



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

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

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

Route::get(uri: '/user', action: function (): Factory|View {
    $username = request()->input(key: 'username', default: 'Guest');
    if (!preg_match(pattern: '/^[A-Za-z]+$/', subject: $username)) {
        $username = 'Guest';
    }

    return view(view: 'user', data: ['username' => $username]);
});

Route::post(uri: '/user', action: function (): Factory|View {
        $username = request()->input(key: 'username', default: 'Guest');
        if (!preg_match(pattern: '/^[A-Za-z]+$/', subject: $username)) {
            $username = 'Guest';
        }

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

```
✓ views

✓ Components

♣ Layout.blade.php

♣ gallery.blade.php

♣ login.blade.php

♣ register.blade.php

♣ review.blade.php

♣ user.blade.php

♣ welcome.blade.php

✓ routes

♣ console.php
```

- -The layout file in a Laravel project serves as a master template that establishes the overall structure and common elements, such as headers, footers, and navigation, making sure a consistent look and feel across all web pages to enhance experience.
- -Each view file extends this layout using the @extends directive, allowing it to adapt the layout's structure while adding specific content into designated sections.

- Each view file in your project extends the layout file by using the @extends directive. This allows individual views to inherit the layout's structure while inserting specific content into designated sections.

```
@extends(view: 'Components.Layout')
@section(section: 'body-class', content: 'homepage')
@section(section: 'content')
```

- The route specifies that when a user accesses the root URL (/), the application will return the login view. Each route corresponds to a specific view file, ensuring that users see the correct content based on their navigation.
- One challenge I encountered could involve creating dynamic content, such as user greetings based on input usernames. To solve this, we implemented validation to ensure that only valid characters are accepted. Additionally, setting default values, such as 'Guest' for any invalid input, helps maintain a smooth user experience.
- {{\$slot}} is primarily used in component-based views in Laravel. When you define a Blade component, you can use {{\$slot}} to indicate where the content passed to that component should be rendered. For instance, if you create a button component, you can define its structure and use {{\$slot}} to display any text you pass to it.
- @yield is used in layout files to define sections that can be overridden by child views. It specifies a placeholder for content that the extending views will provide. For example, @yield('title') in your layout can be populated by any child view using @section('title', 'Page Title').