

IT 314
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Develop Use Case Textual Description for "Process Sale" and "Handle Return" use cases.

Use Case: Process Sale

Actors: Cashier, Customer

Preconditions:

1. The cashier is logged into the POS system.
2. The inventory and catalog system is working properly

Main Flow:

1. After customer gives the items, cashier starts the transaction by using Start new sale option
2. Cashier scan the barcode
3. Application retrieves the details from the catalog system.
4. The system checks the inventory for the scanned item.
5. If item is in the inventory, the item's quantity is modified.
6. All the items are added to the cart
7. Total amount is displayed.
8. Customer is given option by the cashier to choose the payment method.
9. Payment is processed by the bank .
10. The system generates a receipt and prints it for the customer.
11. The sale transaction is recorded in the system for future reference.

Alternative Flow:

- 5.1 If an item is not available in inventory, the system alerts the cashier and prompts to either remove the item from the transaction or suggest a similar item.
- 8.1 If option is cash then, cashier will directly collect the cash and print the receipt
- 10.1 If payment don't get successfully processed, the transaction is cancelled and customer is either asked to repay.

Postconditions:

1. Transaction details should be properly updated in the database
2. Inventory should be updated.

Use Case: Handle Return

Actors: Cashier, Customer

Preconditions:

1. The cashier is logged into the POS system.
2. The inventory and catalog system is working properly

Main Flow:

1. After customer asks for return , the cashier selects the "Process Return" option in the POS system.
2. The cashier asks the customer for the receipt for the item to be returned.
3. The cashier enters the receipt number.
4. The cashier receives details of the transaction.
5. The system verifies checks validity
6. The system processes the refund.
7. The system generates a return receipt and prints it for the customer.
- 8.. The return transaction is recorded in the system.

Alternative Flow:

- 5.1 If the return is invalid, item is not returned the customer.

Postconditions:

1. Transaction details should be properly updated.
2. Inventory should be updated.

Identify Entity/Boundary Control Objects

Entity Objects

1. Receipt
2. Gift Coupons
3. Sale transaction

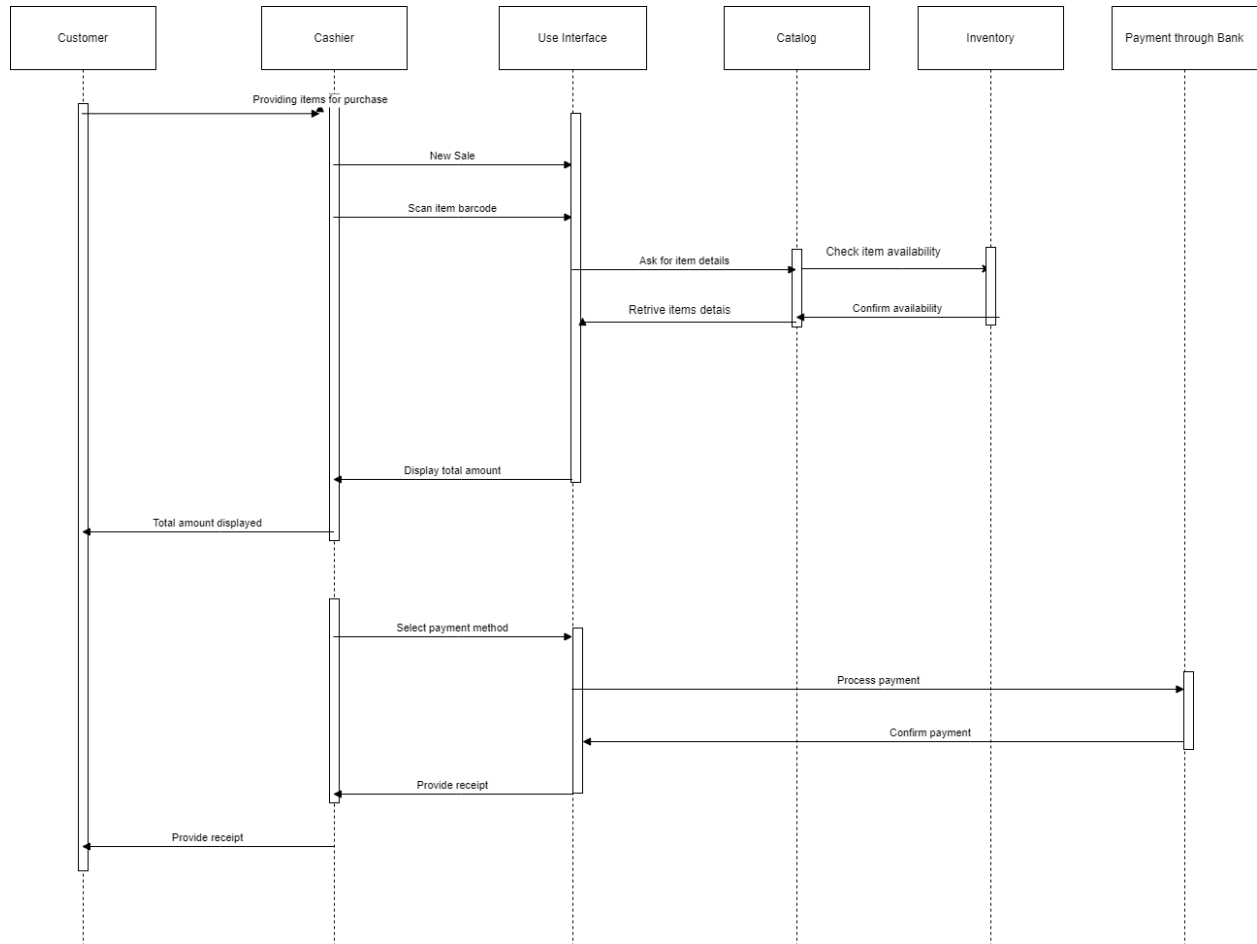
Boundary Objects

1. Point of Sales Interface.
2. Login system

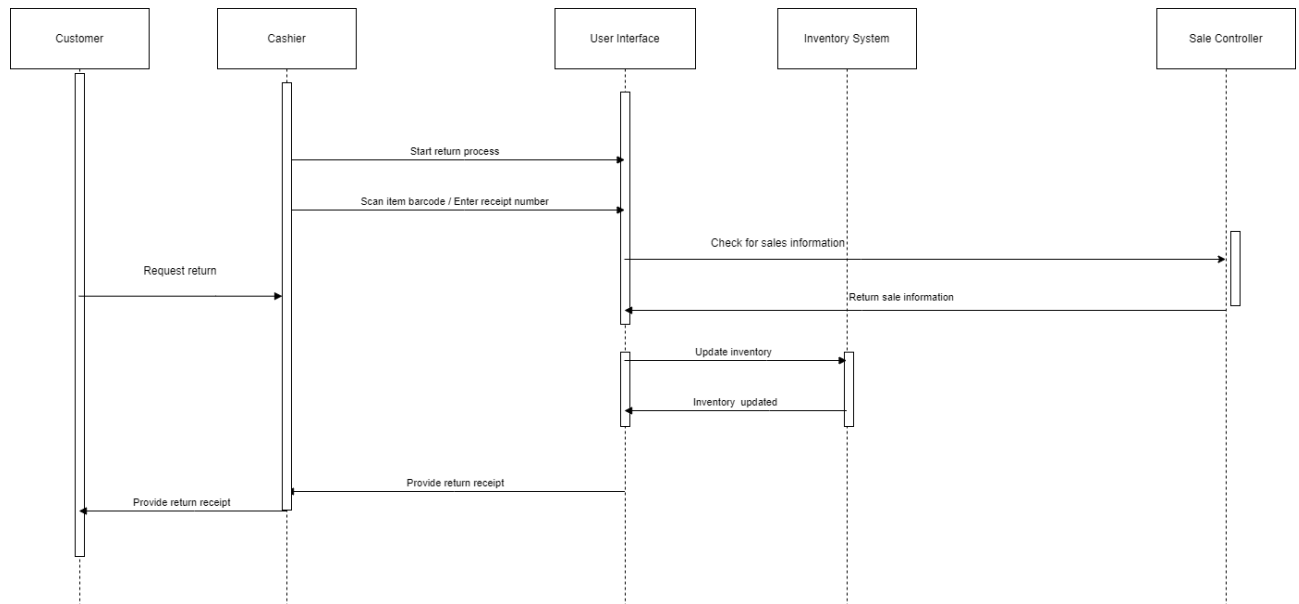
Control Objects

1. Handle Payments
2. Handle Sales
3. Handle Returns

Process Sales Sequence Diagram

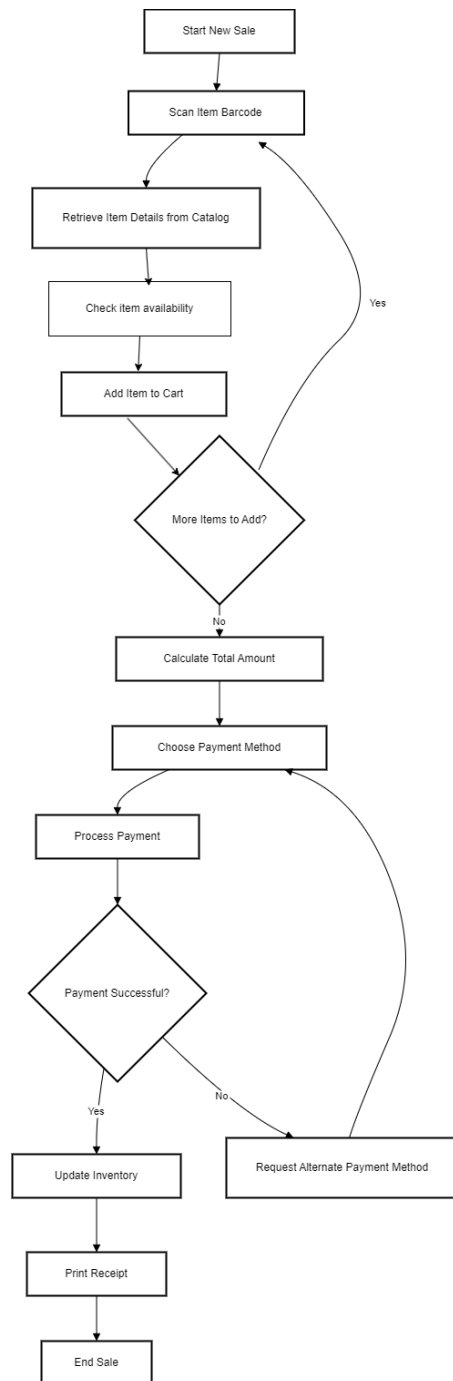


Return Sequence Diagram



Analysis Domain Models

Process Sale



Return

