Project Folder Structure Explanation

This document explains the folder structure of the project, including subfolders, and the function of each folder.

# Root Level

**public/**

Contains static assets such as images, mock data, and files that are served directly.

* **img/***: Product images, banners, and other static images.*
* **mock/***: Mock data for development or demo purposes.*

**src/**

Main source code directory for the application.

* **assets/**

Static resources (e.g., logos, SVG icons) used in components.

* **components/**

Reusable React components, organized by feature or type.

* **AdminBrand/***: Components for managing brands in the admin panel.*
* **AdminCategory/***: Components for managing categories in the admin panel.*
* **AdminPopup/***: Popup components for admin features.*
* **AdminProduct/***: Components for managing products in the admin panel.*
* **AdminPromotion/***: Components for managing promotions in the admin panel.*
* **AdminSidebar/***: Sidebar for the admin panel.*
* **Bill/***: Components related to invoices and billing.*
* **Button/***: Shared button components.*
* **Card/***: Product card display components.*
* **Carousel/***: Image carousel components.*
* **CategorySidebar/***: Sidebar for product categories.*
* **Checkout/***: Components for the checkout process.*
* **Compare/***: Product comparison components.*
* **DropdownCart/***: Dropdown shopping cart components.*
* **Footer/***: Footer components.*
* **Header/***: Header components.*
* **Input/***: Shared input components.*
* **LazyImage/***: Optimized image loading components.*
* **LoadingSpinner/***: Loading indicator components.*
* **Modal/***: Shared modal components.*
* **ModernAuth/***: Modern UI components.*
* **Notification/***: Notification components.*
* **OrderHistory/***: Order history components.*
* **Promotion/***: Promotion display components.*
* **Rating/***: Product rating components.*
* **RedirectNotification/***: Redirect notification components.*
* **ResponsiveAuth/***: Responsive authentication UI components.*
* **SideBar/***: Sidebar for user pages.*
* **SortDropdown/***: Product sorting components.*
* **TokenDebugger/***: Token debugging components.*
* **hooks/**

Custom React hooks for reusable logic (e.g., authentication, data fetching).

* **layouts/**

Layout components defining the overall structure for different pages (AdminLayout, MainLayout, AuthLayout).

* **pages/**

Main page components, each subfolder represents a route or major feature.

* **About/***: About page.*
* **Admin/***: Admin pages, divided into Bills, Brands, Categories, Dashboard, Products, Promotions, Users.*
* **Cart/***: Shopping cart page.*
* **Category/***: Product category page.*
* **Checkout/***: Checkout page.*
* **Contact/***: Contact page.*
* **Dashboard/***: User dashboard.*
* **Favorites/***: Favorite products page.*
* **ForgotPassword/***: Forgot password flow (steps: enter email, verify code, reset password).*
* **Home/***: Home page.*
* **Login/***: Login page.*
* **OrderHistory/***: Order history page.*
* **ProductDetail/***: Product detail page.*
* **Register/***: Registration page.*
* **Search/***: Product search page.*
* **UserInfo/***: User information page.*
* **routes/**

Route definitions and route protection logic (ProtectedRoute, AdminProtectedRoute).

* **services/**

Service files for API calls and business logic (e.g., productService, userService, loadingService).

* **stores/**

State management files (e.g., authStore, cartStore).

* **styles/**

Shared or global CSS files for styling the application.

* **types/**

TypeScript type definitions used throughout the project.

* **utils/**

Utility and helper functions for logic, validation, formatting, etc.

# Other Files and Folders

**index.html***: The main HTML file loaded by the application.*

**package.json, package-lock.json***: Node.js package management files, listing dependencies and scripts.*

**tsconfig.json, tsconfig.app.json, tsconfig.node.json***: TypeScript configuration files.*

**README.md, ADMIN\_PANEL\_GUIDE.md, MODERN\_UI\_GUIDE.md, AUTH\_IMPROVEMENTS.md***: Documentation and guides for setup, features, and improvements.*

**Summary:**

This structure organizes the codebase for clarity, scalability, and maintainability, separating concerns by feature and functionality.