# **Day 4 - Dynamic Frontend Components - As Food Website**

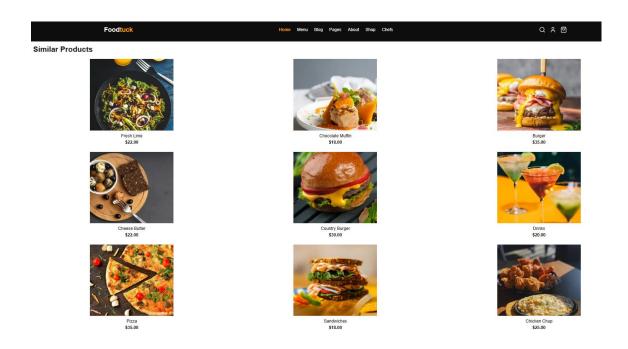
#### **Introduction**

On Day 4, the focus will be on designing and developing dynamic frontend components for our marketplace. These components will retrieve data from Sanity CMS or external APIs and render it in real-time on the frontend. The primary objective is to emphasize modular architecture, ensuring reusability across different parts of the application. Additionally, state management practices will be implemented to enhance scalability, maintain performance, and support seamless user interactions.

#### **Key Elements to Develop and Their Overview**

## 1. Product Display Component

The Product Display Component is created to dynamically present products in a grid format. It showcases essential product information, including name, price, image, and stock availability, enabling users to easily explore available products. This component is designed to be reusable across various product categories.



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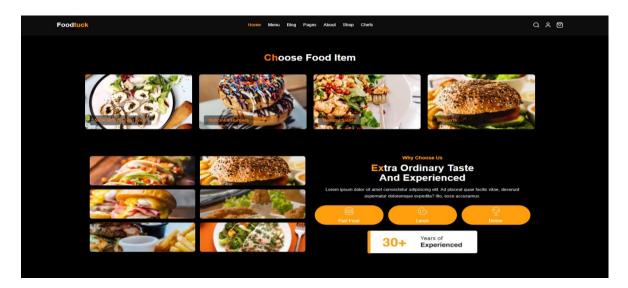
## 2. Product Information Component

The Product Information Component enables the display of detailed information for each product through dynamic routing in Next.js. Each product has its own dedicated page, showcasing comprehensive details such as description, available sizes, and pricing.



## 3. Category Filter Component

The Category Filter Component dynamically retrieves product categories and provides filtering options. Users can select specific categories to view relevant products, enhancing their browsing experience and making it more efficient.



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#### 4. Search Functionality

The search functionality allows users to filter products by name or tags. As users type, the search results are updated in real-time to match their query, providing a seamless search experience.



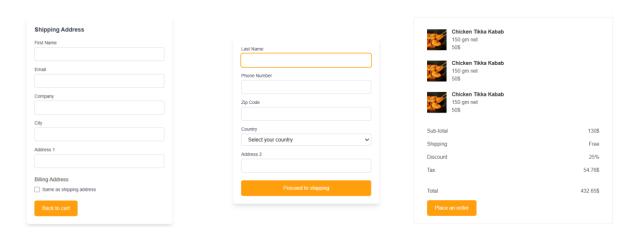
### 5. Shopping Cart Module

The Shopping Cart Module displays the products users add to their cart, including item quantity and total cost. It leverages state management to keep track of the cart contents and ensure accurate updates.



## 6. Checkout Process Component

The Checkout Process Component is a multi-step form that captures essential details, such as billing and shipping addresses, along with mock payment information, facilitating a smooth checkout experience.



## **Summary**

By the end of Day 4, I have effectively designed and implemented a range of dynamic frontend components for the marketplace, including product listings, individual product detail pages, search functionality, and category filtering. These components are structured to be modular, reusable, and responsive, ensuring both scalability and optimal performance. As a result, the project now showcases a fully functional marketplace with essential features, providing a strong foundation for future growth and refinement.

## **Check List of Day 4:**

Task	Status
Frontend Component Development	✓ Completed
Styling and Responsiveness	✓ Ensured the UI is responsive across different devices
Code Quality	✓ Followed clean coding practices, and modular components were created
Documentation and Submission	✓ Documentation has been completed and submitted in PDF format
Final Review	✓ Project has been reviewed and is ready for submission

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