

Use Cases

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May 27, 2015

Exercise: Library administration

Start of an answer:

Name:	<i>Collect one or more books.</i>
Actor:	<i>Librarian</i>
Description:	<i>Member of the library returns (a) book(s) to the library.</i>
Pre-condition:	<i>member has membership card on him(her.)</i>
Scenario:	<ol style="list-style-type: none"><i>1. Actor reads book information code and enters code in system</i><i>2. Actor reads membership card code and enters code in system</i><i>3. Actor activates return book action</i><i>4. System message: "OK".</i><i>5. Librarian reads the copy code(s) of the book(s).</i><i>6. System checks expiry dates.</i><i>7. System displays list of remaining rentals for this member.</i><i>8. System removes rentals from member's list of rentals.</i>
Result:	<i>Member has borrowed the book successfully from the Library.</i>
Exceptions:	<ol style="list-style-type: none"><i>3. System message: "INVALID CARD".</i>
Extensions:	<ol style="list-style-type: none"><i>1. Member wants to extend the lending period of some of the books.</i><i>5. System calculates total fine</i>

New Requirements Library Case

- Req 1: Rentals should be stored. Old rentals can be viewed, not altered. Current rentals can be altered: to store additional info, such as prolongation dates. A rental is for one book copy only.
- Req 2: A member as an actor can prolong his rental only once. Thereafter only the staff member of the library can extend the lending period of a certain rental.

Library Use Case: Terminate Book Rental

Name:	<i>Terminate Rental.</i>
Actor:	<i>Member of the Library Staff</i>
Pre-cond:	<i>Member has returned copy of book and has a valid membership card</i>
Scenario:	<ol style="list-style-type: none"><i>1. Member card and book copy are scanned for id.</i><i>2. System displays member data and data of book copy.</i><i>3. Fee is added to account debt of this member.</i><i>4. Actor activates return of the copy.</i><i>5. System moves rental to collection of old rentals.</i><i>6. Copy is set to state available.</i><i>7. System response: "ready".</i>
Result:	<i>Rental is successfully terminated.</i>
Exceptions:	<ol style="list-style-type: none"><i>2. Copy info does not match this copy. Try to scan again, else end use case</i>
Extensions:	<ol style="list-style-type: none"><i>3. If return date is over expiry date, calculate fine and add this fine to the account debt of this member.</i><i>6. A reservation for this copy exists: set copy state to: not available.</i>