**Cart Management and Checkout**

**Algorithms**

1. **Add Item to Cart**
2. Begin
3. Search for the item by name
4. If the item exists in the inventory, then
   * If the item already exists in the cart, then
     + Update the quantity or cancel
   * If the item does not exist in the cart, then
     + Add the item to the cart with the specified quantity
5. Recalculate the total amount in the cart every time an item is added
6. End
7. **Update Quantity in Cart**
8. Begin
9. Select the item, then
   * Update the item quantity or cancel
10. Recalculate the total amount in the cart once the item is updated
11. End
12. **Delete Item from Cart**
13. Begin
14. Click on the “trash” button
15. Remove the item from the cart.
16. Recalculate the total amount in the cart once the item is deleted
17. End
18. **Checkout Process**
19. Begin
20. Ask the user to confirm the order
21. If the user confirms, then
    * Proceed to the order gateway
    * Complete the transaction
22. Send a confirmation to the user
23. Clear the cart.
24. End

**Pseudocode**

1. **Item management**

BEGIN

PROMPT user to search for the item by name

IF item exists in inventory THEN

IF item exists in cart THEN

PROMPT user to either update the quantity or cancel

IF user chooses to update THEN

UPDATE item quantity in the cart

ELSE

CANCEL the update process

END IF

ELSE

PROMPT user to add quantity

ADD item to cart with the specified quantity

END IF

ELSE

PRINT "Item not available in inventory"

END IF

RECALCULATE the total amount in the cart

END

1. **Checkout**

BEGIN

PROMPT user to confirm the order

IF user confirms THEN

PROCEED to the order gateway

COMPLETE the transaction

SEND confirmation to the user

CLEAR the cart

ELSE

PRINT "Order not confirmed"

END IF

END