Use Cases: OOP's Top 100 Books

Use case name: Log in

Summary: Customer logs in system.

Actor: Customer (supplier)

Precondition: none.

Main sequence:

1. Customer enters id and password.

2. OSS checks if customer id and password are correct.

3. System displays user menu.

Alternative sequence:

Step 3: If customer's ID does not exist in the system, system displays that there is no account.

Postcondition: Customer has logged in system.

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Use case name: Log out

Summary: Customer logs out system.

Actor: Customer

Precondition: Customer logged in system.

Main sequence:

1. Customer selects "log out".

2. OSS System makes customer log out.

Alternative sequence:

None.

Postcondition: Customer has logged out.

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Use case name: Create Account

Summary: Customer creates an account.

Actor: Customer

Precondition: None

Main sequence:

1. Customer inputs id, password, name, address, phone number and credit card number to the system.

2. OSS System creates a customer account and stores account information in a binary file.

3. OSS System displays that an account has been created.

Alternative sequence:

Step1: OSS inputs only id and password to the system.

Step2: If the same id exists in the system, the system displays an error message and requests a different id from the customer.

Postcondition: Customer has created an account.

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Use case name: Select Books.

Summary: Customer browses top 100 books from the supplier's catalog and selects which books to purchase.

Actor: Customer

Main sequence:

1. Customer requests to browse book listings.

2. OSS System displays top 100 books and information to customer.

3. Customer selects one or more books from catalog.

4. System adds the selected book to a cart.

Alternative sequence:

Step 3: Customer does not select books and exits.

Step 5: Customer does not add the book to a cart and exits.

Postcondition: Customer has browsed top 100 books and added them to a cart.

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Use case name: Make Order Request

Summary: Customer enters an order request to purchase the selected books. The customer's credit card is checked for validity to pay for the requested items.

Actor: Customer, Bank

Precondition: Customer added items to a cart and logged in customer account.

Main sequence:

1. Customer orders the books with the order details (item names, quantities, total price) in a cart.

2. OSS System retrieves the customer's credit card number from customer account.

3. OSS System requests to a bank checking the customer's credit card for the purchase amount.

4. if approved, system receives a purchase authorization number from bank.

5. OSS System stores a delivery order containing order details, customer Id, purchase authorization number, and order status as "ordered".

6. OSS System confirms approval of purchase and displays order information to customer.

Alternative sequences:

Step 4: If authorization of the customer's credit card is denied the system prompts the customer to enter a different credit card number. The customer can either enter a different credit card number or cancel the order. If customer's new credit card is authorized by bank, the customer's account is updated with the new card number.

Postcondition: Customer has ordered items.

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Use Case: View Order

Summary: Customer views the order information.

Actor: Customer

Precondition: Customer has logged in.

Main sequence:

1. Customer enters in confirmation number.

2. OSS System retrieves the information about the order(s) and status.

3. OSS System displays the information about the order(s) and status.

Alternative sequence: None

Postcondition: Customer has viewed order(s).

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Use Case: Process Delivery Order

Summary: Supplier requests a delivery order and determines that the inventory is available to fulfill the order.

Actor: Supplier

Precondition: Supplier has logged in.

Main sequence:

1. Supplier requests delivery orders.

2. OSS System retrieves and displays delivery orders to supplier.

3. Supplier selects a delivery order and requests inventory check on items for the delivery order.

4. OSS System determines that items for the delivery order are available in the inventory.

5. If items are in stock, OSS system reserves the items and changes the order status from “ordered” to “ready”.

6. OSS System displays that items are reserved.

Alternative sequence:

Step 5: If an item(s) is out of stock, system displays that an inventory order is required for the item(s).

Postcondition: System has reserved items for delivery order.

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