A. Defining Basic Routes

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 named route that handle request to the root URL (/) and it returns the view 'index' which is my homepage (named as 'homepage' for easy reference in my navigation in the blade files.

```
Route::get('/', function () {
    return view('index'); //named route that returns a view for the homepage
})->name('homepage');
```

```
<nav class="nav-menu d-none d-lg-block">

class="{{ request()->is('/') ? 'active' : '' }}"><a href="{{ route('homepage') }}"> <span>Home</span></a>
class="{{ request()->is('pages/education-experience') ? 'active' : '' }}"><a href="{{ route('education-experience') }}"> <span>Education & class="{{ request()->is('pages/project-skills') ? 'active' : '' }}"><a href="{{ route('project-skills') }}"> <span>Projects & Skills</span>
cli class="{{ request()->is('pages/about') ? 'active' : '' }}"><a href="{{ route('about') }}"> <span>About</span></a>
cli class="{{ request()->is('pages/contact-us') ? 'active' : '' }}"><a href="{{ route('contact-us') }}"> <span>Contact Us</span></a>
</nav>
```

• modal displays a welcome message to the user (this is from the index view (homepage).

11.

• This route group, groups multiple named routes under a common URL prefix (which is 'pages' in here), so to access the named views under these group route, it uses /pages + the view

```
Route::group(['prefix' => 'pages'], function () {
    Route::get('/about', function () {
        return view('about'); //named route that returns a view for the about page
    })->name('about');

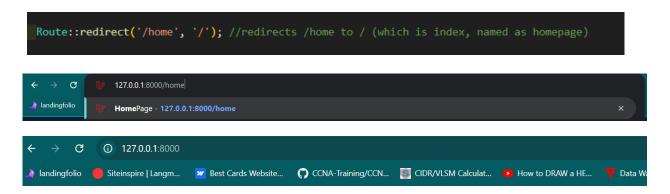
Route::get('/contact-us', function () {
        return view('contact-us'); //named route that returns a view for the contact-us page
    })->name('contact-us');

Route::get('/education-experience', function () {
        return view('education-experience'); //named route that returns a view for the education-experience page

Route::get('/project-skills', function () {
        return view('project-skills'); //named route that returns a view for the project-skills page
    })->name('project-skills');
```



- This redirect route accepts a URL path that the user request to and redirects to another path. In this case, it wants to access the URL /home but it will redirect to '/' which is the root (index—homepage)
- Overall redirect routes manage and update URL without breaking the link. For example, I have an old URL path for a page and I uploaded a new page for substitution for that old page, that old page was referenced from other pages. So, if I delete the old page, when I try to access the old page (since it is referenced) it gives cause 404 error. To avoid this, redirect rout helps by when accessing the old page route (deleted, missing), it can point to another URL

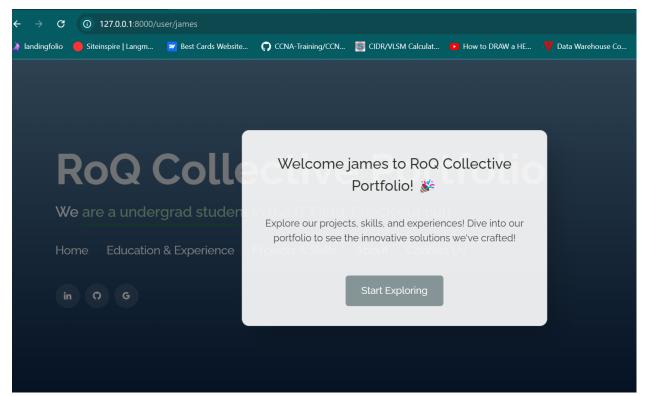


B. Using Route Parameters

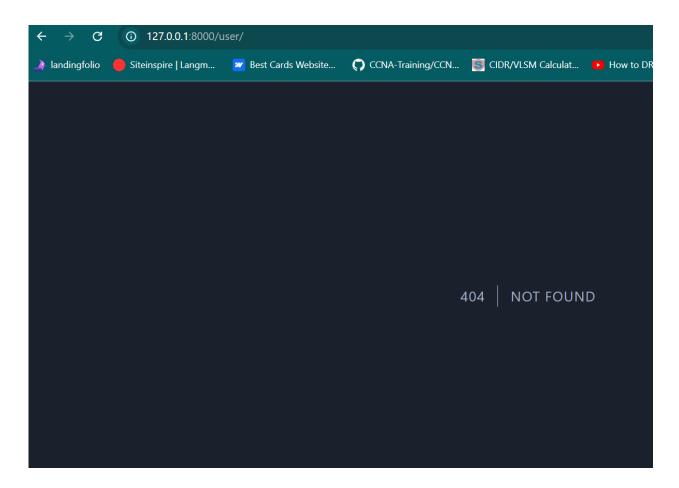
- I. Route with required parameter
 - The route below listens to a GET request to the URL pattern /user/{username}
 - {username} serve as the route parameter here, it accepts a value that a user might input in that part of the URL, then the \$username in the function (\$username) {...} is considered as a argument in the method which is the actual value of the {username} that the user inputted. The method then returns the index view and passes the \$username variable, which also then be received by the index and be put in the \$username variable in the welcome message code.
 - Since it is a required parameter, putting nothing in the parameter (after 'user/' will result to a 404 not found error.

```
// route with required parameter
Route::get('/user/{username}', function ($username) {
    return view('index', ['username' => $username]);
});
```

• Route parameter in here is 'james'



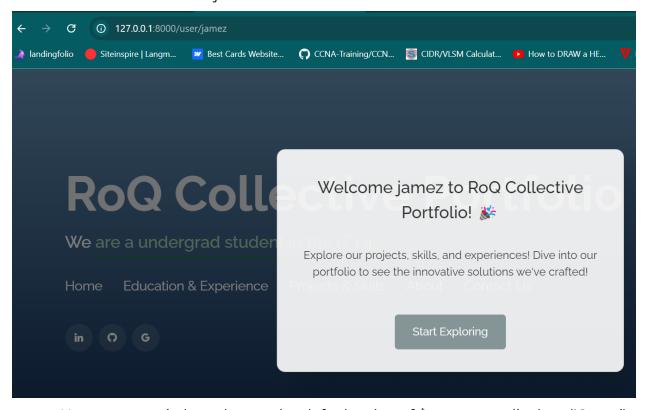
404 not found error occurs as I didn't put any parameter



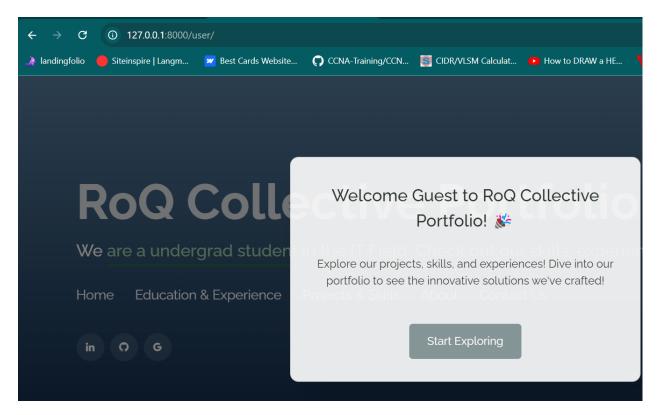
- II. Route with optional parameter
- This route almost works the same as the first one but the parameter in here is not required—even if there's no parameter it will return a default message 'Guest' as the \$username variable is initially assigned a default value which is 'Guest'. If user puts a parameter in the URL, then the default value be overwritten.

```
// route with optional parameter
Route::get('/user/{username?}', function ($username = 'Guest') {
    return view('index', ['username' => $username]);
});
```

• Parameter in here is 'jamez'

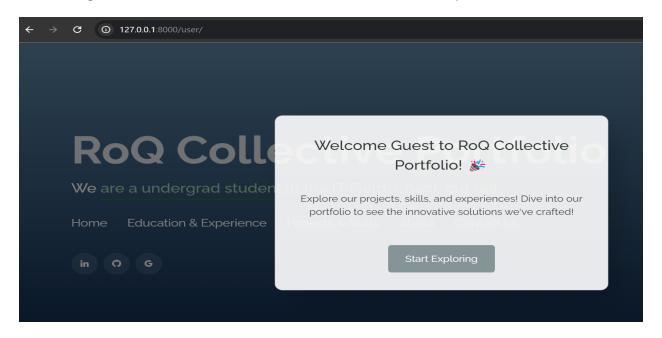


• No parameter in here, hence the default value of \$username displays ('Guest')

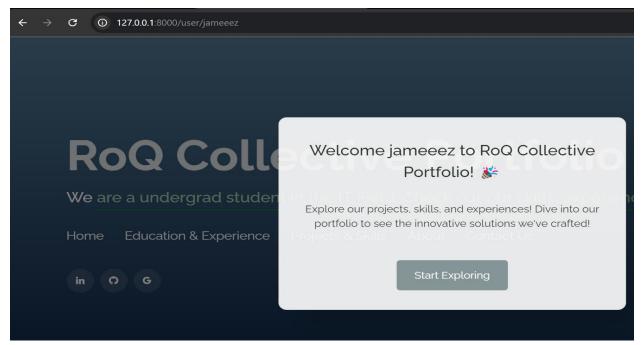


- III. Route with regular expression constrains
- This route allows the parameter ('\$username') to be optional (user can access without providing a username in the URL path). Also, the method in this route sets username variable to null if no parameter is provided in URL
- The preg_match validates the \$username, it checks if value consist of only alphabetic character (regardless of the case), the negation means if username contains anything other than a-z character then condition is true and the username variable is set to 'Guest'
- Assigning of value inside the if statement won't happen if condition is false (it contains only alphabet a-z (regardless of case)

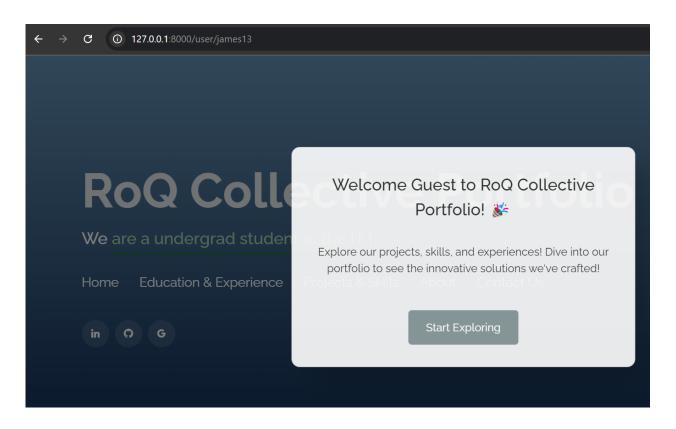
• No parameter passed, variable is set to null then preg_match return false but negated so true, and \$username is set to 'Guest' and passed to the view



• Parameter passed 'jameeez' which contains only alphabetic characters (a-z, case-insensitive).



• Parameter passed 'james13' which contains numeric character so variable \$username is set to 'Guest'



C. Related Documentations

