

## **MERN Stack Training**

**Company:** Sensation Software Solutions

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**Training Duration:** 6 Months

**Days:** 72

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### **Objective of the Day**

The goal of Day 72 was to **establish product listing functionality on the frontend**. This included connecting the frontend to the backend's GET endpoint, fetching product data, and presenting it using React components styled with Tailwind CSS.

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### **Work Detailed Summary**

#### **1 Product List UI Creation**

- Created a new React component named **ProductList.jsx**.
- Structured layout using Tailwind utility classes for spacing, columns, and responsive utilities.

#### **2 Backend Integration**

- Used `fetch()` / `axios` to call **GET /products**.
- Implemented loading and error states for improved UX feedback.
- Stored response results in local component state for rendering.

## 3 ProductCard Component

Each individual product was displayed using a dedicated card component featuring:

- Product image
- Product name
- Price tag
- Category label
- Buttons for **Edit** and **Delete** (disabled for now)

This made the UI modular and reusable for future scaling.

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## Hands-On Practice & Learning

- Practiced mapping array responses to component elements.
  - Learned the importance of **React keys** during component iteration.
  - Understood how to manage component-level and page-level state.
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## Challenges & Solutions

Challenge	Solution Applied
Broken images or missing data	Added conditional fallbacks for null fields
UI layout breaking on smaller screens	Applied responsive breakpoints (sm: md: lg:)
Fetch delays causing blank screen	Added "Loading products..." placeholder UI

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## Conclusion

Day 72 concluded successfully with a **fully functional product listing page** communicating with the backend. This validated the Day 71 API implementation and solidified the connection between both ends of the application.