View {
    // Get the username from the request or default to 'Guest'
    $username = request()->input(key: 'username', default: 'Guest');

    // Validate username to ensure it only contains alphabetic characters
    if (!preg_match(pattern: '/^[A-Za-z]+$/', subject: $username)) {
        $username = 'Guest';
    }

    // Store the username in session
    Session::put(key: 'username', value: $username);

    // Return the user view with the username
    return view(view: 'user', data: ['username' => $username]);
});
```

- This route listens for **GET** requests to the **/user** path.
- ➤ It checks if a **username** is passed as a query parameter **(?username=...).** If **none** is provided, it defaults to **'Guest'**.
- It validates the username using a regular expression (/^[A-Za-z]+\$/) to ensure it contains only alphabetic characters. If the validation fails, the username is set to 'Guest'.
- > The **username** is stored in the session.
- The view (user.blade.php) is returned, with the username passed to the view.

```
Route::post(uri: '/user', action: function (): Factory|View {
    // Get the username from the request or default to 'Guest'
    $username = request()->input(key: 'username', default: 'Guest');

    // Validate username to ensure it only contains alphabetic characters
    if (!preg_match(pattern: '/^[A-Za-z]+$/', subject: $username)) {
        $username = 'Guest';
    }

    // Store the username in session
    Session::put(key: 'username', value: $username);

    // Return the user view with the username
    return view(view: 'user', data: ['username' => $username]);
});
```

- This route listens for **POST** requests to the **/user** path, either from the login/registration form.
- > The logic is similar to the previous route: it **gets the username** from the form, **validates** it to ensure it's **alphabetic**, **defaults** to **'Guest'** if **invalid**, **stores** it in the **session**, and then **renders** the user **view** with the **username**.

```
Route::get(uri: '/logout', action: function (): Redirector | RedirectResponse {
    // Clear the username from session
    Session::forget(keys: 'username');

    // Redirect to the homepage or login page
    return redirect(to: '/');
});

This route listens for GET requests to /logout.

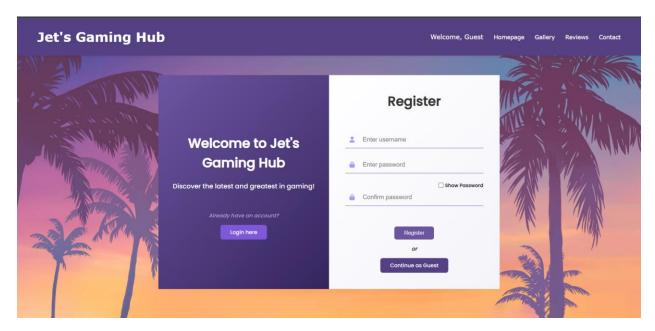
This clears the session's username and redirects to the homepage.
```

Rendered Web Pages

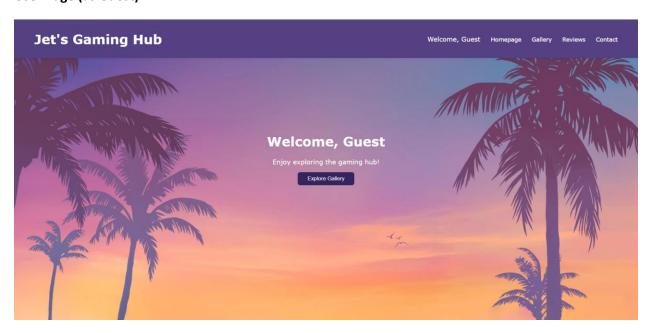
Login Page



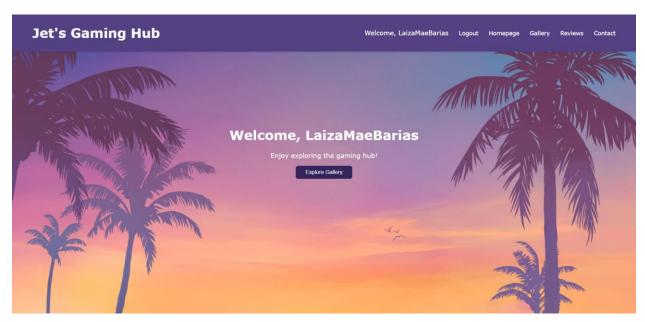
Register Page



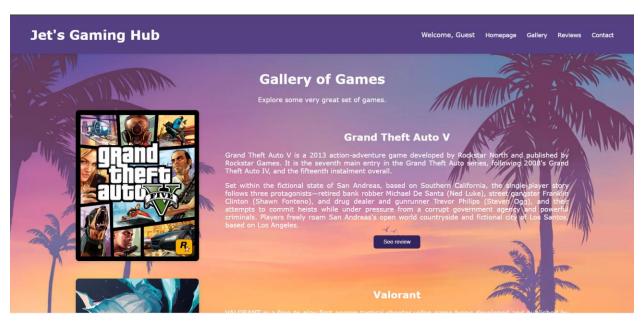
User Page (as Guest)

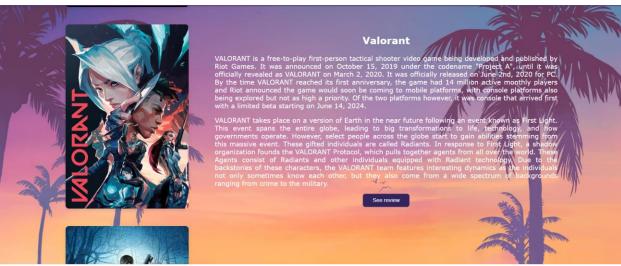


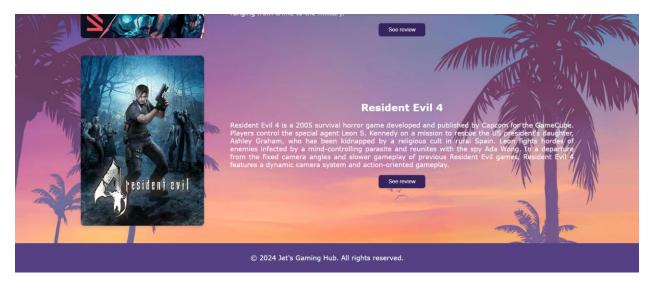
User Page (with Username)



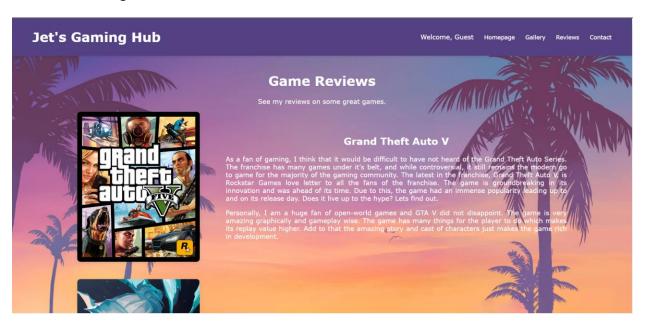
Gallery of Games Page

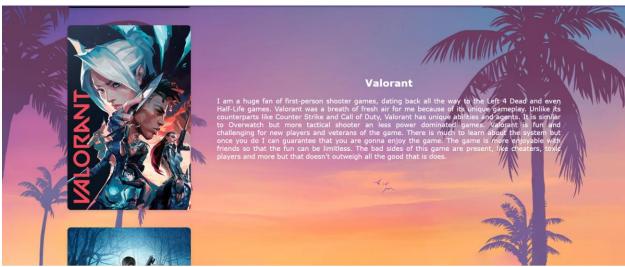






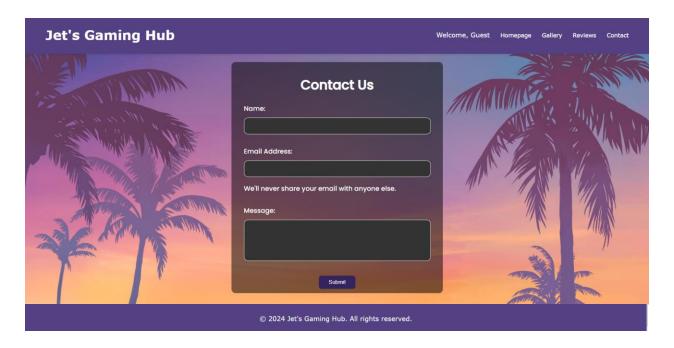
Game Reviews Page







Contact Us Page



Challenges Faced

Css Conflict

- I encountered a conflict between the styles defined in app.css and those in contact.css. Although I separated the styles for the contact.blade.php into its own contact.css file, I reused some of the styles from app.css and made modifications in contact.css. This caused layout issues when the contact.blade.php was loaded, making the page look messy.
- To resolve the conflict, I removed the duplicate styles from contact.css and created new classes specifically for the modified styles in contact.css. This ensured the changes aligned properly with the overall layout while avoiding conflict with the global styles from app.css.

<main> Element Class

- Some views required the <main> element to have a class, but in the layout file, it was only defined as <main>.
- To resolve this issue, I added class="@yield('main-class')" to the layout file, allowing each view to specify its own class for the <main> element when needed.

Data in the URL

- With the **GET** request, the **data** from each input field in the form is **added to the URL** as query parameters. It is **not suitable for login and registration**.
- To resolve this, I changed the method to POST and added a new route that responds to HTTP POST requests. With this, data is not shown in the URL.

Difference Between {{\$slot}} and @yield

- {{\$slot}}: Used within Blade components and captures content passed between component tags
- @yield: Used within Blade layouts to define a section where child views will inject content.

{{\$slot}} is specific to Blade components, while @yield is used in layouts and child views.
@yield requires @section in child views to define what content should be placed, whereas {{\$slot}} directly receives content passed when rendering the component.