Assignment Name: Laravel Concepts Assessment

Student Name: MD Tufik Hasan

Module: 15

Subject: Web Development with PHP & Laravel

Date of Submission: 29/05/2023

Task 1: Request Validation

Implement request validation for a registration form that contains the following fields: name, email, and password. Validate the following rules:

name: required, string, minimum length 2.

email: required, valid email format.

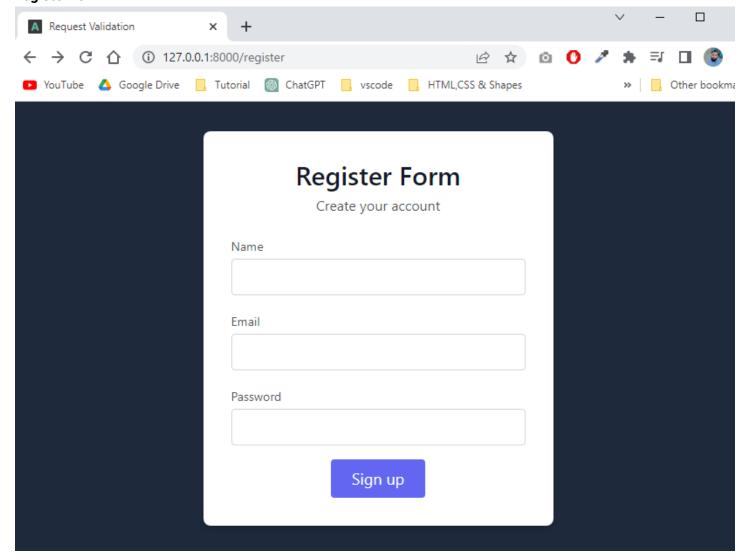
password: required, string, minimum length 8.

Route:

```
Route::controller( AssignmentController::class )→group( function () {
   Route::get( '/register', 'getRegisterForm' );
   Route::post( '/register', 'register' );
} );
```

Controller method:

Register form:



Task 2: Request Redirect

Create a route /home that redirects to /dashboard using a 302 redirect.

Route:

```
Route::controller( AssignmentController::class )→group( function () {
   Route::get( '/home', 'redirectDashboard' );
   Route::get( '/dashboard', 'dashboard' );
} );
```

Controller method:

```
// Task 2: Request Redirect
    function redirectDashboard() {
        return redirect( '/dashboard', 302 );
}
```

```
function dashboard() {
    return 'Welcome to Dashboard';
}
```

Task 3: Global Middleware

Create a global middleware that logs the request method and URL for every incoming request. Log the information to the Laravel log file.

middleware log info (LogInformation):

```
public function handle( Request $request, Closure $next ): Response{
    Log::info( 'Request: ' . $request→method() . ' ' . $request→fullUrl());
    return $next( $request );
}
```

Set (LogInformation) middleware as a global middleware

Task 4: Route Middleware

Create a route group for authenticated users only. This group should include routes for /profile and /settings. Apply a middleware called AuthMiddleware to the route group to ensure only authenticated users can access these routes.

Create a middleware (AuthenticateUsers) & write authentication method:

Authenticated Routes:

```
Route::middleware( AuthenticateUsers::class )→group( function () {
// http://127.0.0.1:8000/profile?email=tufikhasan05@gmail.com&password=12345
```

```
Route::get( '/profile', function () {
    return "Welcome to profile page";
} );
// http://127.0.0.1:8000/settings?email=tufikhasan05@gmail.com&password=12345
Route::get( '/settings', function () {
    return "Welcome to setting page";
} );
} );
```

Task 5: Controller

Create a controller called ProductController that handles CRUD operations for a resource called Product. Implement the following methods:

index(): Display a list of all products.

create(): Display the form to create a new product.

store(): Store a newly created product.

edit(\$id): Display the form to edit an existing product.

update(\$id): Update the specified product.

destroy(\$id): Delete the specified product.

Resource - ProductController all method:

```
public function index() {
   return Product::all();
public function create() {
   return Product::all();
public function store( Request $request ) {
   $product = new Product;
    $product→title = $request→title;
   $product→price = $request→price;
   $product→save();
   return $product;
public function show( string $id ) {
    return Product::findOrFail( $id );
public function edit( string $id ) {
   return Product::findOrFail( $id );
}
public function update( Request $request, string $id ) {
    $product = Product::findOrFail( $id );
```

Api Route::resource:

```
Route::resource( 'product', ProductController::class );
```

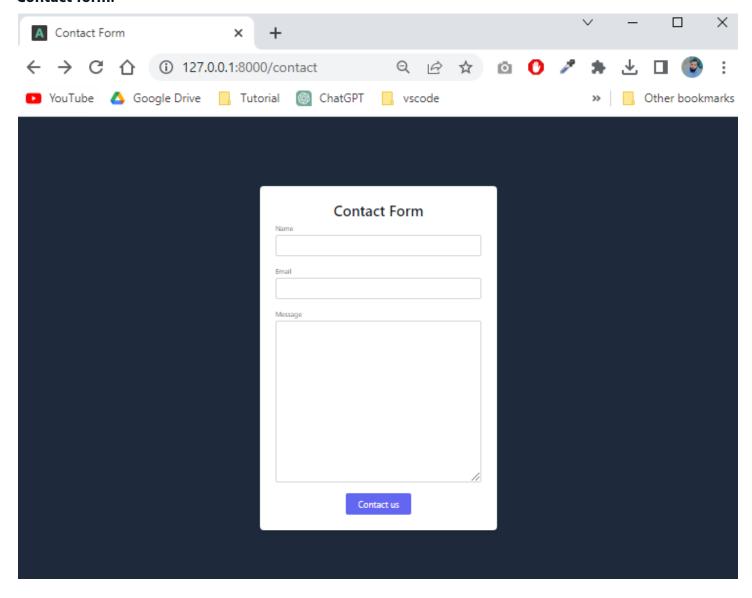
Task 6: Single Action Controller

Create a single action controller called ContactController that handles a contact form submission. Implement the __invoke() method to process the form submission and send an email to a predefined address with the submitted data.

ContactController __invoke function:

```
public function __invoke( Request $request ) {
        // Validating the request data
        $request→validate( [
             'name' \Rightarrow 'required|min:2',
             'email' ⇒ 'required|email',
             'message' \Rightarrow 'required|min:20',
        ]);
        if ( $request→filled( ['name', 'email', 'message'] ) ) {
             // Return a JSON response
             return response() → json( [
                             \Rightarrow $request\rightarrowinput( 'name' ),
                  'name'
                 'email' ⇒ $request→input( 'email' ),
'message' ⇒ $request→input( 'message' ),
                 'Confirmation' ⇒ 'Message sent successfully! We will be in touch
very soon.',
             ]);
        return redirect()→back();
```

Contact form:



Task 7: Resource Controller

Create a resource controller called PostController that handles CRUD operations for a resource called Post. Ensure that the controller provides the necessary methods for the resourceful routing conventions in Laravel.

Resource -PostController all method:

```
public function index() {
    return Post::all();
}

public function create() {
    return Post::all();
}

public function store( Request $request ) {
    $posts = new Post;
```

```
$posts→title = $request→title;
       $posts→description = $request→description;
       $posts→save();
       return $posts;
   public function show( string $id ) {
       return Post::findOrFail( $id );
   public function edit( string $id ) {
       return Post::findOrFail( $id );
   public function update( Request $request, string $id ) {
       $posts = Post::findOrFail( $id );
       $posts→update( [
            'title'
                        ⇒ $request→title,
           'description' ⇒ $request→description,
      1);
     return response()→json( ['message' ⇒ 'Successfully updated Post', $posts], 200
);
   public function destroy( string $id ) {
       $posts = Post::findOrFail( $id );
       $posts→delete();
       return response()→json( ['message' ⇒ 'Successfully deleted Post'], 202 );
```

Api Route::resource:

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

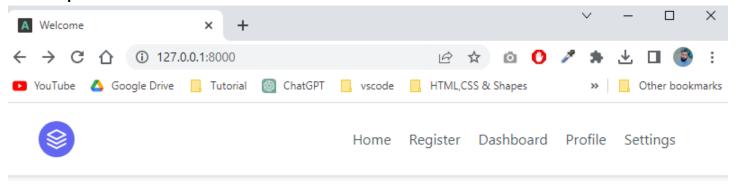
Task 8: Blade Template Engine

Create a Blade view called welcome.blade.php that includes a navigation bar and a section displaying the text "Welcome to Laravel!".

Route:

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

View template:



Welcome to Laravel!