Use Case "Manage Cart"

1. Use case code

UC003

2. Brief Description

This use case describes the interaction between the customer and the AIMS software when managing the cart. Customers can add, view, update, or remove products from the cart.

3. Actors

3.1 Customer

3.2 AIMS Software

4. Preconditions

The customer has started a session with the AIMS software.

At least one product is available in the inventory

5. Basic Flow of Events

1. Customer adds products to the cart by specifying the quantity.
2. AIMS adds products to the cart
3. Customer views the cart.
4. AIMS software displays cart details, including product name, quantity, price, and total amounts.
5. Customer updates the quantity of products in the cart.
6. AIMS updates the cart accordingly.
7. Customer removes products from the cart.
8. AIMS removes products from the cart.
9. AIMS software recalculates the totals dynamically after each change.

6. Alternative flows

Table N-Alternative flows of events for UC Place order

No	Location	Condition	Action	Resume location
1.	Step 2	Inventory is insufficient	Notify the customer	Step 1
2.	Step 2	Products already in cart	Notify the customer	Step 1
3.	Step 6	Inventory is insufficient	Customer cannot update the quantity of products.	Step 4

7. Input data

Table A-Input data of …

No	Data fields	Description	Mandatory	Valid condition	Example
1.	Product Name	Name of the product	Yes	Text, nonempty	"Harry Potter"
2.	Quantity	Number of items	Yes	Positive integer	3
3.	Unit Price	Product 's price	Yes	Positive integer	120,000

8. Output data

Table B-Output data of …

No	Data fields	Description	Display format	Example
1.	Product Name	Name of the product	Text	"Harry Potter"
2.	Quantity	Number of items	Positive integer	4
3.	Unit Price	Product 's price	Positive integer	120,000
4.	Line Total	Total price per product (Quantity x Unit Price)	Positive integer	120,000
5.	Total	Total price of all products in cart	Positive integer	120,000

9. Postconditions

The cart is updated to reflect the customer's actions.

Notifications are sent to the customer regarding any invalid inputs or insufficient inventory.

Total amounts are recalculated and displayed in the cart interface.