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| ID and name | CU-1: Login | | |
| Primary actor | Subscriber | Secondary actors | System |
| Description | A subscriber or the librarian can log in to view the books in the library application. | | |
| Trigger | A subscriber wants to access the LA application. | | |
| Preconditions | PRE-1: The subscriber is registered in the system. | | |
| Postconditions | POST-1: The subscriber is logged into the application. | | |
| Normal flow | Logging into an subscriber account  1. The subscriber clicks on the log in button.  2. The system loads the login page.  3. The subscriber enters his login credentials into the application.  4. The subscriber presses on the button “Log In”.  5. The system goes into the main page. | | |
| Alternative flows | He can exit the form at any time by clicking exit on the form. | | |
| Exceptions | The subscriber introduced wrong credentials  1. The LA app gives an error message.  2 Return to step 3. | | |

Library application

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| ID and name | CU-2: Viewing Available book list | | |
| Primary actor | Subscriber | Secondary actors | System |
| Description | The subscriber visualize all the available books for borrowing. | | |
| Trigger | 1. The subscriber wants to visualize the books from the library. | | |
| Preconditions | PRE-1: The subscriber is logged into system. | | |
| Postconditions | - | | |
| Normal flow | 1. Viewing Available book list 2. After the authentication, the system show the list of available books updated in real time. | | |
| Alternative flows | - | | |
| Exceptions | - | | |

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| ID and name | CU-3: Reserve Book | | |
| Primary actor | Subscriber | Secondary actors | System |
| Description | Authenticated subscribers can reserve books from the library's collection. After logging in, subscribers select the desired book from the catalog and confirm the reserving process. The system updates the book's status to "reserved”. | | |
| Trigger | An subscriber wants to borrow a book/s. | | |
| Preconditions | PRE-1: The subscriber is logged to a terminal. | | |
| Postconditions | POST-1: The book is reserved.  POST-2: The available list of books is updated in real time. | | |
| Normal flow | 1. The subscriber check that the book/s wanted are available.  2. The subscriber select the books he wants by clicking.  3. The system mark the selected book.  4. The subscriber confirms the reservation process on a button.  5. The system marks the book unavailable if the number of available copy is 0 and delete the book from all subscribers terminal. | | |
| Alternative flows | 1. The subscriber leaves the application.  2. The subscriber choose another book and go to step 1. | | |
| Exceptions | If another subscriber reserve the last copy of selected book the book will disappear from the available list of books. | | |

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| ID and name | CU-4: Manage Library | | |
| Primary actor | Librarian | Secondary actors | System |
| Description | Librarian manages the availability of the books in an admin page which can be accessed only by him that contains a list with available books, a list with reserved books and a list with borrowed books. | | |
| Trigger | The library want to give their subscribers the possibility to reserve books online. | | |
| Preconditions | PRE-1: The librarian is logged in. | | |
| Postconditions | - | | |
| Normal flow | 1. Book Management 2. The librarian control the status of the book (reserved, available, borrowed) . | | |
| Alternative flows | - | | |
| Exceptions | - | | |

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| ID and name | CU-5: Return book | | |
| Primary actor | Librarian | Secondary actors | System |
| Description | A subscriber returned a book and the librarian add the book to the available list of books. | | |
| Trigger | A book is returned to the library. | | |
| Preconditions | PRE-1: The librarian is logged in.  PRE-2: The subscriber returns the books. | | |
| Postconditions | POST-1: The list of books will be updated in real time with the returned book.  POST2: The borrowed list will be also updated. | | |
| Normal flow | Successful return  1. The librarian goes to admin page.  2. The librarian select the book from the borrowed list.  3. He press a button to add the book to the available list.  4. The system update the two lists in real time. | | |
| Alternative flows | - | | |
| Exceptions | - | | |

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| ID and name | CU-6: Borrow book | | |
| Primary actor | Librarian | Secondary actors | System |
| Description | The librarian removes book from list of available books when a subscriber borrow it and place it in a list only seen in admin mode named borrowed books. | | |
| Trigger | A subscriber borrow a book. | | |
| Preconditions | PRE-1: The librarian is logged in.  PRE-2: A subscriber borrow the book. | | |
| Postconditions | POST-1: The book is added to the borrowed list and removed from the available list. | | |
| Normal flow | Book borrowed  1. Librarian goes to admin page.  2. Select the book from the available list.  3. Insert the username of the subscriber who borrows the book.  4. Press a button to move the book into the borrowed list.  5. The two list are updated in real time by the system.  6. If the available number of book copies becomes 0 the book will disappear from the available list in all terminals for subscribers.  7. The book will be added in the personal list of the subscriber. | | |
| Alternative flows | - | | |
| Exceptions | If the subscriber already has the book in his personal list the step 7 will not be executed. | | |

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| ID and name | CU-7: Update Book Status | | |
| Primary actor | Librarian | Secondary actors | System |
| Description | The librarian change the status of the book when the book was not borrowed even though it was reserved after 24 hours. | | |
| Trigger | The librarian wants to update all the books reserved that were not borrowed to be available in application. | | |
| Preconditions | PRE-1: The librarian is logged in. | | |
| Postconditions | POST-1: All the books that were reserved yesterday but are still in the library will be available in the application. | | |
| Normal flow | 1. The librarian goes to admin page. 2. The librarian press a button to make all the books with status still reserved from yesterday to be available. 3. The system update the list of available books of the terminal’s subscribers. | | |
| Alternative flows | - | | |
| Exceptions | If there are no books in this situation the button will not be present in the admin page. | | |

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| ID and name | CU-8: Rate book | | |
| Primary actor | Subscriber | Secondary actors | System |
| Description | The subscriber can rate a book from his list of books from a scale of 1 to 10. | | |
| Trigger | The subscriber wants to rate a book. | | |
| Preconditions | PRE-1: The subscriber is logged in. | | |
| Postconditions | POS-1: The book is now marked with a new rating in his personal list. | | |
| Normal flow | 1. The user goes to his profile where he see his list of books.  2. The subscriber select a book to rate.  3. The system open a combo box with value between 1 and 10 and a rate button.  4. The user choose a rating and press the rate button.  5. The app show the rating next to the book. | | |
| Alternative flows | Rate multiple books  1. The subscriber wants to rate another book.  2. Return to step 2. | | |
| Exceptions | - | | |

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| ID and name | CU-9: Log Out | | |
| Primary actor | Subscriber | Secondary actors | System |
| Description | The subscriber/admin can log out from the application. | | |
| Trigger | The subscriber wants to leave the application. | | |
| Preconditions | PRE-1: The subscriber/admin is logged in. | | |
| Postconditions | POST-1: The subscriber is logged out. | | |
| Normal flow | 1. The subscriber/admin press the log out button in the top right corner in the application and is prompted to the log in page. | | |
| Alternative flows | The user press the X button and close the applciation. | | |
| Exceptions | - | | |

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| ID and name | CU-10: Register | | |
| Primary actor | Subscriber | Secondary actors | System |
| Description | A person can create an account in the library application. | | |
| Trigger | A person wants to create an account in the library application. | | |
| Preconditions | PRE-1: The person doesn’t have an account in the application. | | |
| Postconditions | POST-1: The person is now a subscriber and is logged in in the application.  POST-2: The subscriber is registered in the system. | | |
| Normal flow | 1. The person click the register button.  2. The system open the registration page.  3. The user enters the dates needed for the registration (cnp, name, phone, username, password).  4. The system runs a checks on the entered credentials.  5. The system register the user.  6. The system prompts the new subscriber to the main page in the application. | | |
| Alternative flows | 1. The person can leave the register page anytime.  1. The credentials entered are incorrect or incomplete or the username is already used.  2. The system show an error message and request the user to check the credentials, go back to step 3. | | |
| Exceptions | The person already has an account in the application.  1. The system show an error message that say that there exist an account on this name. | | |

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| ID and name | CU-11: Add book | | |
| Primary actor | Librarian | Secondary actors | System |
| Description | The librarian can add new books in the application. | | |
| Trigger | A new book arrived at the library and the librarian need to add it in the application. | | |
| Preconditions | PRE-1: A new book is available to be added in the application.  PRE-1: The librarian is logged in the application. | | |
| Postconditions | POST-1: The book is now available to be reserved by subscribers and the list of available book is updated. | | |
| Normal flow | 1. The librarian enters the admin page.  2. The librarian press the button “Add Book”.  3. The application open a form to be completed by the librarian with the information of the new book.  4. The librarian enters the information.  5. The librarian press the confirm button.  6. The system check that all fields are completed.  7. The system add the new book in the database. | | |
| Alternative flows | The fields are not completed.  1. The system show an error message.  2. The librarian goes back to step 4.  The librarian add more copy of the book.  1. The librarian unlock a fields by checking a checkbox “multiple copies” and state in the field the number of copies added.  2. The librarian goes to step 5. | | |
| Exceptions | - | | |

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| ID and name | Update book | | |
| Primary actor | Librarian | Secondary actors | System |
| Description | The librarian can modify a book that was introduced incorrectly in the database. | | |
| Trigger | A book description is wrong. | | |
| Preconditions | PRE-1: The librarian is logged in.  PRE-2: Information regarding the book is incorrect.  PRE-3: The book exist in the database of the application. | | |
| Postconditions | POST-1: The information regarding the book is corrected. | | |
| Normal flow | 1. The librarian enters the admin page.  2. The librarian choose the book to update.  3. The application open a form to be corrected by the librarian with the information of the book.  4. The librarian correct the information.  5. The librarian press the confirm button.  6. The system check that all fields are completed.  7. The system update the information of the book in the database. | | |
| Alternative flows | The fields are not completed.  1. The system show an error message.  2. The librarian goes back to step 4. | | |
| Exceptions | - | | |

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| ID and name | Delete book | | |
| Primary actor | Librarian | Secondary actors | System |
| Description | The librarian can deletes books destroyed or lost. | | |
| Trigger | A book was not returned for a long time and its need to be deleted from the application. | | |
| Preconditions | PRE-1: The librarian is logged in.  PRE-2: The book has been borrowed for more than 2 months and not returned.  PRE-3: The book exist in the database of the application. | | |
| Postconditions | POST-1: The book is deleted from the application. | | |
| Normal flow | 1. The librarian enters the admin page.  2. The librarian choose the book to delete.  3. The librarian press a button to delete the book.  4. The application show a message to request confirmation.  5. The librarian press yes.  6. The system removes the book from the application. | | |
| Alternative flows | - | | |
| Exceptions | The subscriber returned the book in the meantime and the operation is no longer necessary. | | |