**USE CASE SPECIFICATION FOR REGISTER TO BORROW BOOKS FUNCTION**

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| --- | --- | --- | --- |
| Use case code | UCRTBB | Use case name | Register to Borrow Books |
| Actor | Borrower | | |
| Prerequisites | Borrower have his/her borrowing card activated | | |
| Success/Main flow of event | |  |  |  | | --- | --- | --- | | **#** | **Doer** | **Action** | | 1 | Software GUI | Prompt a borrow book registration screen | | 2 | Borrower | Input username, password, card id and submit | | 3 | System | Check borrower credentials | | 4 | System | Check if borrower card is not expired and borrower does not borrow overdue returned books | | 5 | System | Check if copies are all available | | 6 | System | Check if number of copies to borrow < maximum allowed | | 7 | System | Save borrowing information to database | | 8 | Software GUI | Display success message and the deadline to collect book | | | |
| Alternative flow of event | |  |  |  | | --- | --- | --- | | **#** | **Doer** | **Action** | |  | Borrower | Can cancel registration to borrow books at any time | | 3a | System | Check failed, notify Invalid borrower and goes back to Step 1 | | 4a | System | Check failed, notify corresponding message and terminate | | 5a | System | Check failed, notify Unavailable book copies and terminate | | 6a | System | Check failed, notify Exceed maximum copies and terminate | | | |
| Post-conditon | Don’t have any | | |

\* Input data:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | **Data field** | **Description** | **Mandatory** | **Condition** | **Example** |
|  | Username | Unique username of borrower | Yes | Unique | nam.dng2511 |
|  | Password | Password for the username of the borrower | Yes | Must contain upper case letters and numbers, more than 5 letters | SoftwareDevelopment96 |
|  | Card ID | Unique Card ID of borrower | Yes | Unique | 013298744 |

\*\* Data output:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Data field** | **Description** | **Format** | **Example** |
|  | Message | Status message of borrow registration | A string of ASCII character | Exceed maximum copies  Register to borrow successfully! |
|  | Deadline | The deadline to collect books(optional, display if success message is shown) | AA:BB, XX YY, ZZZZ, in which AA is hour, BB is minute, XX is month, YY is day of month and ZZZZ is year | 08:30, May 19th, 2016 |

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