

# FULL STACK - EXPERIMENT 2.2

## Experiment: Dynamic Product Filter with Dropdown using JavaScript DOM Manipulation

### AIM

Build a web-based product list that dynamically filters items using a dropdown menu and JavaScript DOM manipulation.

### CODE

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Dynamic Product Filter</title>
  <style>
    body { font-family: Arial, sans-serif; padding: 20px; }
    .container { border: 1px solid #000; padding: 15px; margin-bottom: 20px; }
    h2 { margin: 0 0 10px; }
    select { padding: 5px; margin-bottom: 15px; }
    .product { border: 1px solid #eee; padding: 10px; margin-bottom: 5px; border-radius: 4px; }
  </style>
</head>
<body>

  <div class="container">
    <h2>Product List</h2>
    <label>Filter by Category:
      <select id="categoryFilter">
        <option value="all">All</option>
        <option value="clothing">Clothing</option>
        <option value="electronics">Electronics</option>
        <option value="books">Books</option>
      </select>
    </label>
    <div id="productList">
      <div class="product" data-category="clothing">T-Shirt</div>
      <div class="product" data-category="clothing">Jeans</div>
      <div class="product" data-category="electronics">Headphones</div>
      <div class="product" data-category="electronics">Smartphone</div>
      <div class="product" data-category="books">Novel</div>
      <div class="product" data-category="books">Cookbook</div>
    </div>
  </div>

  <script>
    const filter = document.getElementById('categoryFilter');
    const products = document.querySelectorAll('.product');
```

```
filter.addEventListener('change', () => {
  const value = filter.value;
  products.forEach(product => {
    if (value === 'all' || product.dataset.category === value) {
      product.style.display = 'block';
    } else {
      product.style.display = 'none';
    }
  });
});
</script>
</body>
</html>
```

Output :

Product List

Filter by Category: All

T-Shirt

Jeans

Headphones

Smartphone

Novel

Cookbook

Product List

Filter by Category: Clothing

T-Shirt

Jeans

Product List

Filter by Category: Books

Novel

Cookbook