1. Add a Book to the system

Description:

Worker adds a book into the system

Preconditions:

- 1. User must be EOP personnel (Worker)
- 2. User must be in possession of the Book to be added to the system
- 3. Book must have a barcode label on it

Workflow:

- 1. User presents Banner ID and password to EOP Librarian
- 2. EOP Librarian retrieves Worker record from the Worker folder using the Banner ID provided in Step 1 and checking that the password provided by User matches the password on the retrieved Worker record
- 3. EOP Librarian prompts User which type of operation they would like to perform
- 4. User informs EOP Librarian that they would like to add a Book
- 5. User provides the Book barcode to EOP Librarian
- 6. EOP Librarian fails to retrieve a Book record from the Book folder using the barcode provided in Step 5
- 7. EOP Librarian retrieves the Book barcode prefix of the barcode provided in Step 5
- 8. EOP Librarian uses the Book barcode prefix from the barcode and uses it to retrieve the BookBarcodePrefix record from the BookBarcodePrefix folder
- 9. EOP Librarian looks up Discipline value in the record retrieved in Step 8
- 10. EOP Librarian prompts User for other Book information including Title, Author1, Author2, Author3, Author4, Publisher, YearOfPublication, ISBN, Suggested Price, Notes
- 11. User provides EOP Librarian with Book information, including Title, Author1, Author2, Author3, Author4, Publisher, YearOfPublication, ISBN, Suggested Price, Notes
- 12. EOP Librarian validates the data items provided by User in Step 11
- 13. EOP Librarian creates a new Book record with Barcode, Title, Discipline (retrieved in Step 9), Author1, Author2, Author3, Author4, Publisher, YearOfPublication, ISBN, Suggested Price, Notes
- 14. EOP Librarian sets the "Condition" field value in the Book record to "Good" and the "Status" value to "Active"
- 15. EOP Librarian files the Book record into the Book folder
- 16. EOP Librarian informs User that the Book has been successfully added

Results:

1. The new Book is in the system with state "checked-in"

Alternates:

- 1. Another copy of the same Book is already in the system (allow extras?)
- 2. The barcode is invalid
- 3. Some Book information is invalid/incomplete

Entities Involved:

Worker, book, Book database, barcode

2. Modify information about a Book in the system

Description:

Modify title, author(s), publisher, YearOfPublication, ISBN, suggested price, and/or notes of a Book within the library system

Preconditions:

- 1. Person modifying a Book is an EOP worker (ordinary or administrator)
- 2. User must be in possession of the Book to be modified in the system
- 3. Book must have a barcode label on it

Workflow:

- 1. User presents Banner ID and password to EOP Librarian
- 2. EOP Librarian retrieves Worker record from the Worker folder using the Banner ID provided in Step 1 and checking that the password provided by User matches the password on the retrieved Worker record
- 3. EOP Librarian prompts User which type of operation they would like to perform
- 4. User requests that they want to update a Book in the System to EOP Librarian
- 5. EOP Librarian prompts for the Book barcode
- 6. User provides EOP Librarian with the book's barcode
- 7. EOP Librarian retrieves Book record from the Book folder that matches with the provided barcode from step 6
- 8. EOP Librarian hands over the Book record retrieved in step 7 to User
- 9. User makes the changes necessary to the Book record retrieved in Step 8 regarding Title, Author1, Author2, Author3, Author4, Publisher, YearOfPublication, ISBN, Suggested Price, or Notes and provides the Book record to EOP Librarian
- 10. EOP Librarian validates that the new information entered in step 9 on the Book record is correct
- 11. EOP Librarian refiles the Book record into the Book folder
- 12. EOP Librarian informs User that the Book has been successfully updated

Results:

1. The appropriate Book(s) in the Book folder is (are) updated

Alternates:

- 1. EOP Librarian fails to retrieve the Book using the barcode provided in step 3
- 2. User does not provide the barcode

Entities Involved:

Book, User, EOP Librarian, Book folder, Worker Folder

3. Delete a Book From the System

Description:

An administrator deletes a Book from the system

Preconditions:

1. Person removing a Book is part of the administrative staff

Workflow:

- 1. User presents Banner ID and password to EOP Librarian
- 2. EOP Librarian retrieves the Worker record from the Worker folder using the Banner ID indicated in Step 1
- 3. EOP Librarian matches the password provided in Step 1 and checks that the password provided from User on the retrieved Worker record from Step 2
- 4. EOP Librarian informs User that the credentials entered in Step 1 are valid
- 5. EOP Librarian prompts User to identify the operation they would like to perform
- 6. User requests to EOP Librarian they want to remove a Book from the system
- 7. EOP Librarian prompts User to provide the book's barcode
- 8. User presents the book's barcode to EOP Librarian
- 9. EOP Librarian retrieves Book record from the Book folder and provides the collection to the user.
- 10. EOP Librarian confirms with User that the desired Book was retrieved correctly from Step 9
- 11. EOP Librarian presents the book's record to User for confirmation
- 12. User confirms to EOP Librarian that the Book is to be deleted from the system
- 13. EOP Librarian updates the status field in the book's record to 'Inactive' and updates the notes field to comment 'Deleted on [current date and time]'
- 14. EOP Librarian refiles the book's record in the Book folder
- 15. EOP Librarian informs User that the Book was successfully removed from the system

Results:

1. The selected Book is deleted from the system

Alternates:

- 1. The worker does not provide all information needed to the administrator to remove the Book properly
- 2. Multiple books with the same title and author are found in the Book folder
- 3. The Book does not exist

Entities Involved:

User, EOP Librarian, Book folder, Book

Use Case Name: 4. Add a Student Borrower

Description:

Adds a student borrower to the system so that they can borrow books from the library

Preconditions:

1. EOP Librarian is the person registering the student borrower

Workflow:

- 1. A worker shows their BannerID and their password to EOP Librarian
- 2. EOP Librarian retrieves their record from the Worker folder using the BannerID indicated in Step 1
- 3. EOP Librarian verifies that the password provided by User from Step 1 matches the password on the retrieved Worker record
- 4. EOP Librarian prompts User to pick an operation they would like to perform
- 5. The worker requests EOP Librarian to add a StudentBorrower
- 6. EOP Librarian requests from the worker to provide the following information for the StudentBorrower: BannerID, First Name, Last Name, Contact Phone Number, and Brockport Email
- 7. The Worker gives the required information from Step 6 to EOP Librarian
- 8. EOP Librarian validates the information provided by then Worker
- 9. The Librarian fails to retrieve a StudenBorrower record from the StudentBorrower folder using the BannerId given in Step 7
- 10. EOP Librarian creates a new StudentBorrower record with the information given in Step 7
- 11. The Librarian sets the BorrowerStatus to "good standing", Status to "Active" and sets DateOfLatestBorrowerSatus and DateOfRegistration to today's date
- 12. EOP Librarian files the StudentBorrower record into the StudentBorrower folder
- 13. EOP Librarian tells the worker that the student was successfully registered

Results:

1. The student borrower is successfully registered into the system

Alternates:

- 1. The student borrower is already registered in the system
- 2. The student is unable to provide the necessary identification information

Entities Involved:

EOP Librarian, Student Borrower, StudentBorrower folder

5. Modify information about a student borrower in the system

Description:

1. An administrator modifies the information about a student borrower in the system

Preconditions:

- 1. User must be an administrator
- 2. User must have the information of the Student's First Name and Last Name

Workflow:

- 1. User presents Banner ID and password to EOP Librarian
- 2. EOP Librarian retrieves Worker record from the Worker folder using the Banner ID provided in Step 1 and checks that the password provided by User matches the password on the retrieved Worker folder
- 3. EOP Librarian prompts User which type of operation they would like to perform
- 4. User requests that they would like to update a student borrower in the System to EOP Librarian
- 5. EOP Librarian checks User's Credential's and DateofLastCredentialStatus to confirm User is an administrator
- 6. EOP Librarian prompts User for First Name and Last Name of student borrower
- 7. User provides EOP Librarian with the First Name and Last Name of the student borrower
- 8. EOP Librarian retrieves all student borrower pages from the StudentBorrower folder that match the First Name and Last Name provided in Step 7
- 9. EOP Librarian retrieves the student borrower that matches with the BannerID in Step 7 from the StudentBorrower folder
- 10. User selects the BannerID of the corresponding student borrower
- 11. EOP Librarian retrieves the Student Borrower record from the StudentBorrower folder that matches with the provided information from Step 7
- 12. EOP Librarian hands over the Student Borrower record retrieved in Step 8 to User
- 13. User makes the changes necessary to the Student Borrower record retrieved in Step 8 regarding BannerID, First Name, Last Name, Contact Phone, E-mail, BorrowerStatus, DateOfLatestBorrowerStatus, DateOfRegistration, or Status and provides the Student Borrower record to EOP Librarian
- 14. EOP Librarian validates that the new information entered in Step 10 on the Student Borrower record is correct
- 15. EOP Librarian refiles the Student Borrower record into the StudentBorrower folder
- 16. EOP Librarian informs User that the Book has been successfully updated

Results:

1. The desired student information is updated

Alternates:

- 1. User is not an administrator
- 2. EOP Librarian fails to retrieve the Student Borrower using the information they provided
- 3. User does not provide Student Borrower's First Name and Last Name

Entities Involved:

User, EOP Librarian, Student Borrower, Student Borrower folder

6. Delete a student borrower from the system

Description:

EOP Librarian removes a student borrower

Preconditions:

1. User removing a student borrower is EOP worker (ordinary or administrator)

Workflow:

- 1. User presents Banner ID and password to EOP Librarian
- 2. EOP Librarian retrieves Worker record from the Worker folder using the Banner ID provided in Step 1 and checking that the password provided by User matches the password on the retrieved Worker folder
- 3. EOP Librarian prompts User which type of operation they would like to perform
- 4. User requests that they want to delete a student borrower in the System to EOP Librarian
- 5. EOP Librarian prompts User for First Name and Last Name of student borrower
- 6. User provides the First Name and Last Name of the student borrower to EOP Librarian
- 7. EOP Librarian retrieves all Student Borrower pages from the StudentBorrower folder that match the First Name and Last Name provided in Step 6 to the User.
- 8. User selects the BannerID of the corresponding Student Borrower
- 9. EOP Librarian retrieves the Student Borrower that matches with the BannerID in Step 6 from the StudentBorrower folder
- 10. EOP Librarian sets the Status to "Inactive" and sets DateOfLatestBorrowerStatus to the current date and updates the notes field to comment 'Deleted on [current date and time]'
- 11. EOP Librarian refiles the student borrower in the StudentBorrower folder
- 12. EOP Librarian informs User that the Student Borrower has successfully been deleted

Results:

1. Student Borrower has successfully been deleted

Alternates:

- 1. User does not provide BannerID of student borrower to EOP Librarian
- 2. Student borrower does not exist in the StudentBorrower folder

Entities Involved:

User, EOP Librarian, Worker folder, StudentBorrower folder

7. Add a worker to the system

Description:

Add a worker to the system

Preconditions:

1. The person registering the work is a EOP Librarian

Workflow:

- 1. The Worker presents their credentials (i.e their BannerID and password) to EOP Librarian
- 2. EOP Librarian retrieves the record from the Worker folder using the BannerID provided in Step 1
- 3. EOP Librarian matches the password given by the Worker to the password contained in the Worker folder retrieved in Step 2
- 4. EOP Librarian prompts the Worker for the type of action they wish to perform
- 5. The Worker requests EOP Librarian add Worker to the system
- 6. The EOP Librarian requests the Worker provide the following information: BannerID, Password, First Name, Last Name, Contact Phone, and E-mail
- 7. The Worker provides the BannerID, Password, First Name, Last Name, Contact Phone, and E-mail from step 6 to the EOP Librarian
- 8. The EOP Librarian validates that the new information entered in step 7 is correct
- 9. The EOP Librarian fails to retrieve Worker record from the Worker folder using the BannerID from step 7
- 10. The EOP Librarian creates a new Worker record containing the information from Step 7
- 11. EOP Librarian sets the credentials to Ordinary
- 12. EOP Librarian sets the Status to "active"
- 13. EOP Librarian sets the DateOfLatestCredentialsStatus to today's date
- 14. EOP Librarian sets the DateOfHire to today's date
- 15. The EOP Librarian files the Worker record into the Worker folder
- 16. The EOP Librarian informs the Worker that the Worker was successfully registered

Results:

1. The Worker is successfully registered

Alternates:

- 1. The Worker already exists in the system
- 2. The Worker could not provide identification information in step 6

Entities Involved:

EOP Librarian, Worker, Identification Information

8. Modify information about Worker

Description:

An administrator modifies information about a worker in the system

Preconditions:

- 1. User doing the modifications must be an administrator
- 2. User must have the Worker's First Name and Last Name

Workflow:

- 1. User presents BannerId and password to EOP Librarian
- 2. EOP Librarian retrieves Worker record from the Worker folder using the BannerId provided in step 1 and checks that the password provided by User matches the password on the retrieved Worker folder
- 3. EOP Librarian prompts User to choose the action they would like to perform
- 4. User says that they would like to modify information about Worker in the system
- 5. EOP Librarian checks User's credentials and DateofLastCredentialStatus to confirm User is an administrator
- 6. EOP Librarian prompts User to enter the First Name and Last Name of the Worker whose information they would like to modify
- 7. EOP Librarian retrieves the Worker record from the Worker folder which matches the information provided in step 5
- 8. EOP Librarian allows User to modify the retrieved Worker's information retrieved in step 7
- 9. User makes the desired changes to the Worker's information fields
- 10. EOP Librarian refiles the Worker record into the Worker folder
- 11. EOP Librarian informs User that the worker's information has been successfully updated

Results:

The worker has at least one of their information fields modified

Alternates:

- 1. User does not provide administrative credentials to EOP Librarian
- 2. The desired Worker does not exist

Entities Involved:

User, Worker, EOP Librarian, Worker folder

Use Case Name: 9. Delete a worker from the system

Description:

An Administrator deletes a worker from the system

Preconditions:

1. Person removing a worker is part of the administrative staff

Workflow:

- 1. User presents Banner ID and password to EOP Librarian
- 2. EOP Librarian retrieves Worker record from the Worker folder using the Banner ID provided in Step 1 and checking that the password provided by User matches the password on the retrieved Worker record
- 3. EOP Librarian prompts User which type of operation they would like to perform
- 4. User informs EOP Librarian that they would like to delete a worker from the system
- 5. EOP Librarian prompts User for Worker First Name and Last Name
- 6. EOP Librarian retrieves all Worker pages from the Worker folder that match the First Name and Last Name
- 7. EOP Librarian provides the above collection of Worker pages to User
- 8. User selects the BannerID of the desired Worker
- 9. EOP Librarian retrieves the appropriate Worker page from the Worker folder using the BannerID selected in step 8
- 10. EOP Librarian gives the Worker record to User for confirmation
- 11. User confirms to EOP Librarian that this Worker is to be deleted
- 12. EOP Librarian updates the status field in the Worker record to 'Inactive'
- 13. EOP Librarian refiles the Worker record in the Worker folder
- 14. EOP Librarian informs User the Worker is successfully removed

Results:

1. The Worker's status is Inactive

Alternates:

- 1. The Worker does not provide all information needed to EOP Librarian
- 2. Multiple workers with the same first and last name in the Worker folder
- 3. Worker does not exist

Entities Involved:

User, Worker, EOP Librarian, Worker folder

10. Check out a book

Description:

1. Student Borrower rents a Book from Worker and receives a due date for the Book rental

Preconditions:

1. Student Borrower must have a Book with them in order to check it out

Workflow:

- 1. User presents Banner ID and password to EOP Librarian
- 2. EOP Librarian retrieves Worker record from the Worker folder using the Banner ID provided in Step 1 and checking that the password provided by User matches the password on the retrieved Worker record
- 3. EOP Librarian prompts User which type of operation they would like to perform
- 4. User requests from EOP Librarian to check out a Book for a student borrower
- 5. User presents the First Name and Last Name of the Student to EOP Librarian
- 6. EOP Librarian prompts User for First Name and Last Name of student borrower
- 7. User provides EOP Librarian with the First Name and Last Name of the student borrower
- 8. EOP Librarian retrieves all student borrower pages from the StudentBorrower folder that match the First Name and Last Name provided in Step 6
- 9. User selects the BannerID of the corresponding student borrower
- 10. EOP Librarian retrieves the student borrower that matches with the BannerID in Step 6 from the StudentBorrower folder
- 11. EOP Librarian verifies that the BorrowerStatus is "Good Standing"
- 12. User presents EOP Librarian the book's barcode to be rented
- 13. EOP Librarian retrieves the Book record from the Book folder
- 14. EOP Librarian verifies that the Book Status is "Active"
- 15. EOP Librarian prompts User for due date of the book
- 16. User presents EOP Librarian with the due date
- 17. EOP Librarian creates a new rental record with the students BannerId as the BorrowerId, the book's barcode as the BookId, the current date as the CheckoutDate, the worker's BannerId as the CheckoutWorkerId, the due date supplied in step 12 as the DueDate, the CheckinDate as NULL, and the CheckinWorkerId as NULL
- 18. EOP Librarian files the new rental record in the Rental folder
- 19. EOP Librarian informs the User that the Book is successfully checked out.

Results:

A new rental record is in the Rental folder

Alternates:

- 1. Student is delinquent
- 2. Book is not active
- 3. User does not provide a barcode

Entities Involved:

EOP Librarian, Worker, STudent, Worker folder, StudentBorrower folder, Book folder, Rental folder

11. Check in a book

Description:

Worker returns a previously checked out book

Preconditions:

Person returning the Book is Worker

Workflow:

- 1. User presents Banner ID and password to EOP Librarian
- 2. EOP Librarian retrieves Worker record from the Worker folder using the Banner ID provided in Step 1 and checking that the password provided by User matches the password on the retrieved Worker folder
- 3. EOP Librarian prompts User which type of operation they would like to perform
- 4. User requests that they would like to check in a Book to EOP Librarian
- 5. EOP Librarian prompts User for the barcode to scan
- 6. User provides EOP Librarian with the book's barcode
- 7. EOP Librarian retrieves the Rental Page of the Rental folder selected with CheckinDate as NULL or "and barcode provided in Step 6.
- 8. EOP Librarian updates the Rental Page and sets the CheckInDate to the current date and sets the CheckinWorkerID to the WorkerID from Step 2
- 9. EOP Librarian refiles the Rental Page in the Rental folder
- 10. EOP Librarian informs User that the check in has been successfully completed

Results:

1. The appropriate book(s) is (are) updated in the Rental Page to reflect the check in

Alternates:

- 1. EOP Librarian fails to retrieve the Book using the barcode provided in Step 6
- 2. User does not provide the barcode
- 3. Book in Step 6 has not been checked out

Entities Involved:

User, EOP Librarian, Worker folder, Rental folder, Book

12. Run a Delinquency check

Description:

A EOP Librarian checks the status of books that are overdue and marks the associated student as a "delinquent"

Preconditions:

- 1. The Student has been registered as a Borrower
- 2. A Book was registered under a Student to be borrowed
- 3. The Book has gone overdue and the Student hasn't returned it

Workflow:

- 1. The Worker presents credentials to the EOP Librarian (BannerID and Password).
- 2. The EOP Librarian retrieves the record from the Worker folder using the BannerID provided in Step 1.
- 3. The EOP Librarian matches the Password given by the Administrator to the password contained on the Worker index card retrieved in Step 2.
- 4. The EOP Librarian Informs the Worker that their credentials are valid by asking them what type of action they wish to perform.
- 5. The Worker informs the EOP Librarian that they would like to perform a delinquency check.
- 6. The EOP Librarian retrieves a collection of Rental Pages from the Rental Folder whose CheckInDate is NULL or ", and whose DueDate is earlier than the current date.
- 7. For each Rental Page in the collection provided in Step 6:
 - a. The EOP Librarian gets the BorrowerID from the Rental Page.
 - b. The EOP Librarian retrieves the StudentBorrower Page from the StudentBorrower folder using the BorrowerID from Step 7a.
 - c. The EOP Librarian updates the StudentBorrower Page from Step 7b and sets the BorrowerStatus to "Delinquent" and sets the DateOfLatestBorrowerStatus to the current date.
 - d. The EOP Librarian refiles the StudentBorrower Page in the StudentBorrower folder.
- 8. The EOP Librarian informs the Worker that the delinquency check was successfully completed.

Results:

1. The student borrower is marked as a "Delinquent"

Alternates:

- 1. Worker does not have admin status
- 2. The student borrower cannot be found

Entities Involved:

Worker, EOP Librarian, StudentBorrower, Book Records, Book Status

13. List all books that are currently checked out

Description:

An administrator lists all of the books which are currently checked out

Preconditions:

1. User is part of the administrative staff

Workflow:

- 1. User presents their Banned ID and password to EOP Librarian
- 2. EOP Librarian retrieves Worker record from the Worker folder using the Banner ID provided by User in step 1 and checks that it matches the Banner ID and password provided by User
- 3. EOP Librarian prompts User which action they would like to perform
- 4. User informs EOP Librarian that they would like to list all of the books which are currently checked out
- 5. EOP Librarian retrieves a list of all the books
- 6. For each Book information page retrieved in step 5
 - a. EOP Librarian retrieves the next Book page from this collection
 - b. EOP Librarian retrieves the title of the Book if its status is 'Checked out'and adds this Book page to the CheckedOutBooksCollection
- 7. EOP Librarian displays the CheckedOutBooksCollection created in step 6(b) to User

Results:

1. List of currently checked out books is displayed

Alternates:

1. There are no books currently checked out

Entities Involved:

User, EOP Librarian, Book folder

15. List all student borrowers who have books checked out

Description:

An Administrator list all student borrowers who have books checked out

Preconditions:

1. User is part of the administrative staff

Workflow:

- 1. User presents Banner ID and password to EOP Librarian
- 2. EOP Librarian retrieves Worker record from the Worker folder using the Banner ID provided in Step 1 and checking that the password provided by User matches the password on the retrieved Worker record
- 3. EOP Librarian prompts User which type of operation they would like to perform
- 4. User informs EOP Librarian that they would like to list all student borrowers who have books checked out
- 5. The EOP Librarian retrieves a collection of Rental Pages from the Rental folder whose CheckInDate is NULL or ""
- 6. For each Rental Page in the collection provided in Step 6,
 - a. EOP Librarian retrieves the next Rental page from this collection
 - b. EOP Librarian gets the BorrowerID from the Rental page
 - c. EOP Librarian retrieves the StudentBorrower Page from the StudentBorrower folder using this BorrowerID
 - d. EOP Librarian adds this StudentBorrower page to the StudentBorrowerCollection if the StudentBorrower page is not already in this collection
- 7. EOP Librarian presents this StudentBorrower collection created in Step 6(d) above to User

Results:

1. List of student borrowers with books checked out is displayed

Alternates:

1. A student borrower cannot be found in the StudentBorrower folder

Entities Involved:

Worker, EOP Librarian, Rental folder, StudentBorrower folder