



DAY 4 - BUILDING DYNAMIC FRONTEND COMPONENTS FOR YOUR MARKETPLACE (E-commerce)

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Overview

On day 4, my primary task was to create **dynamic frontend components** for the e-commerce marketplace. This involved reviewing the existing setup and carefully going through the requirements documented for the day. Below are the detailed actions taken and challenges faced:

Step 1: Planning and Listing Required Pages

- I reviewed the document thoroughly to understand the project's structure and requirements.
 - Created a comprehensive **list of pages** that were needed to meet the project's goals:
 - **Products Listing Page**
 - **Dynamic Product Details Page**
 - **Suggestion Page for Products**
 - **Blogs Section (with Latest Blog Posts and Dynamic Blog Details Page)**
 - **About Us Page**
 - **Contact Page**
 - **Help Section**
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Step 2: Product Components

1. Product Cards

- Designed and developed reusable **product cards** to display products dynamically.
- Ensured that these cards displayed necessary product details like image, name, price, and rating.

2. Dynamic Product Details Page

- Created a **dynamic route** for the product details page.
- Fetched product-specific data dynamically and rendered details such as description, specifications, and reviews.
- Implemented **suggestion functionality** that shows different products on every page reload to enhance user experience.

3. Search and Filter Functionality

- Added **search functionality** to help users find products quickly.
- Implemented **filters** to sort products based on categories, price ranges, or ratings.

- Tested the functionality thoroughly to ensure seamless integration.
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Step 3: Blog Section

1. Blog Data Creation

- As the data for blogs was not provided, I initially attempted to create a custom API for blogs.
- Faced multiple errors while creating dynamic routes for the blogs using the API. To resolve this:
 - I used JSON data as a temporary solution.
 - Structured the blog data into a reusable format for future enhancements.

2. Dynamic Blog Details Page

- Built a **dynamic details page** for each blog post.
- Enabled navigation between blogs and ensured the page displayed all relevant details like title, author, date, and content.

3. Latest Blogs Component

- Created a **Latest Blogs Component** to showcase the most recent blog posts on the homepage or dedicated blog page.
- Styled the component for a visually appealing design.

4. Latest Posts Component

- Added a **Latest Posts Section** to display trending or recently added content.
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Step 4: Featured and Trending Products

1. Top Products Component

- Designed a section to highlight **top-rated products**.
- Added hover effects and responsive design to ensure compatibility across devices.

2. Featured Products Component

- Created a dedicated section for **featured products**, dynamically fetching and displaying data.

3. Trending Products Component

- Added a **trending products section** to showcase products that are most popular.
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Step 5: Additional Features

1. Dynamic Cart and Wishlist

- Built a **cart functionality** to allow users to add products, view total price, and manage quantities dynamically.
- Added a **wishlist feature** to save favorite products for future reference.

2. About Us and Contact Components

- Created content and components for the **About Us** page.
- Designed a **Contact Us** form with fields for name, email, and message submission.

3. Help Component

- Added a **Help Section** to address user queries or provide assistance.

4. Shimmer Loading Effects

- Implemented **shimmer loading effects** for better user experience during data fetching.
- This ensures that users see loaders instead of blank spaces while waiting for content to load.

Challenges Faced

1. API for Blogs

- Encountered errors while implementing dynamic routes for blogs using a custom API.
- Resolved the issue temporarily by using JSON data but will revisit the API implementation later.

2. Error Handling in Dynamic Pages

- Faced multiple errors in fetching and rendering data for dynamic product and blog pages.
- Spent considerable time debugging and resolving these issues to ensure a smooth user experience.

Double-Checking and Testing

- Double-checked all components to ensure they worked seamlessly together.
 - Verified data rendering, search, filter, and dynamic routing functionalities.
 - Tested components across devices and browsers for responsiveness and performance.
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Outcome

By the end of the day, I successfully:

1. Built all required **dynamic components** for the e-commerce website.
2. Added **search and filter functionality** for products.
3. Created reusable components for **blogs, featured products, and trending products**.
4. Integrated **shimmer loading effects** for enhanced user experience.
5. Tested the entire system to ensure everything worked flawlessly.

This was a productive and challenging day, laying the foundation for a robust and scalable E-commerce frontend.