Case Study 1: Online Food Ordering System

App.js

```
import React, { useState } from "react";

import Header from "./components/Header";

import Menu from "./components/Menu";

import Cart from "./components/Cart";

function App() {

  const [cart, setCart] = useState([]);


  const addToCart = (food) => {

    setCart((prevCart) => {

      const existing = prevCart.find((item) => item.id === food.id);

      if (existing) {

        return prevCart.map((item) =>

          item.id === food.id ? { ...item, qty: item.qty + 1 } : item

        );

      }

      return [...prevCart, { ...food, qty: 1 }];

    });

  };


  return (

    <div>

      <Header />
```

```jsx
      <Menu addToCart={addToCart} />

      <Cart cart={cart} />

    </div>

  );

}


export default App;
```

Header.js

```jsx
import React from "react";

function Header() {

  return (

    <header style={{ padding: "15px", background: "#007bff", color: "white" }}>

      <h1> Online Food Ordering</h1>

    </header>

  );

}


export default Header;
```

Menu.js

```jsx
import React from "react";

import FoodCard from "./FoodCard";

const foodItems = [

  { id: 1, name: "Pizza", price: 250, description: "Cheesy delicious pizza" },

  { id: 2, name: "Burger", price: 150, description: "Juicy grilled burger" },
```

```
  { id: 3, name: "Pasta", price: 200, description: "Italian pasta with sauce" },
];


function Menu({ addToCart }) {
  return (
    <div style={{ display: "flex", gap: "20px", margin: "20px" }}>
      {foodItems.map((item) => (
        <FoodCard key={item.id} food={item} addToCart={addToCart} />
      ))}
    </div>
  );
}


export default Menu;
```

FoodCard.js

```
import React from "react";

function FoodCard({ food, addToCart }) {
  return (
    <div style={{ border: "1px solid gray", padding: "15px", borderRadius: "10px", width: "200px" }}>
      <h3>{food.name}</h3>
      <p>{food.description}</p>
      <p>₹{food.price}</p>
      <button onClick={() => addToCart(food)}>Add to Cart</button>
    </div>
```

```
  );
}


export default FoodCard;
```

Cart.js

```jsx
import React from "react";

function Cart({ cart }) {
  const total = cart.reduce((sum, item) => sum + item.price * item.qty, 0);


  return (
    <div style={{ margin: "20px", padding: "15px", border: "1px solid black" }}>
      <h2>🛒 Cart</h2>
      {cart.length === 0 ? (
        <p>Cart is empty</p>
      ) : (
        <ul>
          {cart.map((item) => (
            <li key={item.id}>
              {item.name} x {item.qty} = ₹{item.price * item.qty}
            </li>
          ))}
        </ul>
      )}
      <h3>Total: ₹{total}</h3>
    </div>
```

```
  );
}


export default Cart;
```

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