

Question: Inventory Management

A company wants to automate its inventory management system by allowing administrators to add item details (item name and stock count) and enabling warehouse managers to identify items that need to be reordered based on a stock threshold.

Functional Requirement:

<u>Req.</u>	<u>Type (Class)</u>	<u>Req. desc.</u>	<u>Method Name</u>	<u>parameters</u>
1.	Inventory Manager	Add item details to the inventory list	addItemDetails	String itemName, int stockCount

Responsibilities:-

This method should add item details to the inventory, which is implemented as a HashMap <String, Integer>.

2.	Inventory Manager	Retrieve items that need to be reordered	getReorderItems	int threshold
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Responsibilities:-

This method should filter items with stock below the threshold, add them to a List <String>, and return the same. If no matches are found, an empty list is returned.

Constraints:

- **ItemName** - represents the name of the item in the inventory.
- **stockCount** - represents the quantity of items available in the stock.
- **threshold** - is the minimum stock level. Items with stock below this value should be flagged for reordering.
- This method should return a list of strings representing items that need to be reordered.

WARNING

You are provided with the main method in the `ItemInterface` class as a code template, and it is excluded from evaluation.

NOTE:

- Implement only the `InventoryManager` class to meet the business requirements.
- The methods should be public, and the attributes of the class should be private.
- In the sample Input / Output provided, the highlighted text in bold corresponds to the input given by the user and the rest of the text represents the output.
- Ensure that the name of the classes, attributes, and methods are provided as specified in the question description.

- o Please do not use `system.exit(0)`; to terminate the program.

Sample Input / Output 1 :-

Enter the number of items:

5

Enter item name:

Laptop

Enter stock count:

~~5~~ 5

Enter item name:

mouse

Enter stock count:

2

Enter item name:

keyboard

Enter stock count:

12

Enter item name:

monitor

Enter stock count :

3

Enter item name:

Chair

Enter stock count:

8

Enter the stock threshold:

4

Items that need reordering:

Mouse

Monitor

Sample Input / Output 2:-

Enter the number of items:

3

Enter item name:

Table

Enter stock count:

10

Enter item name:

Notebook

Enter stock count:

15

Enter item name:

Projector

Enter stock count:

20

Enter the stock threshold:

5

No items found that need reordering.