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# Inventory Management System
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inventory = {  
    "Apple": {"category": "Fruits", "unit": "kg", "stock": 50, "price": 150},  
    "Orange": {"category": "Fruits", "unit": "kg", "stock": 40, "price": 120},  
    "Potato": {"category": "Vegetables", "unit": "kg", "stock": 100, "price": 25},  
    "Rice": {"category": "Grains", "unit": "kg", "stock": 200, "price": 50},  
    "Milk": {"category": "Dairy", "unit": "liter", "stock": 100, "price": 60},  
    "Biscuits": {"category": "Packaged Foods", "unit": "pack", "stock": 60, "price": 30},  
}
```

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def display_inventory():  
    print("\nCurrent Inventory:")  
    print(f'{"Item":<12}{Category':<20}{Stock':<10}{Unit':<10}{Price (₹/Unit)':<15}")  
    print("-" * 60)  
    for item, details in inventory.items():
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        print(f'{"item":<12}{details["category"]':<20}{details["stock"]':<10}{details["unit"]':<10}{details["price"]':<15}")  
        print("-" * 60)
```

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def place_order():  
    print("\nPlace your order. Type 'done' when finished.")  
    order = {}  
    while True:  
        item_name = input("Enter item name (or 'done' to finish): ").strip()  
        if item_name.lower() == "done":  
            break  
  
        if item_name not in inventory:  
            print("Item not found in inventory. Please enter a valid item.")  
            continue  
  
        try:  
            quantity = float(input(f"Enter quantity of {item_name} ({inventory[item_name]['unit']}): "))  
            if quantity <= 0:  
                print("Quantity must be a positive number. Try again.")  
                continue  
        except ValueError:  
            print("Invalid quantity. Please enter a number.")  
            continue  
  
        available_stock = inventory[item_name]["stock"]  
        if quantity > available_stock:  
            print(f"Only {available_stock} {inventory[item_name]['unit']} of {item_name} is available.")
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        quantity = available_stock

    order[item_name] = order.get(item_name, 0) + quantity

return order

def process_order(order):
    print("\nOrder Summary:")
    total_cost = 0
    total_weight = 0

    for item_name, quantity in order.items():
        unit_price = inventory[item_name]["price"]
        category = inventory[item_name]["category"]
        unit = inventory[item_name]["unit"]

        cost = quantity * unit_price
        total_cost += cost
        if unit == "kg":
            total_weight += quantity

    # Update inventory
    inventory[item_name]["stock"] -= quantity

    print(f'{item_name}: {quantity} {unit} × ₹{unit_price}/{unit} = ₹{cost}')

print(f'\nTotal Weight: {total_weight} kg')
print(f'Total Cost: ₹{total_cost}')

# Display updated inventory
display_inventory()

# Highlight low-stock warnings
print("\nLow-Stock Warnings:")
for item_name, details in inventory.items():
    if details["stock"] < 5:
        print(f"⚠️ {item_name} is low on stock ({details['stock']} {details['unit']} remaining).")

def main():
    print("Welcome to the Grocery Shop Inventory Management System!")
    display_inventory()
    order = place_order()
    if order:
        process_order(order)

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else:
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    print("\nNo items ordered. Exiting.")
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if __name__ == "__main__":
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    main()
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