

## Shopping Cart System

// ShoppingCart class to handle various items

```
class ShoppingCart {
```

```
    int itemCount = 0;
```

```
    String[] cart = new String[10]; // Simple fixed-size cart array to store items
```

// Method to add an electronic item

```
public void addItem(String name, double price, String brand, String model, int warranty) {
```

```
    if (itemCount < cart.length) {
```

```
        cart[itemCount++] = "Electronics - " + name + ": Price $" + price + ", Brand: " + brand + ", Model: " + model + ", Warranty: " + warranty + " years";
```

```
    } else {
```

```
        System.out.println("Cart is full!");
```

```
    }
```

```
}
```

// Method to add a clothing item

```
public void addItem(String name, double price, String size, String color, String material) {
```

```
    if (itemCount < cart.length) {
```

```
        cart[itemCount++] = "Clothing - " + name + ": Price $" + price + ", Size: " + size + ", Color: " + color + ", Material: " + material;
```

```
    } else {
```

```
        System.out.println("Cart is full!");
```

```
    }
```

```
}
```

// Method to add a grocery item

```

public void addItem(String name, double price, double weight, String expiryDate) {

    if (itemCount < cart.length) {

        cart[itemCount++] = "Grocery - " + name + ": Price $" + price + ", Weight: " + weight + " kg, Expiry
Date: " + expiryDate;

    } else {

        System.out.println("Cart is full!");

    }

}

// Method to add a cosmetics item

public void addItem(String name, double price, String brand, String type) {

    if (itemCount < cart.length) {

        cart[itemCount++] = "Cosmetics - " + name + ": Price $" + price + ", Brand: " + brand + ", Type: " +
type;

    } else {

        System.out.println("Cart is full!");

    }

}

// Method to display all items in the cart

public void displayCart() {

    if (itemCount == 0) {

        System.out.println("Cart is empty!");

    } else {

        System.out.println("Items in the Cart:");

        for (int i = 0; i < itemCount; i++) {

            System.out.println(cart[i]);

        }

    }

}

```

```
    }  
    }  
}  
}
```

// Driver class

```
public class ShoppingCartDemo {  
    public static void main(String[] args) {  
        ShoppingCart cart = new ShoppingCart();  
        // Adding different types of items using overloaded methods  
        cart.addItem("Laptop", 1200.99, "Dell", "XPS 13", 2); // Electronics  
        cart.addItem("T-shirt", 15.99, "L", "Blue", "Cotton"); // Clothing  
        cart.addItem("Apple", 2.5, 1.0, "2024-10-10"); // Grocery  
        cart.addItem("Lipstick", 12.99, "Maybelline", "Matte"); // Cosmetics  
        // Display the cart  
        cart.displayCart();  
    }  
}
```