

## Assignment 9 : Product Catalogue

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**Objective:** Build a product catalogue application in React.js where users can:

1. Add products by providing a name, price, and image URL.
2. View the product listing on the right side of the screen.
3. Add products to a cart and manage the quantity, with a real-time update of the total bill.

**Key Features:**

1. Add Product Form:
  - Fields: Name, Price, Image Source URL.
  - On form submission, the product gets added to the product listing.
2. Product Listing:
  - Displays added products.
  - Each product should show the name, price, and image.
  - An "Add to Cart" button should be available for each product.
3. Shopping Cart:
  - When the "Add to Cart" button is clicked, the product gets added to the cart.
  - The cart should allow users to:
    - Increase or decrease the quantity of each product.
    - See the total price of all the items in the cart.

**Key Concepts to Practice:**

- Component State: Manage product and cart states.
- Props: Pass product details from the form to the listing and cart.
- Event Handling: Handle adding products, adding to cart, and adjusting quantities.

- Conditional Rendering: Show the cart only when products are added.
- Form Handling: Properly submit and clear the product addition form.

### Additional Hints:

- Consider breaking the app into components like ProductForm, ProductList, Cart, and ProductItem.
- Use state management to handle the cart logic efficiently.
- There will be mainly 2 states products ( an array ) to store all the products.  
Cart ( an array ) to store the elements of cart.

