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| Use Case ID | UC-XX | | | |
| Use Case Name | Issue a book | | | |
| Created By | Mr. Pasakorn Kunchai | | Last Update By | Mr. Pasakorn Kunchai |
| Date Created | 15-04-2017 | | Last Revision Date | 22-04-2017 |
| Actors | Librarian | | | |
| Description | The librarian can issue a book using member id and book id. | | | |
| Trigger | The librarian clicks “Issue a book” button. | | | |
| Preconditions | - | | | |
| Use Case Input Specification | | | | |
| Input | type | Constraint | | Example |
| member id  book id | String  String | Numeric input.  Numeric input | | 214  1028 |
| Post conditions | 1. the Records in the database is created.  2. Status of the book is updated to “borrowed” | | | |
| Normal Flows | User | | System | |
| 1. |  | | The system shall display the user interface for issue the book consisting of 1 text fields for member id. | |
| 2. |  | | The system shall provide a button labeled as “Confirm member” for the librarian to validate the member id. | |
| 3. | The librarian input member id to the text fields. | |  | |
| 4. | The librarian clicks “Confirm member” button. | |  | |
| 5. |  | | The system shall validate the input. [A1: member id is in the wrong format], [A2: Not have this member id in the database], [A3: member id text fields is not inputted]. | |
| 6. |  | | The system shall display the user interface for issue the book consisting of 1 text fields for book id. if the input passes the validation. | |
| 7. |  | | The system shall provide a button labeled as “Confirm issue” for the librarian to confirm issue and do not need to want to issue more book. | |
| 8. |  | | The system shall provide a button labeled as “Issue more” for the librarian to issue more book. | |
| 9. | The librarian input book id to the text fields and clicks “Confirm issue” button. [A4: The librarian clicks “Issue more”] | |  | |
| 10. |  | | The system shall validate the input. [A5: book id is in the wrong format], [A6: Not have this book id in the database], [A7: Book id text field is not inputted], [A8: status of the book is not valid]. | |
| 11. |  | | The system shall create the records in the database using record number, member id, book id and issue date, which auto generated by the system. [E1: Database cannot be connected] | |
| 12. |  | | The system shall update the book status to “borrowed” into the database. | |
| 13. |  | | The system shall display success message “Issue complete” when the records is stored in the database. | |
| Alternative Flow | A1: member id is in the wrong format.   * The system shall display the fail message “The format of member id is not valid”. * Return to normal flows 3.   A2: Not have this member id in the database.   * The system shall display the fail message “Not have this member id in the database”. * Return to normal flows 3.   A3: member id text field is not inputted.   * The system shall display the message “Please input the member id”. * Return to normal flows 3.   A4: The librarian clicks “Issue more”.   * Go to normal flow 10. * Return to normal flow 6.   A5: book id is in the wrong format.   * The system shall display the fail message “The format of book id is not valid”. * Return to normal flows 8.   A6: Not have this book id in the database.   * The system shall display the fail message “Not have this book id in the database”. * Return to normal flows 9.   A7: book id text field is not inputted.   * The system shall display the message “Please input the book id”. * Return to normal flows 9.   A8: status of the book is not valid.   * The system shall display the message “book status must be “available”. * Return to normal flows 9. | | | |
| Exception Flow | E1: Database cannot be connected   * The system shall display the fail message “Fail to connect the database”. * Use case ends. | | | |
| Assumption | The Librarian must understand English. | | | |