**Use case diagram**

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**Use case descriptions**

**View items**

|  |  |  |  |
| --- | --- | --- | --- |
| **Use case** | View Items | | |
|  |  |  |  |
| **Summary** | Views items based on customer’s requirement | | |
|  |  |  |  |
| **Actor** | Customer | | |
|  |  |  |  |
| **Precondition** | Database must be populated | | |
|  |  |  |  |
| **Postcondition** | Database must be populated | | |
|  |  |  |  |
| **Main scenario** | 1. Customer selects by what attribute he wants to search | | |
|  |
|  | 2. System shows a list of all Items, with that specific attribute | | |
|  |  |  |  |
| **Alternate** | If there are no data stored, continue from 1. | | |
| **Scenarios** | If the system cannot find item with specific attribute, continue from 1. | | |
|  |
| **Borrow items** |  |  |  |
|  |  |  |  |
| **Use case** |  | Borrow items |  |
|  |  |  |  |
| **Summary** |  | The customer borrows items from the library |  |
|  |  |  |  |
| **Actor** |  | Customer |  |
|  |  |  |  |
| **Precondition** |  | Customer has an account and is logged in. The selected item is not |  |
|  |  | currently borrowed by any other customers |  |
|  |  |  |  |
| **Postcondition** |  | The item will be borrowed by the customer |  |
|  |  |  |  |
| **Main scenarios** |  | 1. The customer chooses an item to borrow |  |
|  |  | 2. The system checks the item’s availability |  |
|  |  | 3. The item is borrowed by the customer and system has been |  |
|  |  | updated |  |
|  |  |  |  |
| **Alternative** |  | \*a At any time during step 1 Customer cancels |  |
| **scenarios** |  | 1. The use case ends |  |
|  |  | 2a The item is already reserved |  |
|  |  | 1. System informs customer, that item is already borrowed |  |
|  |  |  |  |
| **Reserve item** |  |  |  |
|  |  |  | |
| **Use case** |  | Reserve items |  |
|  |  |  |  |
| **Summary** |  | The customer reserve items from the library |  |
|  |  |  |  |
| **Actor** |  | Customer |  |
|  |  |  |  |
| **Precondition** |  | Customer has an account and is logged in. The selected item is |  |
|  |  | already borrowed by other customer |  |
|  |  |  |  |
| **Postcondition** |  | The customer was added to the queue for item reserve |  |
|  |  |  |  |
| **Main scenarios** |  | 1. The customer chooses book to reserve |  |
|  |  | 2. The system checks the item’s availability |  |
|  |  |  |  |

|  |  |
| --- | --- |
|  | 3. The item is reserved by the customer and the customer is added |
|  | to the queue for the item. And the system has been updated |
|  |  |
| **Alternative** | \*a At any time during step 1 Customer cancels |
| **scenarios** | 2. The use case ends |
|  |  |

**Login**

|  |  |  |  |
| --- | --- | --- | --- |
| **Use case** | Login | | |
|  |  |  |  |
| **Summary** | The customer logins into the system | | |
|  |  |  |  |
| **Actor** | Customer | | |
|  |  |  |  |
| **Precondition** | The customer already has an account registered | | |
|  |  |  |  |
| **Postcondition** | The customer is logged in the system | | |
|  |  |  |  |
| **Main scenarios** | 1. The customer provides CPR number and password | | |
|  | 2. The system validates the customer’s CRP number and password | | |
| **Alternative** | 2a The systems fails to validate credentials | | |
| **scenarios** |  | 1. The system signals an error and prompts for new credentials | |
|  |  | 2. The use case proceeds from (1) | |
| **Return items** |  |  |  |
|  |  |  |  |
| **Use case** | Return items | | |
|  |  |  |  |
| **Summary** | The customer can return borrowed items | | |
|  |  |  |  |
| **Actor** | Customer | | |
|  |  |  |  |
| **Precondition** | The customer has borrowed items | | |
|  |  |  |  |
| **Postcondition** | The due date of the item has been removed and the item is available for | | |
|  | reservation | | |
|  |  |  |  |
| **Main scenarios** | 1. The customer selects the item to return | | |
|  | 2. The system checks for due date | | |
|  | 3. The item is removed from the customer’s borrowed list | | |
| **Alternative** |  |  |  |
| **scenarios** |  |  |  |
|  |  |  |  |
| **Register** |  |  |  |
|  |  |  |  |
| **Use case** |  | Registor |  |
| **Summary** |  | The visitor signs up into library system |  |
| **Actor** |  | Visitor |  |
| **Precondition** |  | Visitor has an CPR |  |
| **Postcondition** |  | The visitor’s account was created, and visitor can log into the |  |
|  |  | system as a customer |  |

|  |  |  |
| --- | --- | --- |
| **Main scenarios** | 1. | Visitors provides his/her information as a CPR, password, name, |
|  | address and credit card information | |
|  | 2. | System validates data |
|  | 3. | Visitor’s account was created |
| **Alternative** | At any time during step 1 visitor cancels | |
| **scenarios** |  | 1. The use case ends |
|  | 2a The account already exists | |
|  |  | 1. System informs visitor, that system already exists |
|  | 2b visitor’s information are invalid | |
|  |  | 1. System informs visitor, that his/her data are not valid |

**Edit customer info**

|  |  |
| --- | --- |
| **Use case** | Edit customer info |
|  |  |
| **Summary** | The customer manages his/her account |
|  |  |
| **Actor** | Customer |
|  |  |
| **Precondition** | Customer must have an account |
|  |  |
| **Post condition** | Changes made by customer are saved |
|  |  |
| **Main scenario** | 1. The customer chooses to change the value for: |
|  | a. Full name |
|  | b. Password |
|  | c. Address |
|  | d. Credit card info |
|  |  |
| **Alternative** | 1a The entered value is the same as previous value |
| **scenario** | 1. No change has been made |