

BUILDING DYNAMIC FRONTEND COMPONENTS FOR YOUR MARKETPLA

DAY-04

1. Technical Reports:-

➤ OBJECTIVE

- API Integration
- Dynamic Page Creation
- Search and Filter Functionality
- Responsive Design
- Styling Enhancements
- About and Contact

• DETAILS:

• API Integration:

Successfully fetched data from the API and integrated it into the frontend. Ensured proper handling of dynamic data.

• Dynamic Page Creation:

The dynamic page was designed to display detailed information about each product fetched from the API. Using the API response, we dynamically retrieved and displayed key details, including the product's image, name, price, description, and stock status. The image was displayed prominently for better visual appeal, followed by the product name and price to catch the user's attention

• Search and Filter Functionality:

Implemented a search bar functionality to allow users to search through the data effectively. Added filtering options to refine results based on various parameters.

• Responsive Design:

Ensured that the page is fully responsive, adapting to different screen sizes with optimal display on both mobile and desktop devices.

• Challenges and Their Solutions:

Challenge 1: Writing Dynamic Code

Solution:

Use map() to dynamically loop over API data and render components.

Apply props to pass data into reusable components.

Example: Rendering product cards dynamically from a product list.

Challenge 2: API Integration

The API image URLs were not properly configured for use in the Next.js project. Next.js restricts external image domains for security and performance reasons.

Solution:

Configured the **next.config.js** file to allow images from external sources.

Used the optimized Image component from Next.js for dynamic image rendering.

CHEKLIST

- ✓ Frontend Components Development
- ✓ Styling Responsive
- ✓ Code Quality
- ✓ Documentation and Submission