Claudio Falcioni, Kevin Chu

Operation Contract and Interaction Diagram - confirmMembership(ID)

Name: confirmMembership(ID)

Responsibilities:
- Receives a membership ID from the library staff when forming a borrowing transaction
- Match the ID with existing memberships to check whether the provided ID exists.
- Triggers a response accordingly

Type: System

Cross References: Use case, SSD, and domain model for the "Borrow Library Resources"

Notes:
- This operation does not actually display the member's information, just confirms its existence or not. Follow-up actions are requested based on the outcome of the check.

Exceptions:
- ID input is invalid
- ID not found

Output:
- (Internal) Request for a system to fetch and display the member's information and loans.
- (Display) Message of ID not found and prompt to create a new membership.
- (Display) Message of invalid ID and prompt to try again.

Pre-conditions:
- The system is active and idle.
- The library patron presents their membership identification to the library staff, who enters it into the system.

Post-conditions:
- If the ID matches with a membership, a request is sent for the member's information and status of loans to be retrieved (Patron class) and displayed on screen
- If no membership exists for a given ID, a message is shown, and a prompt asking if the library staff wants to create a new membership is displayed.
- If the inputted ID is invalid, a message is displayed, and the library staff is prompted to try again.

Patron

confirmMembership(ID)

BorrowingTransaction

1: matchID()

Membership

BorrowingTransaction

+ date

+confirmMembership(ID)

Membership

+ id
+ startDate

matchID()