

Project Milestone 3-1
Flow of Events

6a. Create a Reservation for a Specific Title

1. A customer wants to make a reservation for a title, because all available copies are currently rented.
2. The clerk inputs the customer's ID, and the title's ID.
3. The system returns a confirmation that a reservation has been recorded for the given customer and title.

6b. Place an item on hold

1. A title is returned, and there is a reservation for it.
2. If there is more than one reservation out for the title, the system checks to see who is the next in line for the title.
3. The system flags the returned item for this reservation.

6c. Cancel a reservation

1. A customer wants to cancel a standing reservation.
2. The clerk inputs the customer's ID, and selects to remove/cancel the appropriate reservation.
3. The system confirms that the reservation has been cancelled. (And returns an item's status to available if it was on hold).

8b-d. Produce a Title Report (without reservation information)

1. Management requests a customer report.
2. The clerk makes a system inquiry for a title report.
3. The system returns the name, other basic information, total number of copies owned, which is broken up into total copies rented, on hold, and in stock, for each title. Also now, include number of copies on hold for some customer, the number of reservations pending for an item, a list of the names of customer who have standing reservations in the order which they will be fulfilled.

Test Cases

Use Case	Function Being Tested	Initial System State	Input	Expected Output
Create a Reservation	System creates a reservation when a given customer ID & title ID are input.	On and idle.	Customer ID, Title ID	System returns a confirmation that a reservation has been made for the given title for the given customer.
Create a Reservation	Fail Case: Item is available	On and idle.	Customer ID, Title ID	System returns an exception: saying that title is currently available.
Create a Reservation	Fail Case: Title doesn't exist	On and idle.	Customer ID, Title ID	System returns an exception: saying that title does not exist.
Create a Reservation	Fail Case: Customer doesn't exist	On and idle.	Customer ID, Title ID	System returns an exception: saying that Customer does not exist.
Create a Reservation	Fail Case: Double Jeopardy	On and idle.	Customer ID, Title ID	System returns an exception: saying that the given Customer already has a reservation for that title.

Use Case	Function Being Tested	Initial System State	Input	Expected Output
Place an item on hold	Reserved item is placed on hold when returned.	Item is being returned.	Item ID	System returns a confirmation that the item has been/ should be placed on hold for a certain customer.
Cancel a reservation	A reservation is being cancelled.	On and idle.	Customer ID, select the appropriate title from list.	System confirms that the reservation(s) have been cancelled and any on hold items, are now available or reserved to the next customer.
Produce a title report	System produces a title report with the required information.	On and idle.	Request for a title report.	List of every title in the system records, with appropriate information.