Candidate Class, System Operation, & CRC Cards

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July 13, 2022

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1   Candidate Class List

- Customer
- Customer Lending Account
- Library Employee
- System Administrator
- GBALS Website
- GBALS Kiosk
- Audiobook
- Reservation
- Request

2   System Operation List

1. Customer Reserves Audiobook
    i. Create reservation
    ii. Add audiobook to reservation
    iii. Update inventory of kiosk
2. Customer Requests Audiobook
    i. Create request
    ii. Add new request to queue
3. Customer Returns Audiobook
    i. Authenticate the Customer Lending Account
    ii. Offer Customer option to return Audiobook
    iii. Check for any late fees incurred
    iv. Update inventory of kiosk
    v. Check for open requests for returned audiobook
4. Customer Checks Out Audiobook
    i. Authenticate the Customer Lending Account
    ii. Update reservation status to fulfillment
    iii. Update inventory of kiosk
5. Library Employee Updates GBALS Kiosk Inventory
    i. Authenticate the Library Employee
    ii. Displays inventory of the GBALS Kiosk
    iii. Checks for need of update to inventory
    iv. Adds and removes Audiobooks from GBALS Kiosk
    v. Update inventory of GBALS Kiosk
6. Customer Cancel Reservation
    i. Update inventory of kiosk
    ii. Update reservation status to canceled
7. Customer Cancel Request
    i. Remove request from queue

3   CRC Card List

Customer	
Knows authentication information of its Lending Account	
Can return Audiobook	
Knows QR codes of Audiobooks	Audiobook
Knows its Lending Account	Customer Lending Account
Can interface GBALS Kiosk	GBALS kiosk

Customer Lending Account	
Knows length of time Audiobook has been borrowed	
Knows which Audiobook to return	Audiobook

Audiobook	
Knows its QR code	
Knows its title	

GBALS Kiosk	
Knows its inventory	
Can update its inventory	
Can calculate delays	
Can calculate any late fees from delays	
Knows QR codes of Audiobooks	Audiobook
Knows authentication information of Customer Lending Account	Customer Lending Account
Knows authentication information of Library Employee	Library Employee
Knows the number of audiobook copies (per title)	Audiobook
Knows the queue of request (per audiobook title)	Request

Library Employee	
Knows its authentication information	
Can remove Audiobooks	
Knows QR codes of Audiobooks to add	
Knows QR codes of Audiobooks to remove	
Knows quantity of Audiobooks to add	
Knows quantity of Audiobooks to remove	
Can interface GBALS Kiosk	GBALS kiosk
Can add Audiobooks	Audiobooks

Reservation	
Knows the date it was created	
Knows its reserved Audiobook	Audiobook
Knows its Customer	Customer

Request	
Knows its requested Audiobook	Audiobook
Knows its Customer	Customer