

## **MERN Stack Training**

**Company:** Sensation Software Solutions

**Student Name:** Gurvinder Singh

**Training Duration:** 6 Months

**Days:** 79

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### **Objective of the Day**

The objective of Day 79 was to develop and incorporate the Product Filtering System on the GadgetShop platform. This included filtering products by category and price range on the frontend. It improves browsing experience and gives users control over how they view available products.

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### **Work Done on Day 79**

#### **1. Creating FilterSidebar Component**

A sidebar component named `FilterSidebar.jsx` was created, including clickable filter options for:

- Category selection
- Price range control
- Rating filter structure placeholder for future addition

The sidebar is collapsible for mobile compatibility.

#### **2. State and Filter Logic Integration**

The product list was connected to filter criteria states. When a user applies filters, the system updates the rendered product view.

The system supports multi-layer filters simultaneously, such as category + price range.

### **3. UI Design**

Tailwind CSS was used to create:

- Sidebar container
- Buttons and checkboxes
- Collapsible mobile menu for responsive handling

### **4. Auth Check Integration**

Filters are available only for authenticated users. If a guest user attempts to access filters, a redirect triggers.

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## **Conclusion**

Day 79 enhanced the browsing experience through user-driven customization of product views. The Shop page is now more interactive and structured for scale.