set up a Laravel + React + Inertia.js full-stack application

1. Create a Laravel Project

composer create-project laravel/laravel laravel-react-inertia cd laravel-react-inertia

2. Install Inertia.js (Server-Side for Laravel)

composer require inertiajs/inertia-laravel

Publish the middleware:

php artisan inertia:middleware

🔽 Register Inertia Middleware in Laravel 12

composer require inertiajs/inertia-laravel php artisan inertia:middleware

+ Step 1: Register Middleware in bootstrap/app.php

Open bootstrap/app.php, and add your middleware in the web middleware group like this:

```
use App\Http\Middleware\HandleInertiaRequests;
use Illuminate\Foundation\Application;
use Illuminate\Foundation\Configuration\Exceptions;
use Illuminate\Foundation\Configuration\Middleware;

return Application::configure(basePath: dirname(_DIR__))
   ->withRouting(
    web: _DIR__.'/../routes/web.php',
    api: _DIR__.'/../routes/api.php',
)
   ->withMiddleware(function (Middleware $middleware) {
```

```
// Register global middleware here if needed

// Add the Inertia middleware to the 'web' group
$middleware->group('web', [
    \Illuminate\Cookie\Middleware\EncryptCookies::class,
    \Illuminate\Http\Middleware\AddLinkHeadersForPreloadedAssets::class,
    \Illuminate\Cookie\Middleware\AddQueuedCookiesToResponse::class,
    \Illuminate\Session\Middleware\StartSession::class,
    \Illuminate\View\Middleware\ShareErrorsFromSession::class,
    HandleInertiaRequests::class,
    ]);
})
->withExceptions(function (Exceptions $exceptions) {
    //
})->create();
```

- ✓ Now HandleInertiaRequests will be used in all web routes.
- ⚠ If You're Using Laravel Breeze

php artisan breeze:install react

It **automatically registers** everything for you—including the Inertia middleware—so you **don't need to do anything extra**.

But if you're setting things up manually or modifying middleware, bootstrap/app.php is where it's done now.

3. Install Laravel Breeze with React + Inertia

```
composer require laravel/breeze --dev
php artisan breeze:install react
npm install && npm run dev
php artisan migrate
```

This is set up:

Inertia.js

- React
- Auth scaffolding
- TailwindCSS
- Proper file structure

4. Directory Structure After Breeze Install

5. Add a Custom Route and Page

routes/web.php

```
use Inertia\Inertia;
use Illuminate\Support\Facades\Route;

Route::get('/', function () {
   return Inertia::render('Home', [
      'message' => 'Hello from Laravel with React + Inertia!'
   ]);
});
```

resources/js/Pages/Home.jsx

6. Run Your App

php artisan serve npm run dev

Input Request File Validation ->

Store Image ->

```
if ($request->file('thumbnail')){
    $thumbnail = $request->file('thumbnail');
    $thumbnailName = $thumbnail->getClientOriginalName();
    $directory = 'upload/article/';
    $thumbnail->move($directory,$thumbnailName);
    $thumbnailUrl = $directory.$thumbnailName;
    $article->thumbnail = $thumbnailUrl;
}
```

Update Image ->

```
if ($request->file('thumbnail')){
    if (file_exists($article->thumbnail)){
        unlink($article->thumbnail);
    }
    $thumbnail = $request->file('thumbnail');
    $thumbnailName = $thumbnail->getClientOriginalName();
    $directory = 'upload/product/thumbnail/';
    $thumbnail->move($directory,$thumbnailName);
    $thumbnailUrl = $directory.$thumbnailName;
    $article->thumbnail = $thumbnailUrl;
}
```