

# Day 4 - Dynamic Frontend Components for Your Marketplace

**Prepared By:** Shahzain Ali

**Project Name:** E-commerce Marketplace

**Hackathon Day:** 4

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## Overview

This report highlights the development and implementation of dynamic frontend components for the E-Commerce marketplace. It covers essential features such as dynamic product listing, advanced search functionality, cart and wishlist management, checkout process, and more. The project leverages **Sanity CMS** for backend data storage, ensuring scalability and dynamic updates.

The report is divided into the following sections for clarity and better understanding:

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## 1. Header Functionality



### ● **Wishlist and Cart Icons:**

- Icons dynamically show the count of items added to the wishlist or cart.

- These counters update in real-time when a product is added or removed. ● **Login/Logout:**

- Users can log in via Google sign-in or by creating an account.

- Account creation includes email verification.

- After login, the user's profile picture is displayed in the header. ○ Users can log out directly from the header.

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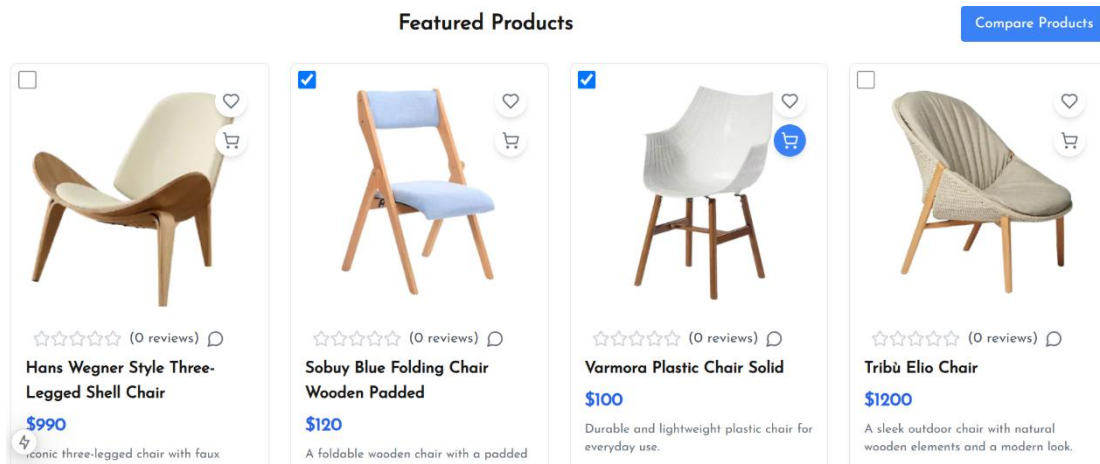
## 2. Product Display

- **Grid Layout:**

- Products are displayed in a clean, responsive grid format, ensuring usability across devices.

- **Hover Effects:**

- On hovering over a product, add-to-cart and wishlist buttons appear for quick actions.



- **Dynamic Product Detail Page:**

- Each product has its own detail page created using dynamic routing.

○ Features on this page:

■ **Product Details:** Description, price, and available options (e.g., sizes, colors).



■ **Ratings:** Users can view average ratings and submit their reviews dynamically.

# Hans Wegner Style Three-Legged Shell Chair

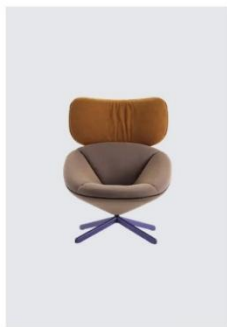
★★★★★ (5)

\$990 ~~\$10~~

Color:

- **Related Products:** Automatically displays products similar to the one being viewed based on tags or categories.

## Related Products



Armchair Tortuga ★★★★★  
\$850



Hans Wegner Style... ★★★★★  
\$990



Rapson Thirty-Nine Gu... ★★★★★  
\$1299



Cozy Armchair ★★★★★  
\$520

- **Add to Cart/Wishlist Buttons:** Users can add products directly from the detail page.

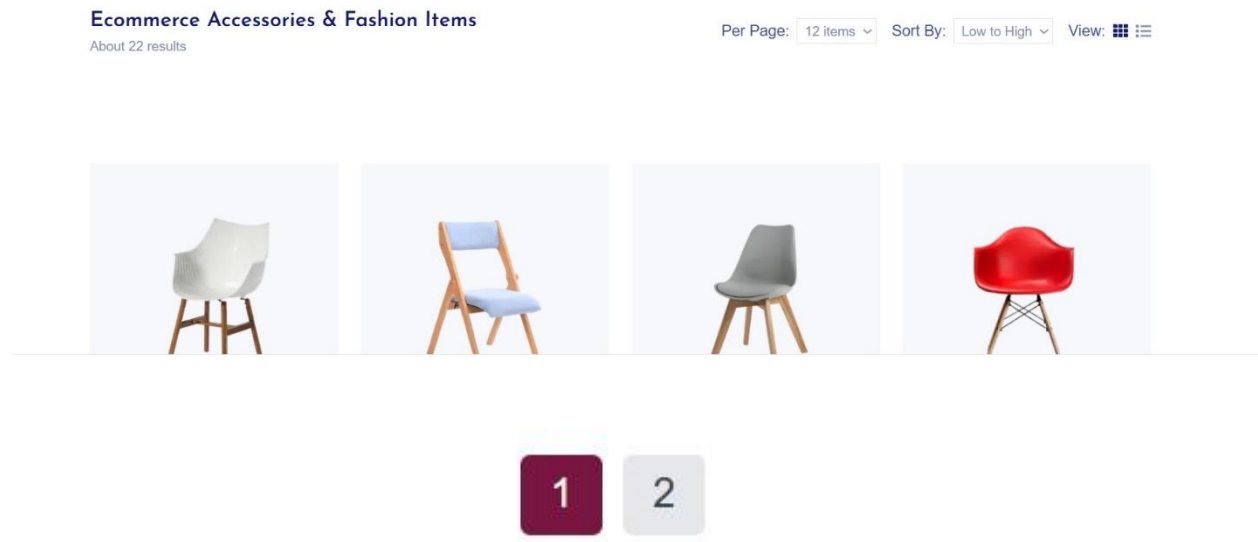
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Mauris tellus porttitor purus, et volutpat sit.

Add to Cart 

## 3. Pagination and Grid System

- **Pagination:**

- Large product lists are split into pages for better navigation.
- Includes next/previous buttons or numbered pagination.
- **Responsive Grid System:**
  - Ensures products are displayed consistently on all devices, adjusting the layout dynamically.



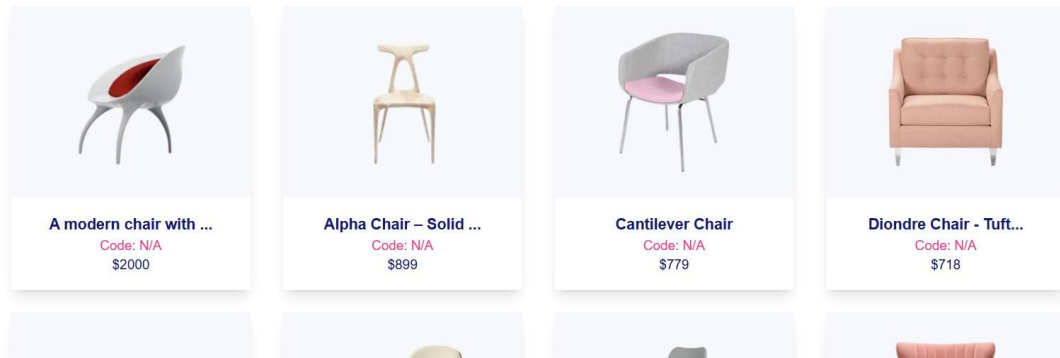
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#### 4. Search Functionality

- **Real-Time Search:**
  - Users can search for products by name or tag.
- Results are fetched dynamically as the user types.



## Search Results for chair







- **Loader:**
  - A loading animation runs while the results are being fetched to improve user experience.

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## 5. Cart Functionality

- **Item Management:**
  - Users can increase or decrease product quantities or remove items entirely.
- **Total Price:**
  - Automatically calculates and displays the total price based on the items in the cart.
- **Clear Cart:**
  - A single button to remove all items from the cart.
- **Access Restrictions:**
  - Only logged-in users can access the cart. Logged-out users are prompted to log in first.

Product	Price	Quantity	Total	Cart Totals	
<div><div></div><div>A modern chair with a carbon fiber frame and bold red accents.</div></div>	\$2000.00	<div><div>-</div><div>1</div><div>+</div></div>	£2000.00	Subtotal:	£3738.99
<div><div></div><div>Alpha Chair - Solid Ebonised Oak</div></div>	\$899.00	<div><div>-</div><div>1</div><div>+</div></div>	£899.00	Total:	£4396.00
<div><div></div><div>Cantilever Chair</div></div>	\$779.00	<div><div>-</div><div>1</div><div>+</div></div>	£779.00	<input type="checkbox"/> Shipping & taxes calculated at checkout.	
<div><div></div><div>Diondre Chair - Tuft Button - Acrylic Legs</div></div>	\$718.00	<div><div>-</div><div>1</div><div>+</div></div>	£718.00	<div>Proceed to Checkout</div>	
<div>Update Cart</div>			<div>Clear Cart</div>		

## 6. Wishlist Functionality

- **Save for Later:**
  - Users can add products to their wishlist for future reference.
- **Move to Cart:**
  - Products from the wishlist can be directly moved to the cart.
- **Clear Wishlist:**
  - Option to remove all items from the wishlist.
- **Access Restrictions:**
  - Only logged-in users can access the wishlist.

Product	Price	Old Price	Actions
 Diondre Chair - Tuft Button - Acrylic Legs	\$718.00	<del>\$7.00</del>	<a href="#">Add to Cart</a>
 Cantilever Chair	\$779.00	<del>\$15.00</del>	<a href="#">Add to Cart</a>
 Futuristic Sleek Modern Chair	\$2000.00	<del>\$0.00</del>	<a href="#">Add to Cart</a>
<a href="#">Clear Wishlist</a>			

## 7. Checkout Process

- **Billing Information:**
  - A multi-step form collects billing and shipping information, which is stored in Sanity CMS.
- **Payment System:**

- Integration of a payment method for completing purchases.
- **Order Completion:**
  - After successful payment, users are redirected to an order completion page displaying their order details.
- The completed order data, including billing details and products, is stored in Sanity CMS for future reference.

**Hekto** Home Pages Products Blog Shop Contact

Search products...

First name (optional) Last name

Address

Apartment, suite, etc. (optional)

City

Country Postal Code

**Continue Shipping**

**Diondre Chair - Tuft Button - Acrylic Legs**  
Color: N/A  
Size: N/A

**Subtotal: £3738.99**

**Total: £4396.00**

☐ Shipping & taxes calculated at checkout.

**Proceed to Checkout**

ecommerce TEST MODE

Pay ecommerce

**\$4,396.00**

**A modern chair with a carbon fiber frame and bold red accents.** \$2,000.00  
A modern chair with a carbon fiber frame and bold red accents.

**Alpha Chair – Solid Ebonised Oak** \$899.00  
A sturdy oak chair with a sleek and minimalist design.

**Cantilever Chair** \$779.00  
A modern cantilever chair with a unique floating effect.

**Diondre Chair - Tuft Button - Acrylic Legs** \$718.00  
A tufted chair with acrylic legs for a chic, modern touch.

**Subtotal \$4,396.00**

[Add promotion code](#)

**Pay with card**

Email infojawaaidali@gmail.com

**Card information**

1234 1234 1234 1234 VISA

MM / YY CVC

**Cardholder name**

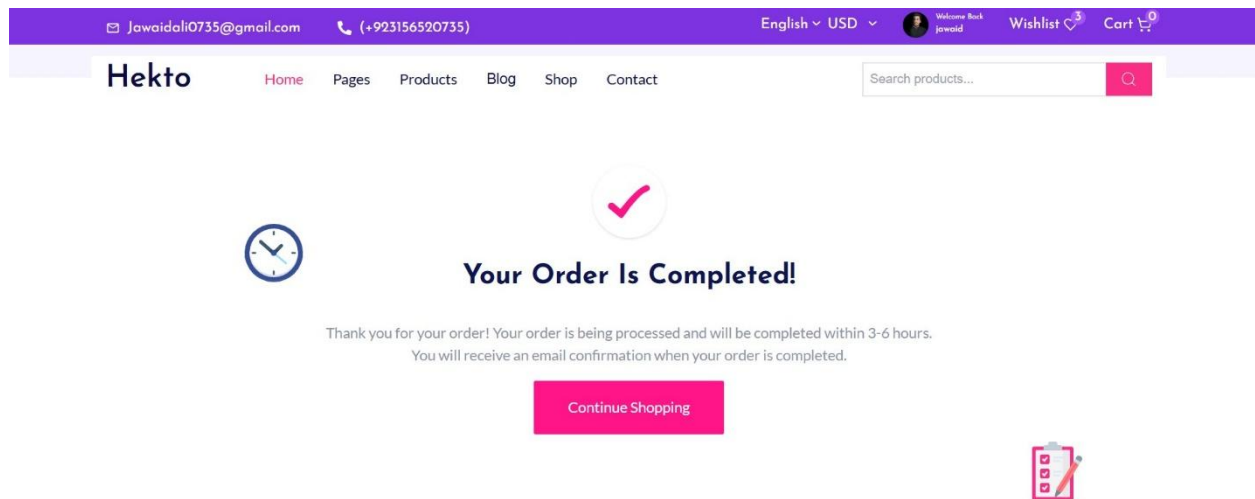
Full name on card

**Country or region**

Pakistan

☐ Securely save my information for 1-click checkout  
Pay faster on ecommerce and everywhere Link is accepted.

**Pay**



## Self-Validation Checklist

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### 1. Header Functionality

- ✓ Wishlist and cart icons show dynamic item counts.
  - ✓ Login via Google and email verification.
  - ✓ Profile picture displayed after login. • ✓ Logout functionality available.
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### 2. Product Display

- ✓ Dynamic product listing in a responsive grid layout.
  - ✓ Hover effects for quick actions (add to cart/wishlist).
  - ✓ Dynamic product detail page with full product details.
  - ✓ Ratings system for viewing and submitting reviews.
  - ✓ Related products displayed dynamically on the detail page.
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### 3. Pagination and Grid System

- ✓ Pagination implemented for large product collections.
  - ✓ Responsive grid adapts to all screen sizes (mobile, tablet, desktop).
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#### 4. Search Functionality

- ✓ Real-time product search with dynamic filtering.
  - ✓ Smooth loader animation while fetching results.
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#### 5. Cart Functionality

- ✓ Add, remove, and update product quantities.
  - ✓ Total price calculated dynamically.
  - ✓ Clear cart option available for quick actions.
  - ✓ Access restricted to logged-in users only.
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#### 6. Wishlist Functionality

- ✓ Products can be saved to the wishlist.
  - ✓ Wishlist items can be moved directly to the cart.
  - ✓ Clear wishlist option implemented.
  - ✓ Wishlist access restricted to logged-in users.
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#### 7. Checkout Process

- ✓ Multi-step form collects billing and shipping information.
  - ✓ Billing details stored securely in Sanity CMS.
  - ✓ Payment system integrated to process orders.
  - ✓ Order summary displayed after payment.
  - ✓ Completed orders stored in Sanity CMS for tracking.
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#### 8. Styling and Responsiveness

- ✓ Responsive grid layout for product listings.
- ✓ Consistent UI design across all pages.
- ✓ Mobile responsiveness for all components.
- ✓ Modern styling with proper fonts, colors, and spacing.

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## 9. Code Quality

- ✓ Modular and reusable components.
- ✓ Clean and organized code structure.
- ✓ Proper use of state management and data binding. • ✓ Optimization for performance and loading speed.

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## 10. Documentation and Submission

- ✓ Clear documentation for each component.
- ✓ Detailed steps for setting up and running the application.
- ✓ Screenshots and videos provided for all key features. • ✓ Submission completed before the deadline.

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## 11. Final Review

- ✓ All functionality tested (products, cart, checkout).
- ✓ UI/UX reviewed for user-friendliness.
- ✓ No bugs/issues identified during development.

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## 12. Professional Practices Emphasized

- ✓ Modular and reusable component design.
- ✓ State management and dynamic data binding.
- ✓ Responsive and user-friendly UI design.
- ✓ Thorough documentation for code and processes.