8/11/24, 11:40 PM Untitled-1

## Untitled-1

```
import java.io.*;
 2
    import java.util.*;
 3
    public class InventoryManager {
 4
 5
        private static final String FILE_NAME = "inventory.txt";
 6
        private static Map<String, Integer> inventory = new HashMap<>>();
 7
        public static void main(String[] args) {
 8
 9
            loadInventory();
            Scanner scanner = new Scanner(System.in);
10
11
            String command;
12
13
            while (true) {
14
                System.out.println("\nInventory Management System");
                System.out.println("1. Add Item");
15
                System.out.println("2. View Inventory");
16
                System.out.println("3. Update Item");
17
                System.out.println("4. Remove Item");
18
19
                System.out.println("5. Exit");
20
                System.out.print("Enter command: ");
21
                command = scanner.nextLine();
22
23
                switch (command) {
                     case "1":
24
25
                         addItem(scanner);
26
                         break;
27
                     case "2":
28
                         viewInventory();
29
                         break:
                     case "3":
30
31
                         updateItem(scanner);
32
                         break;
                     case "4":
33
34
                         removeItem(scanner);
35
                         break;
                     case "5":
36
37
                         saveInventory();
                         System.out.println("Exiting...");
38
39
                         scanner.close();
                         return;
40
41
                     default:
42
                         System.out.println("Invalid command. Please try again.");
43
                }
44
            }
45
        }
46
47
        private static void addItem(Scanner scanner) {
            System.out.print("Enter item name: ");
48
```

```
49
            String name = scanner.nextLine();
50
            System.out.print("Enter item quantity: ");
            int quantity = Integer.parseInt(scanner.nextLine());
51
52
53
            if (inventory.containsKey(name)) {
54
                System.out.println("Item already exists. Updating quantity.");
55
                inventory.put(name, inventory.get(name) + quantity);
            } else {
56
57
                inventory.put(name, quantity);
            }
58
59
        }
60
        private static void viewInventory() {
61
62
            System.out.println("\nCurrent Inventory:");
            for (Map.Entry<String, Integer> entry : inventory.entrySet()) {
63
                System.out.println("Item: " + entry.getKey() + ", Quantity: " + entry.getValue());
64
            }
65
        }
66
67
68
        private static void updateItem(Scanner scanner) {
            System.out.print("Enter item name to update: ");
69
70
            String name = scanner.nextLine();
71
            if (inventory.containsKey(name)) {
                System.out.print("Enter new quantity: ");
72
73
                int quantity = Integer.parseInt(scanner.nextLine());
74
                inventory.put(name, quantity);
                System.out.println("Item updated successfully.");
75
            } else {
76
77
                System.out.println("Item not found.");
78
            }
79
        }
80
        private static void removeItem(Scanner scanner) {
81
            System.out.print("Enter item name to remove: ");
82
83
            String name = scanner.nextLine();
84
            if (inventory.containsKey(name)) {
                inventory.remove(name);
85
86
                System.out.println("Item removed successfully.");
87
            } else {
                System.out.println("Item not found.");
88
89
            }
90
        }
91
92
        private static void loadInventory() {
93
            try (BufferedReader reader = new BufferedReader(new FileReader(FILE NAME))) {
94
                String line;
                while ((line = reader.readLine()) != null) {
95
96
                    String[] parts = line.split(",");
                    if (parts.length == 2) {
97
                        String name = parts[0];
98
```

```
99
                         int quantity = Integer.parseInt(parts[1]);
100
                         inventory.put(name, quantity);
101
                     }
                 }
102
             } catch (IOException e) {
103
104
                 System.out.println("No existing inventory file found. Starting fresh.");
105
             }
         }
106
107
         private static void saveInventory() {
108
109
             try (BufferedWriter writer = new BufferedWriter(new FileWriter(FILE_NAME))) {
                 for (Map.Entry<String, Integer> entry : inventory.entrySet()) {
110
111
                     writer.write(entry.getKey() + "," + entry.getValue());
112
                     writer.newLine();
113
                 }
             } catch (IOException e) {
114
                 System.out.println("Error saving inventory.");
115
116
             }
117
         }
     }
118
119
```