

Day 4: Dynamic Components and Functionalities Documentation

Step 1: Functionalities Overview

The marketplace implements the following core features:

1. Product Listing Page
2. Dynamic Routes
3. Cart Functionality
4. Checkout
5. Price Calculation
6. Integration with Sanity CMS

These functionalities create a scalable, responsive marketplace.

Step 2: Functionalities in Detail

1. Product Listing Page

- Displays products dynamically from Sanity CMS in a grid or list layout.
- Offers sorting, filtering, and pagination for enhanced usability.
- Fully responsive across devices.
- Real-time updates reflect backend changes instantly.

2. Dynamic Routes

- Dynamically generated pages for each product using unique IDs (e.g., /product/[id]).
- Server-rendered for improved SEO and performance.
- Displays detailed product information, such as descriptions, images, prices, stock status, and reviews.

3. Cart Functionality

- Enables users to add, edit, or remove items from the cart dynamically.
- Real-time updates of item quantities and total costs.
- Persistent cart data using local or session storage.

- Managed with tools like React Context or Redux.

4. Checkout

- Streamlined multi-step process: billing, shipping, and payment.
- Progress tracker enhances the user experience.
- Validates user inputs and displays order summaries before submission.
- Mocked payment integration, extendable to gateways like Stripe or PayPal.

5. Price Calculation

- Real-time updates of subtotals, taxes, and discounts.
- Supports promotional codes, bulk discounts, and tiered pricing.
- Clear breakdown of costs ensures transparency.

6. Integration with Sanity CMS

- Sanity CMS manages all product data, categories, and metadata.
- Changes in the CMS reflect instantly on the frontend.
- Extendable structure to accommodate future marketplace growth.

Conclusion

This modular and responsive marketplace leverages Sanity CMS for efficient backend management and dynamic frontend components. Key functionalities—such as product listings, dynamic routes, and checkout—ensure a seamless user experience. The system is scalable and ready for future enhancements like advanced analytics or AI-driven recommendations.