

Functional Components:

1. Product Listing Component

Purpose: Displays products dynamically in a grid layout, fetched from CMS or API.

Description: This component is used to showcase all the available products on the marketplace homepage. It pulls the product data from a backend or API, ensuring that the content is always updated.

2. Product Detail Component

Purpose: Shows detailed information about a selected product using dynamic routing.

Description: This component allows users to click on a product from the listing page and view detailed information. The URL updates based on the selected product, providing a seamless user experience with routing.

3. Category Component

Purpose: Allows users to filter products based on categories.

Description: Categories are dynamically fetched, and users can select specific categories to filter products based on their preferences.

4. Search Bar

Purpose: Provides users with the ability to search products by name or description.

Description: The search bar is crucial for helping users find specific products quickly. It uses a search query to filter products by matching text in the name or description fields.

5. Cart Component

Purpose: Displays the selected products, their quantities, and the total price.

Description: This component tracks items added to the cart. Users can view the products they've selected, adjust quantities, and see the total cost before checking out.

6. Reviews Component

Purpose: Allows users to submit and view product reviews.

Description: Customers can share their experiences with a product by leaving reviews. This component is essential for building trust and helping future customers make decisions.

7. Pagination Component

Purpose: Breaks large product lists into smaller, manageable pages.

Description: Pagination ensures that users can navigate through large product lists without overwhelming the page. It improves load times and user experience, especially when dealing with many products.

8. Footer and Header Component

Purpose: Provides consistent navigation and branding across the website.

Description: The header contains links to key pages, such as Home, Shop, Cart, and Profile, while the footer includes essential links and information like contact details, social media links, and terms of service.

9. Notification Component

Purpose: Displays real-time alerts for user actions, errors, or success messages.

Description: This component is used to inform users about the success of their actions, such as adding items to the cart or completing a purchase. It can also display error messages, like failed payments or invalid inputs.

10. Contact Form with Validation

Purpose: Ensures accurate and valid user input for reliable and efficient communication.

Description: The contact form allows users to get in touch with the marketplace team. It includes validation to make sure all fields are filled correctly and that the user's message is properly submitted.

Non-Functional Components:

1. FAQ Component

Purpose: Provides a searchable FAQ section for user assistance.

Description: This section helps users find answers to commonly asked questions quickly, reducing the need for direct customer support.

2. Multi-Language Support Dropdown

Purpose: Allows users to switch between multiple languages.

Description: This component is designed to enhance the global reach of the marketplace by providing a multilingual interface. It enables users to select their preferred language for a personalized experience.

3. Checkout Flow Component

Purpose: Manages the flow of the checkout process, breaking it down into manageable steps.

Description: The checkout flow ensures that users can easily navigate through the checkout process, from adding billing information to selecting a shipping method and completing their purchase.

Libraries Used:

1. React Hook Form

Purpose: Handles forms efficiently, providing simple validation, field tracking, and error handling.

Description: This library is used for managing forms in React, ensuring an optimized and smoother experience with complex forms.

2. Zod Resolver

Purpose: A TypeScript-first schema validation library, used to validate form data.

Description: Zod Resolver integrates with React Hook Form, providing a type-safe and declarative approach to validation. It ensures the accuracy of user inputs by validating the data before submitting.

3. Shadcn/ui

Purpose: A UI component library that provides modern and responsive components.

Description: Shadcn/ui helps in creating sleek, responsive, and consistent UI elements, ensuring the user interface is aesthetically pleasing and functional.