Assignment: React Product Details Component

Objective: Build a React application to display product details dynamically using **state** and **props**. This exercise will help you practice managing state, passing props, and rendering dynamic content in React.

Instructions

Set Up the App:

1- Create a React app using create-react-app.
2- Create the following components:

- App: The main parent component.
- ProductList: A child component that displays a list of products.
- ProductForm: A child component to add new products to the list.

Product List:

1- Create a list of 5 products in the App component. Each product should have the following properties:
  - id
  - name
  - price
  - category
  - featured
2- Pass the product list as props to the ProductList component.
3- Include filters or buttons to display [NOT FOR THIS ASSIGNMENT]:
  - All products
  - Featured products
  - Products by category (e.g., Electronics, Clothing)

ProductForm Component

The ProductForm component will allow users to add new products dynamically to the list. It can include input fields for name, price, category.

Reference:

```
const products = [
{
id: 1,
name: "Laptop",
price: 999.99,
category: "Electronics",
featured: false // New field added
},
{
id: 2,
name: "T-shirt",
price: 19.99,
category: "Clothing",
featured: false // New field added
},
{
id: 3,
name: "Microwave",
price: 89.99,
category: "Home Essentials",
featured: false // New field added
},
{
id: 4,
name: "Smartphone",
price: 699.99,
category: "Electronics",
featured: false // New field added
},
{
id: 5,
name: "Jeans",
price: 39.99,
category: "Clothing",
featured: false // New field added
},
{
id: 6,
name: "Blender",
```

```
price: 49.99,
category: "Home Essentials",
featured: false // New field added
},
{
id: 7,
name: "Wireless Headphones",
price: 159.99,
category: "Electronics",
featured: false // New field added
},
{
id: 8,
name: "Socks",
price: 5.99,
category: "Clothing",
featured: false // New field added
}
];
```