

LAB - 06

Modelling Class Diagram and Activity Diagram(POS)

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Develop Use case Textual Description for “Process Sale” and “Handle Return” Use cases ::

Use Case - 1 : As an Employee (Cashier / Administrator) I should be able to login into the Point of Sale system to be able to,

- **Cashier :** Access Listing system,
- **Administrator :** Access system management functionality, user management and security configuration


Acceptance Criteria :

- Return error if wrong Login ID/ Password.
- Should always redirect the cashier and administrator to their respective places only.
- Should return error if anyone other than the administrator tries to access the security and system management functionality.

Use Case - 2 : As a Cashier I want to list all items that customers bought into the POS system. (The cashier will start a new sale transaction.)

Acceptance Criteria :

- Return error if unable to enter a new sale transaction.
- System should update details in catalog and inventory accordingly.
- Should correctly quantify and list all the items according to the cashier else return error if any issues according to catalog system and inventory system.
- Should list a new item always when encountering a new barcode in the same existing list.
- Should return error if the barcode is not scanned perfectly.



Use Case - 3 : As a Cashier I want to manage operations such as print receipt and manage transactions done by customers to ensure security.

Acceptance Criteria :

- Should return error if transaction is not done successfully.
- Should return error if there is any issue regarding the printer and unable to print the receipt.
- Should return a discounted amount if the customer uses gift coupons and should also return an error / warning message if the coupon is expired.

Use Case - 4 : As a cashier I want to restock catalog when a customer returns any item/s so that all quantities are correctly shown to other customers.

Acceptance Criteria :

- Customers should have a bill of the returned item/s.
- The POS system must reflect the old bills of which items must be returned.
- Should update the catalog system once item/s are handed over else return an error / warning message.
- Should generate a successful message and hand a receipt of the returns.

Use Case -5 : As a cashier I want the POS system to generate a receipt of the return amount of the bill to pay the customer.

Acceptance Criteria :

- Should have scanned the barcode correctly to price the item/s accordingly.
- Should calculate the price of the combined quantity accurately.
- Should return an error message if there is any issue regarding catalog or inventory system.



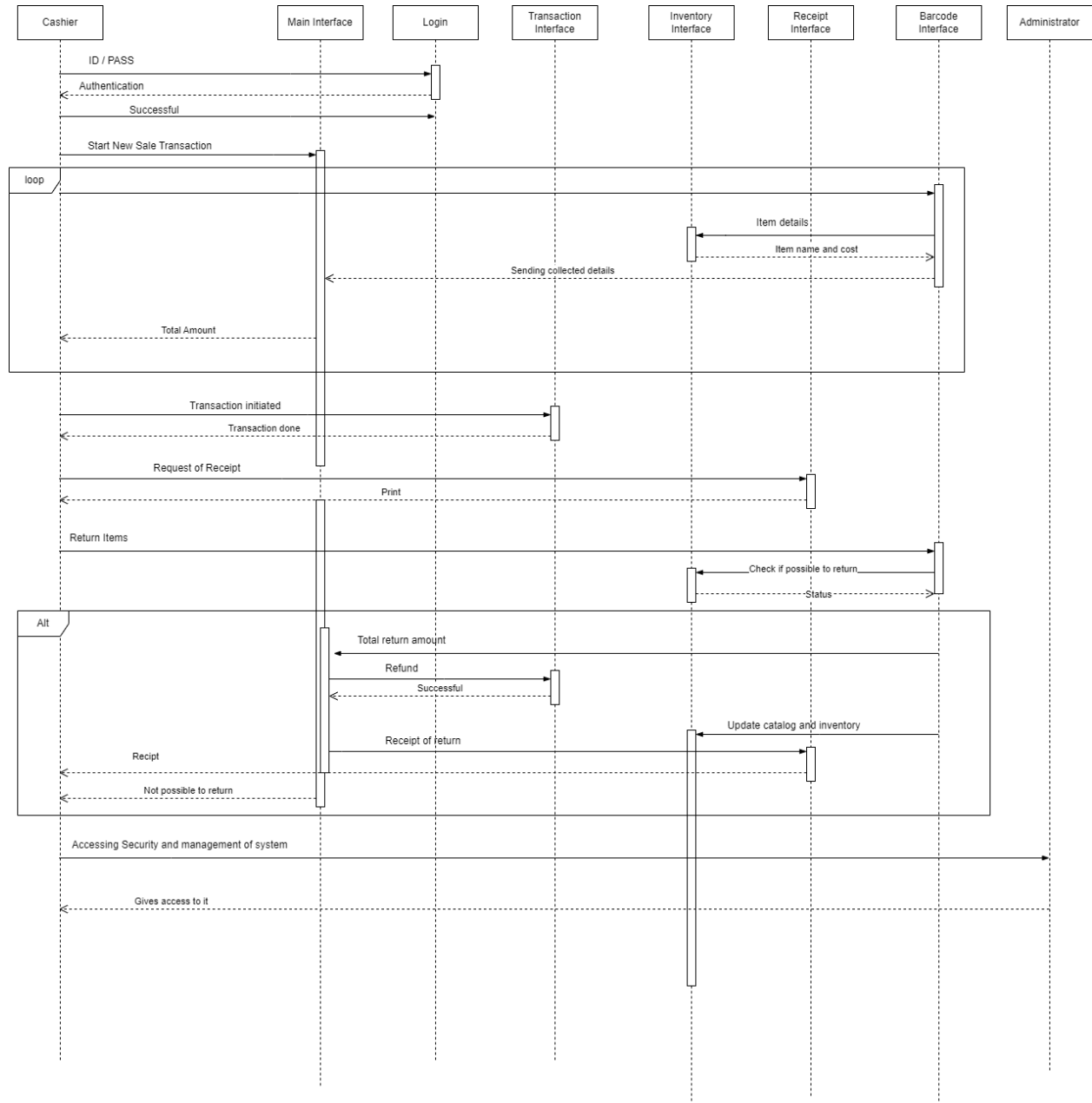
Entity Objects ::

- Product
- Cashier
- Receipt
- Coupon
- Transaction
- Inventory

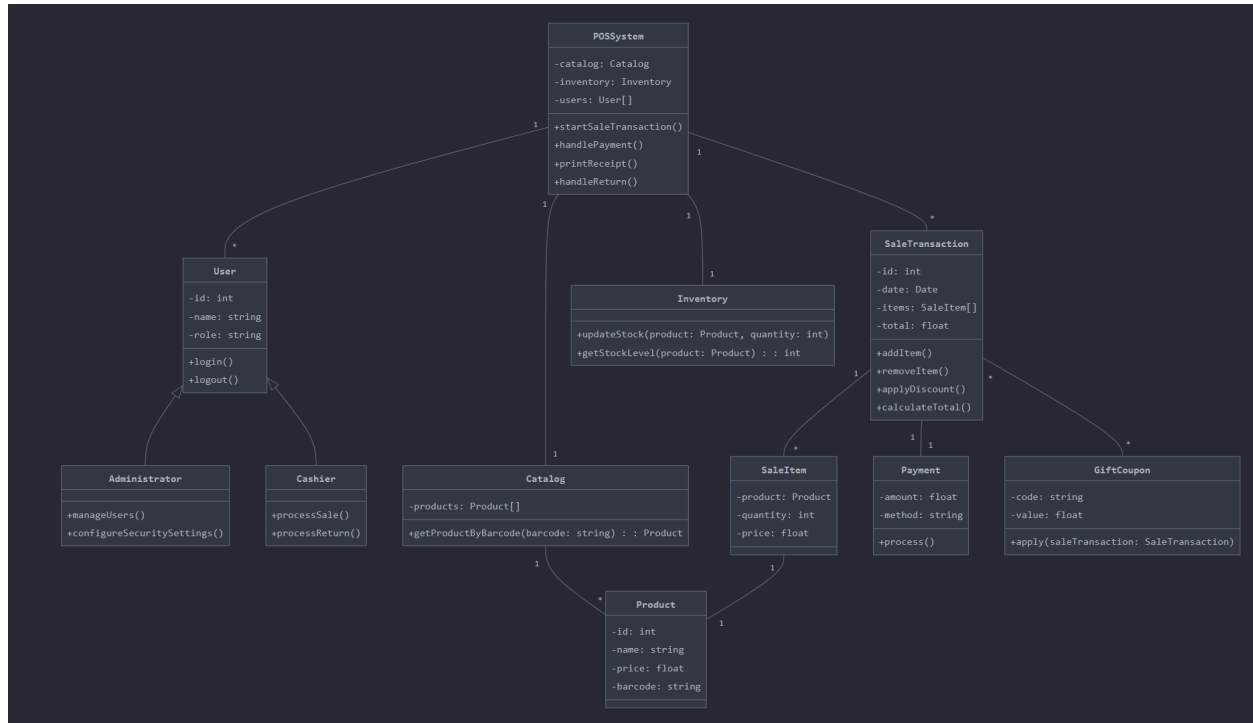
Boundary Objects ::

- systemInterface
- loginInterface
- barcodeInterface
- adminInterface
- transactionInterface

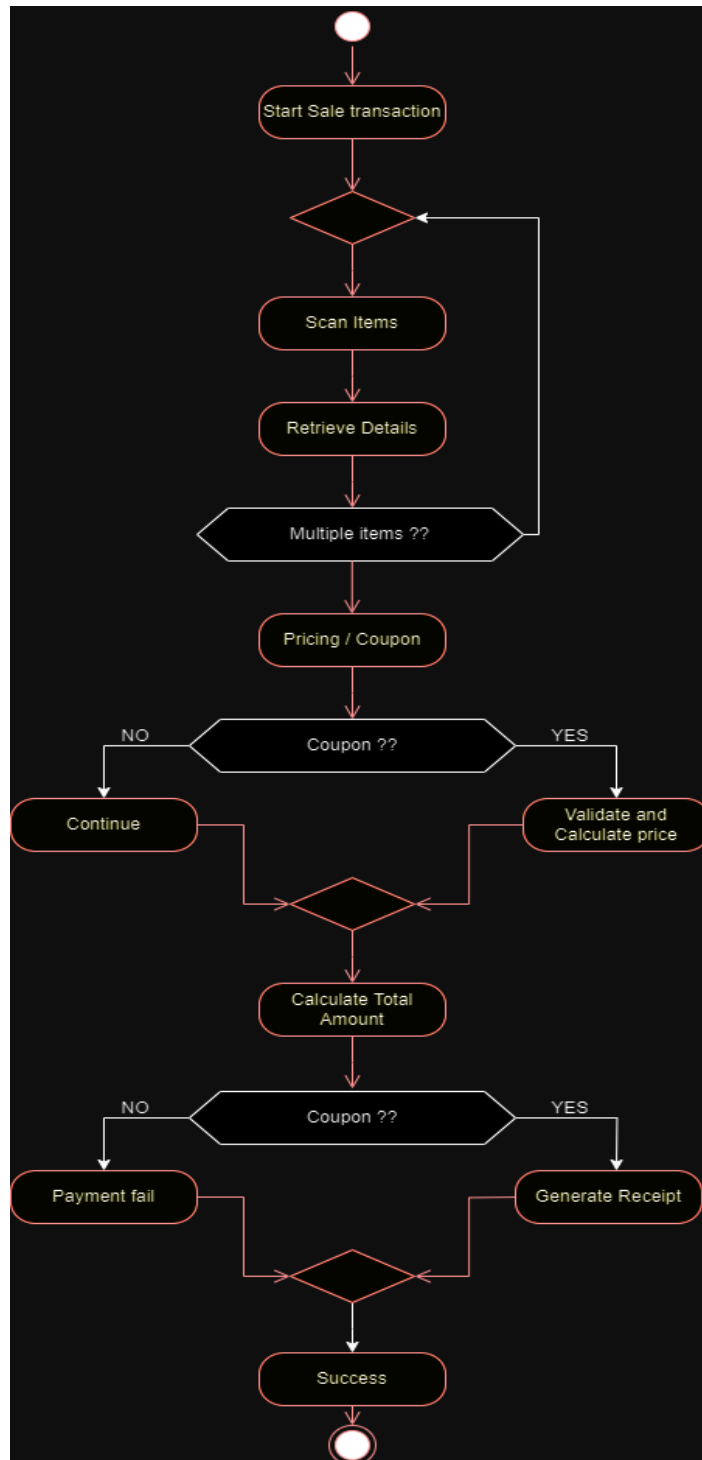
Sequence Diagram ::



Class Diagram ::



Activity Diagram (Handle Sales)



Activity Diagram (Returns)

