

# ***Day 4 - Dynamic Frontend Components - [Furniture]***

## **Overview**

Today, I worked on creating dynamic components for the Furniture website, focusing on product listings, including different furniture items such as chairs, stools, and sofas. I integrated real-time data fetching and added pagination for smooth navigation. I also built category filters for easy product sorting. The design is responsive, ensuring a great shopping experience on both desktop and mobile.

## **Objective**

Build a dynamic frontend for an e-commerce marketplace. Implement pagination, category filters, and responsive design.

## **Features Delivered**

- Product listing with pagination.
- Category filters for dynamic product segmentation.
- Responsive and reusable components.

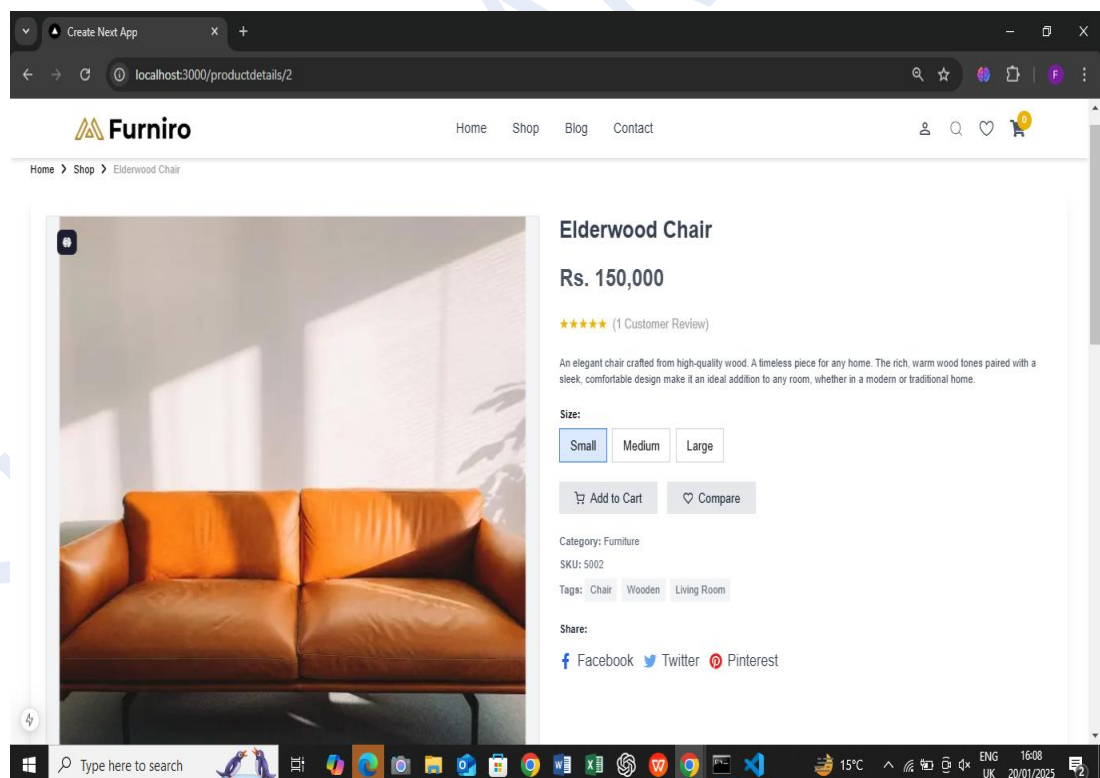
# Fetching Product Data

## Project Overview

### Product Listing Page (Dynamic Data):

The product listing page is designed to dynamically fetch and display products. The data is fetched in real-time, which ensures the content stays updated without the need for manual changes.

**Product Details:** The page displays important information such as product titles, prices, and images fetched dynamically.

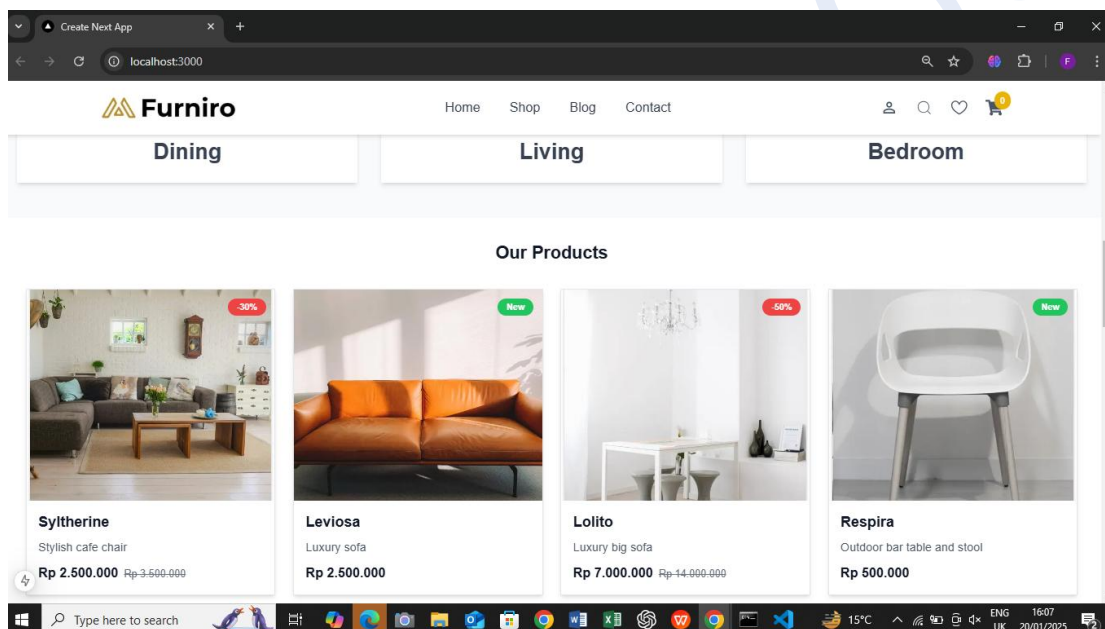


**Responsive Design:** The page layout is fully responsive, ensuring optimal viewing across

devices such as mobile phones, tablets, and desktops. Tailwind CSS utilities ensure that the content is rearranged according to the screen size, enhancing usability.

## Featured and Categories Data Fetching:

Products are categorized (e.g., featured, new arrivals, etc.) and can be filtered dynamically using category-based APIs.



**Category Filtering:** Users can view products based on categories (e.g., Living Room, Office Furniture), or they can browse specific featured products that highlight top-selling items.

This system streamlines product discovery, allowing users to quickly find what they are looking for.

## **Gallery Product**

- The product gallery is visually organized into a grid layout, showing a series of product cards.
- The gallery uses CSS Grid and Flexbox to ensure an attractive and responsive display of products, with each product card containing essential information and images.

## **Pagination**

Pagination is implemented to ensure that a manageable number of products are displayed per page, improving page load times and overall user experience.

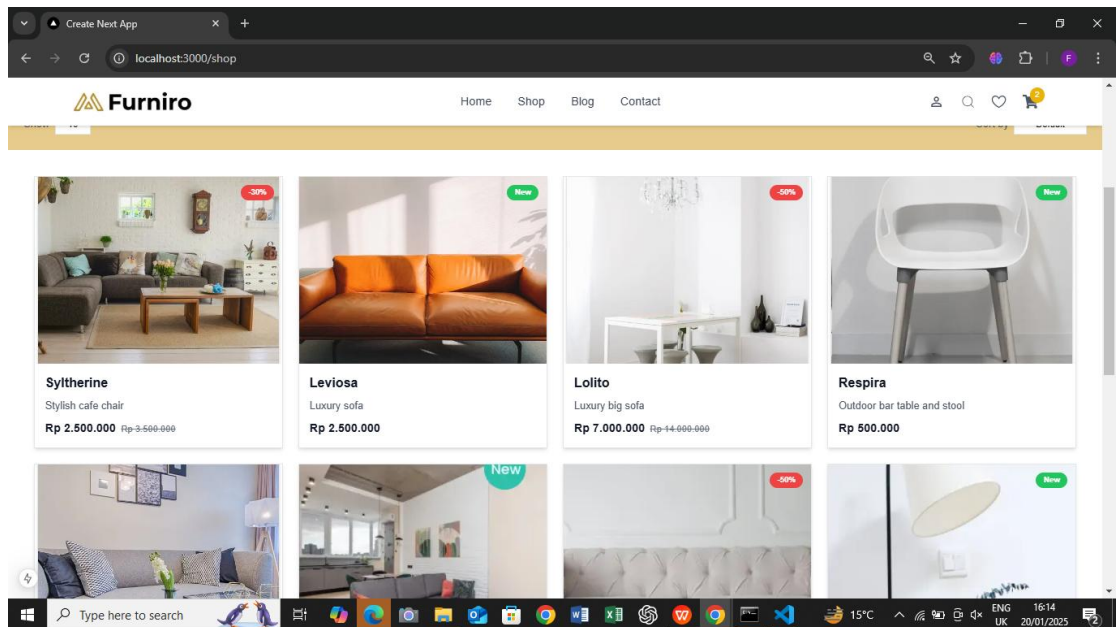
Users can navigate through multiple pages of products, ensuring they can browse the entire inventory without overwhelming the page with too many items at once.

## **Category Filter**

The category filter allows users to refine product results based on selected categories.

When a user selects a category (e.g., “Sale” or “Office Furniture”), the product listing automatically updates to show products that match the selected category.

This functionality enhances the user experience by allowing for more specific and refined searches.



## Dynamic Page

Each product has its own page that is dynamically generated using Next.js.

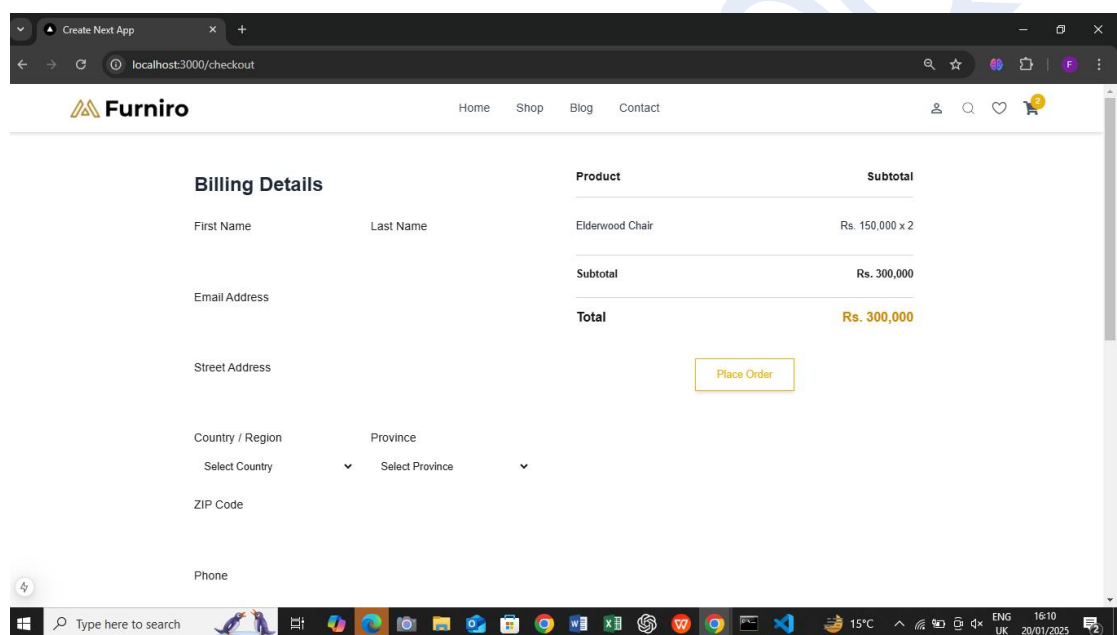
The page content (title, price, description, images) is fetched from the Sanity CMS or other backend sources based on the product's unique identifier (ID).

This ensures that when a user clicks on a product, they are shown real-time data specific to that product.

## What We Learned from This Project

### Dynamic Data Handling:

We gained valuable skills in working with dynamic data fetching and routing, making our application flexible and responsive to data changes.



### User Experience Enhancements:

By adding features like search, filters, pagination, and related products, we learned how to improve the usability and overall experience for customer

## **Frontend Optimization:**

We learned how to implement pagination and lazy loading to optimize the performance of the frontend, making sure pages load faster and handle large datasets efficiently.

## **Responsive Web Design:**

We explored how to build responsive web pages using Tailwind CSS, ensuring that the website looks great on any device, which is crucial for modern web development.

## **Conclusion**

In conclusion, the Furniture website offers a dynamic and responsive e-commerce platform, featuring an attractive selection of chairs, stools, and sofas. By integrating product listings, category filters, and pagination, it provides an intuitive shopping experience. The website's design ensures accessibility on all devices, and its modular components are built for future scalability.