

Hackathon

Day 4 - Report

Prepared By
AFFAN KHALID

Day-4

DYNAMIC FRONTEND COMPONENTS

INTRODUCTION

PROJECT OVERVIEW

Day 4 is focused on designing and building dynamic frontend component using Nextjs. The primary goal was to create reusable, modular and dynamic components and also using sanity where the data is come from database .

KEY COMPONENTS BUILT

Product Listing Component

- Rendered Product Details dynamically in a grid layout and also using flexbox , including a Furniture name, price , image, rating .

Product Detail Component

- Implemented dynamic routing to display detailed Furniture description , images, price, reviews, ratings, vendor, Dimensions, return warranty, etc.
- Integrated a "Similar Items" section by fetching the same category product.

Searchbar Component

- By creating a custom API to fetch the results according to the query by using sanity groq.

Filterpanel Component

- Filter the results of the response got from an API of sanity groq.
- Filters the result based on the selected option, options, including price low to high , high to low, sort A to Z, sort Z to A, sort by Most Popular , etc.

Category Componnet

- Filter the results according to the selected Category.
- Categoriories , include Sofa , office chairs, Beds, Wardrobes, etc.

STEPS FOR IMPLEMENTATION

Component Design

- Created reusable components such as Card, CategoryFilter, and SearchBar.
- Ensured props were used to maintain flexibility across components.

API INTEGRATION

- Fetch data from sanity CMS and rendered it dynamically on pages.
- Implemented error handling and fallback state for consistent UI.

STYLING

- Using tailwind CSS to ensure modern and effective UI.
- By using tailwind we ensure that our layouts are responsive respectively for both Mobiles and Desktops.

PERFORMANCE OPTIMIZATION

- Implement Pagination to handle large datasets efficiently.

CHALLENGES AND SOLUTIONS

SEARCH

- **Challenge** : Faced problems like the search is working but when I connect it to backend it is not working because the url not change.
- **Solution** : I use Router to dynamically navigates to that url.

Pagination

- **Challenge** : Faced problem when the making the each dynamic page button .
- **Solution** : I use count method to count the dynamically fetched total products and then base on the number of products create dynamic number of pages .

OUTCOME

The final result is a fully functional and responsive marketplace frontend, featuring dynamic components for product listing, details, search, filtering, and much more. These components are scalable and modular , and they are make according to industry best practices.

SUBMISSION DETAILS

SCREEN RECORDINGS

PAGINATION

[Pagination Video Link](#)

Productdetail page +Similar items

[Productdetail page +Similar itemsVideo Link](#)

Search Functionality

[Search Functionality Video Link](#)