



MSc Computer Science
School of Computing, Engineering and Digital technologies
Object-oriented Programming
CIS 4037-N

Academic Year: 2023/24

**ICA Element 2: *Test Cases* for Stock Control Application with low
stock reporting**

10 January 2024

Class: ASCStockItem.java

Test Case 1: Create ASC Stock Item

Instantiate a Stock object with valid parameters.

STATUS: PASSED

<i>Company</i>	<i>Product Title</i>	<i>Description</i>	<i>Unit Price (Pound)</i>	<i>Unit Price (Pence)</i>	<i>Quantity</i>	<i>Department</i>
ASC	Swimming Shorts	More reliable and water proof	15	89	50	SWM

Test Case 2: Validate Product Code Generation

Check if the product code is generated automatically.

STATUS: PASSED

<i>Company</i>	<i>Product Title</i>	<i>Description</i>	<i>Unit Price (Pound)</i>	<i>Unit Price (Pence)</i>	<i>Quantity</i>	<i>Department</i>
ASC	Running Sneakers	More reliable and easy to wear	34	56	50	RUN

Test Case 3: Validate with random inputs

Check if the input for the integers e.g jh for Quantity, Price it will show an alert on popup.

STATUS: PASSED

<i>Company</i>	<i>Product Title</i>	<i>Description</i>	<i>Unit Price (Pound)</i>	<i>Unit Price (Pence)</i>	<i>Quantity</i>	<i>Department</i>
ASC	Running Joggers	More reliable and easy to wear	99	45	7	CYC

Test Case 4: Validate with invalid inputs

Check if the input for the integers e.g jh for Quantity, Price it will show an alert on popup. It is showing popup for enter valid values.

STATUS: PASSED

<i>Company</i>	<i>Product Title</i>	<i>Description</i>	<i>Unit Price (Pound)</i>	<i>Unit Price (Pence)</i>	<i>Quantity</i>	<i>Department</i>
ASC	Running Joggers	More reliable and easy to wear	test	LL	0IN	CYC

Test Case 5: Validate CSV File Upload

STATUS: PASSED

Upload a CSV file with sales transaction data with the expected format separately for ASC despite the MSM records in the same table.

→ **Values / Input:** Sample CSV file with multiple sales transactions.

→ **EXPECTED OUTCOME:** Sales transactions recorded successfully.

Test Case 6: Validate Department-wise Product Code Formats

Check if the product code format is generated correctly based on the department.

STATUS: PASSED

→ **Values / Input:** Department ID: "2", Product Title: "Joggers", Product Description: "best for the long run", Unit Price (Pounds): 30, Unit Price (Pence): 79 Quantity: 10

→ **EXPECTED OUTCOME:** Product code follows the format for the RUN department.

Test Case 7: Create Sales Transaction Records on Sell Items

Check Instantiate a Sales Transaction object with valid parameters for ASC items.

STATUS: PASSED

→ **Values / Input:** Quantity Sold: 5

→ **EXPECTED OUTCOME:** Sales Transaction object created successfully.

Test Case 8: Invalid Inputs on Sold Quantity Form

Check Instantiate a Sold Quantity with invalid parameters for ASC items. For example, Negative integer, strings etc, It'll show alert on popup to enter a valid input

STATUS: PASSED

→ **Values / Input:** Quantity Sold: -6

→ **EXPECTED OUTCOME:** Please enter the valid input.

Test Case 9: Display All ASC Stock Records

Retrieve and display all ASC stock records in proper format in the stock table.

STATUS: PASSED

→ **Values / Input:** None

→ **EXPECTED OUTCOME:** List of all ASC stock records displayed.

Test Case 10: Display All ASC Sales Transactions

Retrieve and display all ASC sales transactions recorded in Proper format in the stock table.

STATUS: PASSED

→ **Values / Input:** None

→ **EXPECTED OUTCOME:** List of all ASC sales transactions displayed.

Class: MSMStockItem.java

Test Case 1: Create MSM Stock Item

Instantiate a Stock object with valid parameters.

STATUS: PASSED

<i>Company</i>	<i>Product Title</i>	<i>Description</i>	<i>Unit Price (Pound)</i>	<i>Unit Price (Pence)</i>	<i>Quantity</i>	<i>Department</i>
MSM	Swimming Shorts	More reliable and water proof	15	89	50	SWM

Test Case 2: Validate Product Code Generation

Check if the product code is generated automatically.

STATUS: PASSED

<i>Company</i>	<i>Product Title</i>	<i>Description</i>	<i>Unit Price (Pound)</i>	<i>Unit Price (Pence)</i>	<i>Quantity</i>	<i>Department</i>
MSM	Running Sneakers	More reliable and easy to wear	34	56	50	RUN

Test Case 3: Validate with random inputs

Check if the input for the integers e.g jh for Quantity, Price it will show an alert on popup.

STATUS: PASSED

<i>Company</i>	<i>Product Title</i>	<i>Description</i>	<i>Unit Price (Pound)</i>	<i>Unit Price (Pence)</i>	<i>Quantity</i>	<i>Department</i>
MSM	Running Joggers	More reliable and easy to wear	99	45	7	CYC

Test Case 4: Validate with invalid inputs

Check if the input for the integers e.g jh for Quantity, Price it will show an alert on popup. It is showing popup for enter valid values.

STATUS: PASSED

Values / Input:

<i>Company</i>	<i>Product Title</i>	<i>Description</i>	<i>Unit Price (Pound)</i>	<i>Unit Price (Pence)</i>	<i>Quantity</i>	<i>Department</i>
MSM	Running Joggers	More reliable and easy to wear	twenty	Thirty two	fifty	CYC

Test Case 5: Validate CSV File Upload

STATUS: PASSED

Upload a CSV file with sales transaction data with the expected format separately for MSM despite the ASC records in the same table.

→ **Values / Input:** Sample CSV file with multiple sales transactions.

→ **EXPECTED OUTCOME:** Sales transactions recorded successfully.

Test Case 6: Validate Department-wise Product Code Formats

Check if the product code format is generated correctly based on the department.

STATUS: PASSED

→ **Values / Input:** Department ID: "2", Product Title: "Joggers", Product Description: "best for the long run", Unit Price (Pounds): 30,Unit Price (Pence): 79 Quantity: 10

→ **EXPECTED OUTCOME:** Product code follows the format for the RUN department.

Test Case 7: Create Sales Transaction Records on Sell Items

Check Instantiate a Sales Transaction object with valid parameters for MSM items. **STATUS: PASSED**

→ **Values / Input:** Quantity Sold: 5

→ **EXPECTED OUTCOME:** Sales Transaction object created successfully.

Test Case 8: Invalid Inputs on Sold Quantity Form

Check Instantiate a Sold Quantity with invalid parameters for MSM items. For example, Negative integer, strings etc, It'll show alert on popup to enter a valid input **STATUS: PASSED**

→ **Values / Input:** Quantity Sold: -6

→ **EXPECTED OUTCOME:** Please enter the valid input.

Test Case 9: Display All MSM Stock Records

Retrieve and display all MSM stock records in proper format in the stock table. **STATUS: PASSED**

→ **Values / Input:** None

→ **EXPECTED OUTCOME:** List of all MSM stock records displayed.

→

Test Case 10: Display All MSM Sales Transactions

Retrieve and display all MSM sales transactions recorded in Proper format in the stock table. **STATUS: PASSED**

→ **Values / Input:** None

→ **EXPECTED OUTCOME:** List of all MSM sales transactions displayed.

Low Stock Reporting

Test Case 1: Report Low Stock

Simulate a scenario where the stock quantity falls below the predefined threshold, triggering a low stock report.
On (Threshold: <5)

STATUS: PASSED

→ **Values / Input:** Quantity Sold: 20

→ **EXPECTED OUTCOME:** Low stock alert generated.