

```
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8" />

  <meta name="viewport" content="width=device-width, initial-scale=1.0" />

  <title>Product Catalog with Filters</title>

  <style>

    Body {

      Font-family: Arial, sans-serif;

      Background: #f4f6f8;

      Margin: 0;

      Padding: 0;

    }

    Header {

      Background: #2a6592;

      Color: white;

      Padding: 1rem;

      Text-align: center;

    }

    .filters {

      Display: flex;

      Flex-wrap: wrap;

      Justify-content: center;

      Gap: 1rem;

      Background: white;

      Padding: 1rem;

      Box-shadow: 0 2px 5px rgba(0,0,0,0.1);

    }
```

```
Select, input[type="number"], input[type="text"] {  
  Padding: 0.5rem;  
  Border: 1px solid #ccc;  
  Border-radius: 6px;  
}  
  
#productList {  
  Display: grid;  
  Grid-template-columns: repeat(auto-fit, minmax(200px, 1fr));  
  Gap: 1rem;  
  Padding: 1rem;  
}  
  
.product-card {  
  Background: white;  
  Border-radius: 8px;  
  Box-shadow: 0 2px 5px rgba(0,0,0,0.1);  
  Padding: 1rem;  
  Text-align: center;  
  Transition: transform 0.2s;  
}  
  
.product-card:hover {  
  Transform: scale(1.03);  
}  
  
.product-card img {  
  Width: 100%;  
  Height: 150px;  
  Object-fit: cover;  
  Border-radius: 8px;  
}  
  
.product-card h3 {
```

```
    Font-size: 1.1rem;

    Margin: 0.5rem 0;
}

.price {
    Color: #2a6592;

    Font-weight: bold;
}

</style>
</head>
<body>

<header>

<h1>🛍️ Product Catalog with Filters</h1>
</header>

<div class="filters">

    <input type="text" id="searchBox" placeholder="Search products...">

    <select id="categoryFilter">

        <option value="all">All Categories</option>

        <option value="electronics">Electronics</option>

        <option value="fashion">Fashion</option>

        <option value="home">Home</option>

    </select>

    <input type="number" id="minPrice" placeholder="Min Price">

    <input type="number" id="maxPrice" placeholder="Max Price">

</div>

<div id="productList"></div>
```

```
<script>
```

```
Const products = [
```

```
  { id: 1, name: "Smartphone", category: "electronics", price: 25000, image:  
https://via.placeholder.com/200x150?text=Smartphone },
```

```
  { id: 2, name: "Laptop", category: "electronics", price: 55000, image:  
https://via.placeholder.com/200x150?text=Laptop },
```

```
  { id: 3, name: "Headphones", category: "electronics", price: 2000, image:  
https://via.placeholder.com/200x150?text=Headphones },
```

```
  { id: 4, name: "T-Shirt", category: "fashion", price: 800, image:  
https://via.placeholder.com/200x150?text=T-Shirt },
```

```
  { id: 5, name: "Shoes", category: "fashion", price: 2500, image:  
https://via.placeholder.com/200x150?text=Shoes },
```

```
  { id: 6, name: "Wrist Watch", category: "fashion", price: 1500, image:  
https://via.placeholder.com/200x150?text=Wrist+Watch },
```

```
  { id: 7, name: "Sofa", category: "home", price: 30000, image:  
https://via.placeholder.com/200x150?text=Sofa },
```

```
  { id: 8, name: "Lamp", category: "home", price: 1200, image:  
https://via.placeholder.com/200x150?text=Lamp },
```

```
  { id: 9, name: "Mixer Grinder", category: "home", price: 4000, image:  
https://via.placeholder.com/200x150?text=Mixer+Grinder }
```

```
];
```

```
Const productList = document.getElementById("productList");
```

```
Const searchBox = document.getElementById("searchBox");
```

```
Const categoryFilter = document.getElementById("categoryFilter");
```

```
Const minPrice = document.getElementById("minPrice");
```

```
Const maxPrice = document.getElementById("maxPrice");
```

```
Function renderProducts(filteredProducts) {
```

```
  productList.innerHTML = "";
```

```
  if (filteredProducts.length === 0) {
```

```
    productList.innerHTML = "<p style='text-align:center;width:100%;>No products found.</p>";
```

```

    return;
}
filteredProducts.forEach(p => {
    const card = document.createElement("div");
    card.className = "product-card";
    card.innerHTML = `
        
        <h3>${p.name}</h3>
        <p class="price">₹${p.price}</p>
        <p>${p.category.charAt(0).toUpperCase() + p.category.slice(1)}</p>
    `;
    productList.appendChild(card);
});
}

```

```

Function filterProducts() {
    Const searchTerm = searchBox.value.toLowerCase();
    Const selectedCategory = categoryFilter.value;
    Const min = parseInt(minPrice.value) || 0;
    Const max = parseInt(maxPrice.value) || Infinity;

    Const filtered = products.filter(p => {
        Return (
            p.name.toLowerCase().includes(searchTerm) &&
            (selectedCategory === "all" || p.category === selectedCategory) &&
            p.price >= min &&
            p.price <= max
        );
    });
}

```

```
renderProducts(filtered);  
}
```

```
searchBox.addEventListener("input", filterProducts);  
categoryFilter.addEventListener("change", filterProducts);  
minPrice.addEventListener("input", filterProducts);  
maxPrice.addEventListener("input", filterProducts);
```

```
renderProducts(products);  
</script>
```

```
</body>  
</html>
```