Use Case Document

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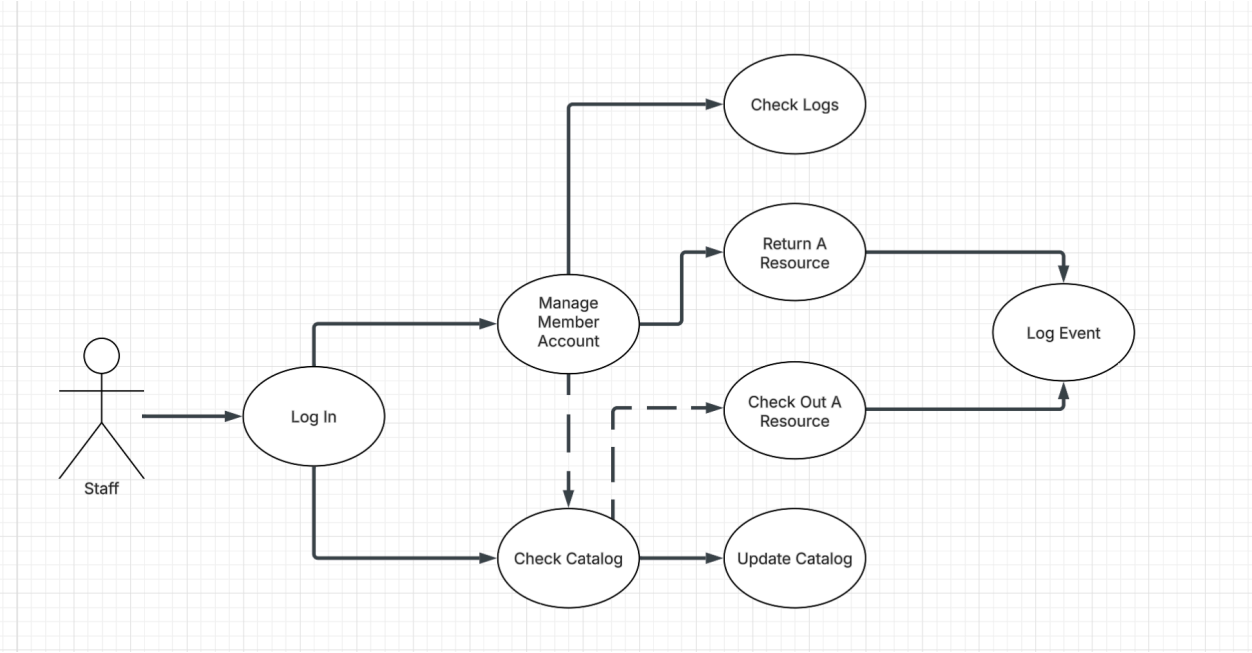
Revision History

Date	Revision	Description	Author
09/11/2025	1.0	Checking in/out book, Staff check logs use cases	
09/19/2025	1.1	Staff Checks Logs and Update Catalog use cases	Nathan S.
09/23/2025	1.2	Completed Remaining Use Cases	Salvador

Use Case Diagram



Returning a Resource

Use case id: 01

Use case name: Returning a resource
Relevant requirements:

- 3.1.3.1
- 3.1.3.2
- 3.1.4.2

Primary actor:

- Staff

Pre-condition:

- Media item is checked out
- Media item exists in the catalog
- Staff logged in

Post-condition:

- The system updates the status of the media item to +1 copy available
- The system updates the member's account
- The system logs the event

Basic flow or main scenario

- Staff logs in
- Staff selects "check in" from main menu
- Staff enters a search for the matching item
- Staff selects the desired result from the search results
- System displays the borrower name and resource for confirmation
- Upon confirmation, system updates the relevant logs and profile information
- System displays a completion message and pressing any key returns to the main menu

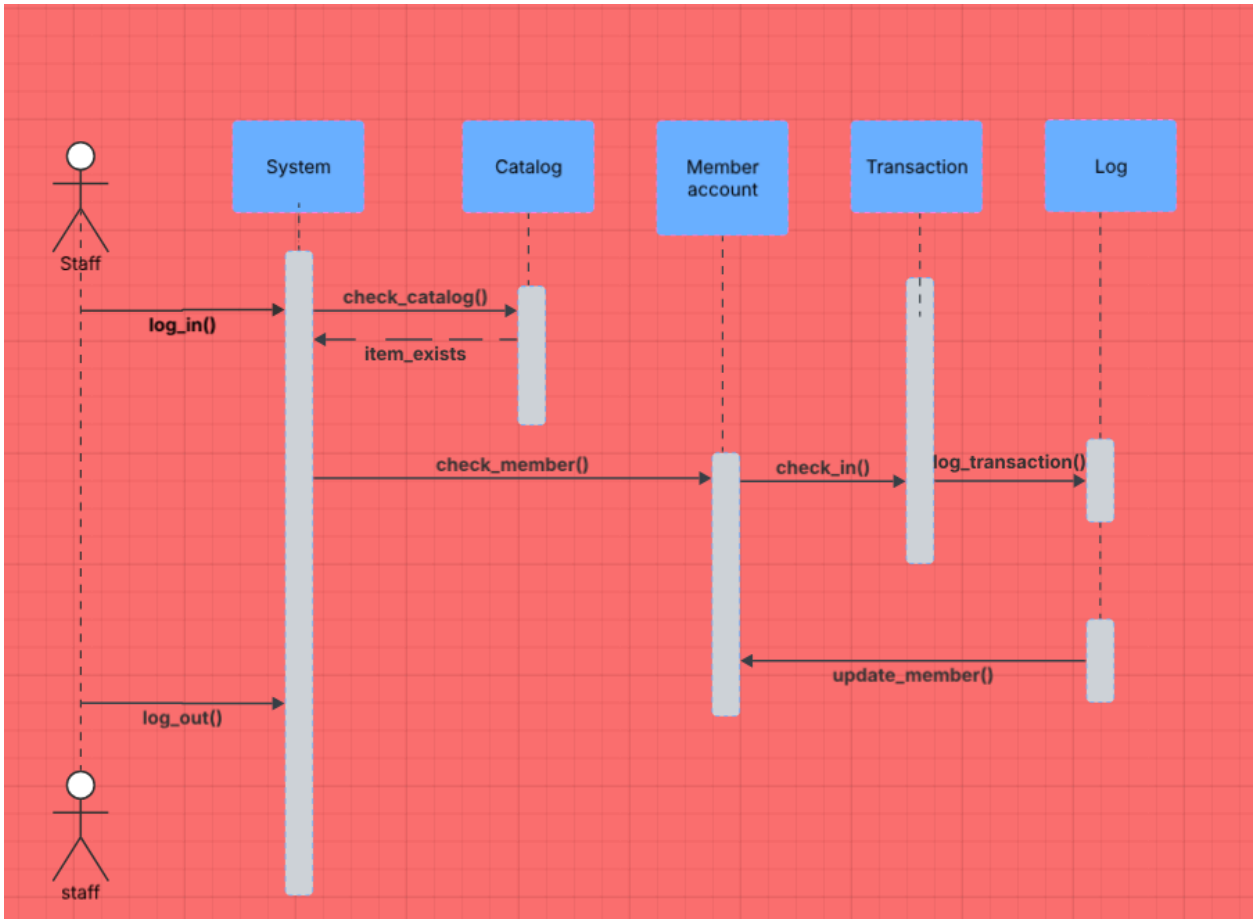
Extensions: (alternate scenarios):

Exceptions:

- Staff checks in a book that was not returned. Later on, when the book is requested to be checked out, it's not available.
- Staff checks in a book under another book ID

Related use cases:

- Updating catalog
- Checking catalog



Borrowing a Resource

Use case id: 02

Use case name: Checking out a resource
Relevant requirements-

- 3.1.4.2

Primary actor: Staff
Pre-condition:

- Staff is logged into the system
- Member has an active account and no overdue penalties that block borrowing
- Resource is available

Post-condition:

- Resource is marked as “borrowed”
- Due date is recorded in the system
- System logs the event

Basic flow or main scenario:

1. Staff searches for the member's account.
2. Staff selects the resource to loan
3. The system checks resource availability
4. The system records the loan transaction and assigns a due date

Extensions

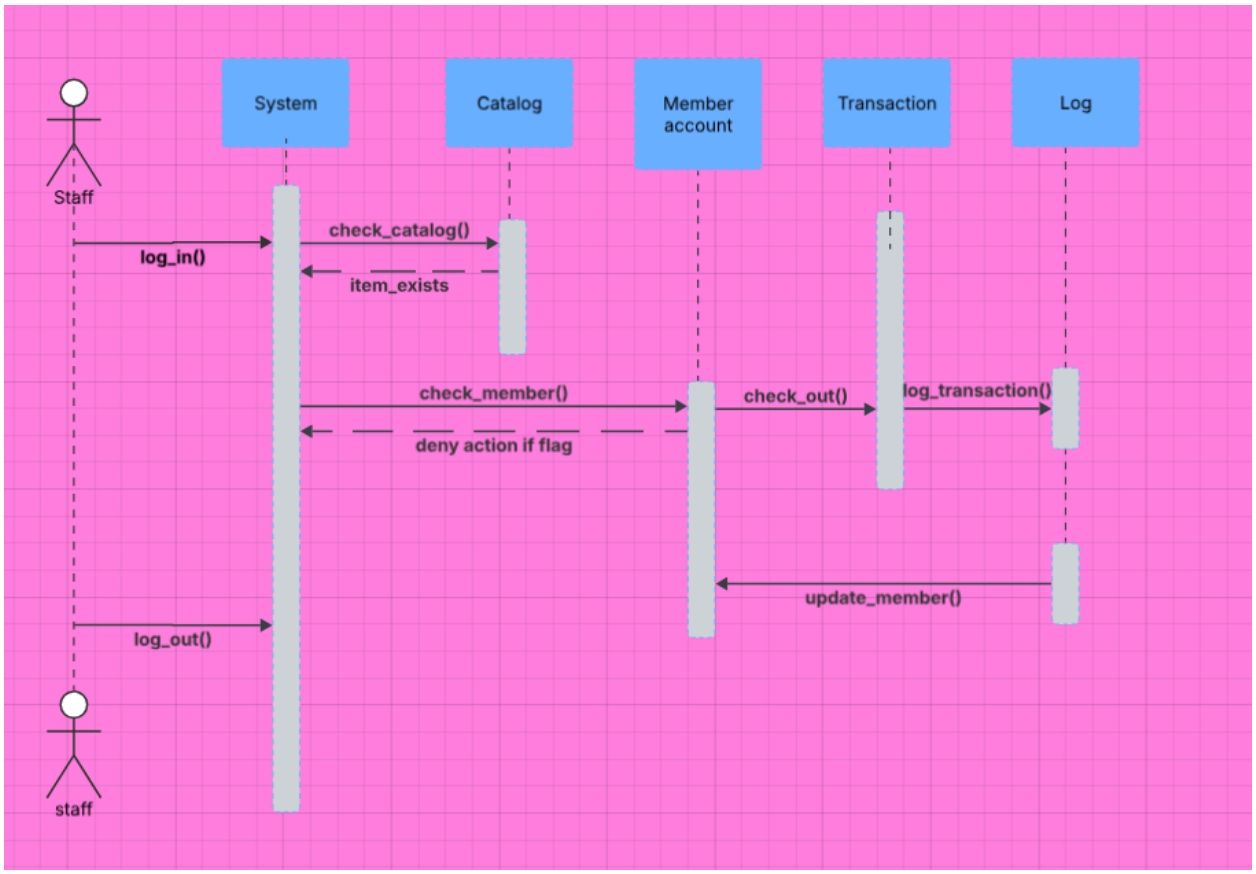
- Updating catalog

Exceptions

- If requested item does not exist, system indicates "no items match the search"
- If requested item is already checked out, system indicates "item already checked out"
- If user is flagged for any reason, the system indicates the warning

Related use case

- Member returns items checked out before checking out more items



Staff Checks Logs

Use case id: 03

Use case name: Checking logs
Relevant requirements:

- 3.1.1.3
- 3.1.5.1
- 3.1.5.2
- 3.1.5.3

Primary actor: Staff
Pre-condition: Staff log in data exists
Post-condition: Requested logs display, **Staff can add notes**?
Basic flow or main scenario:

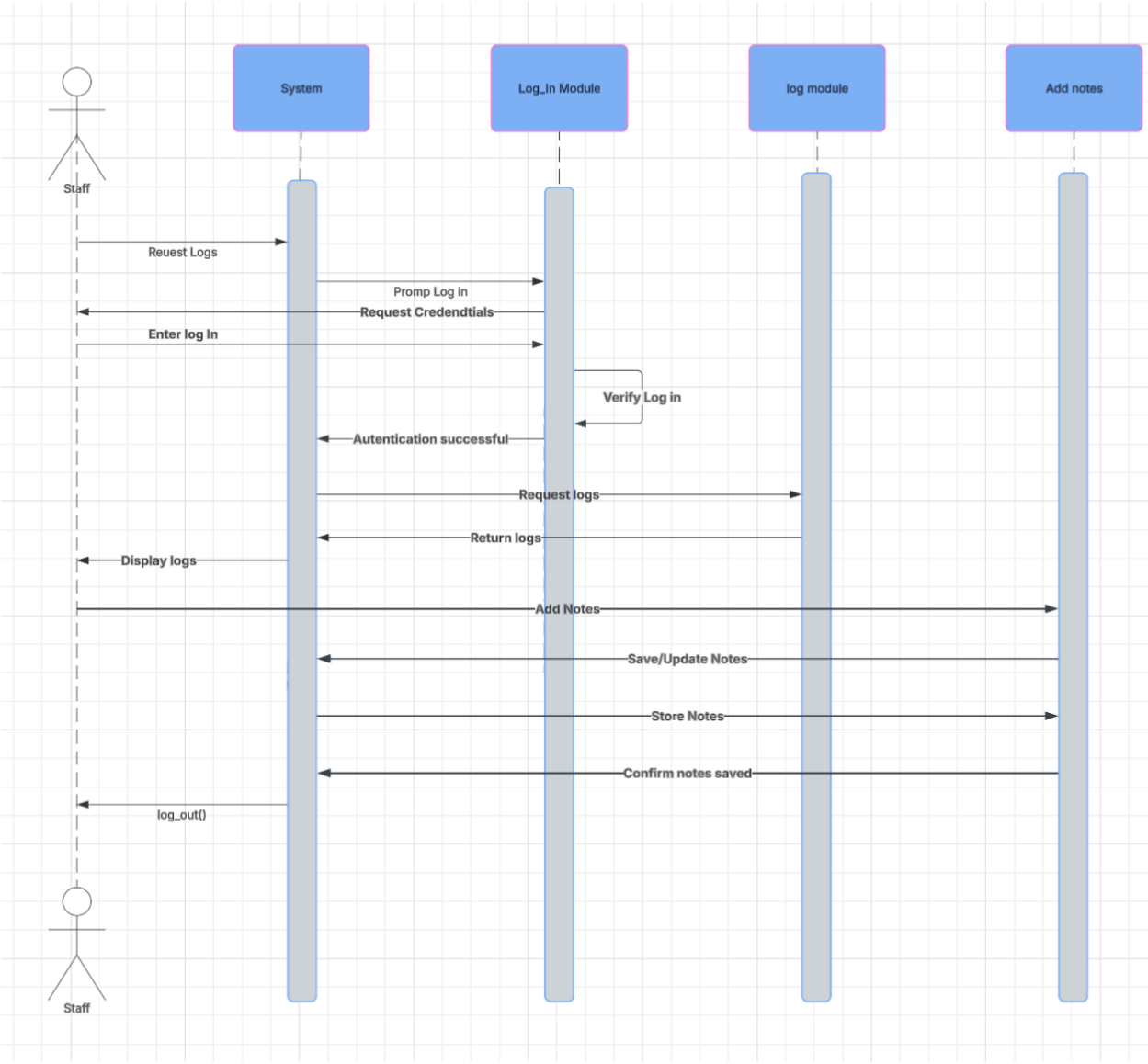
- Staff member logs in
- System verifies credentials
- System displays logs
- Staff member logs out

Extensions

- System can deny access for invalid log info -> prompt to re enter log info

Exceptions

- Too many failed log in attempts result in system lock
- If the system cannot fetch log in data -> Error prompt out putted



Update Catalog

Use case id: 04

Use case name: Update Catalog
Relevant requirements:

- 3.1.3.2

Primary actor: Staff
Pre-condition:

- Staff is logged into the system

Post-condition:

- Resource information is updated in the system

Basic flow or main scenario:

- Staff navigates to the catalog
- Staff adds, updates, or deletes resource(s)
- Catalog is updated

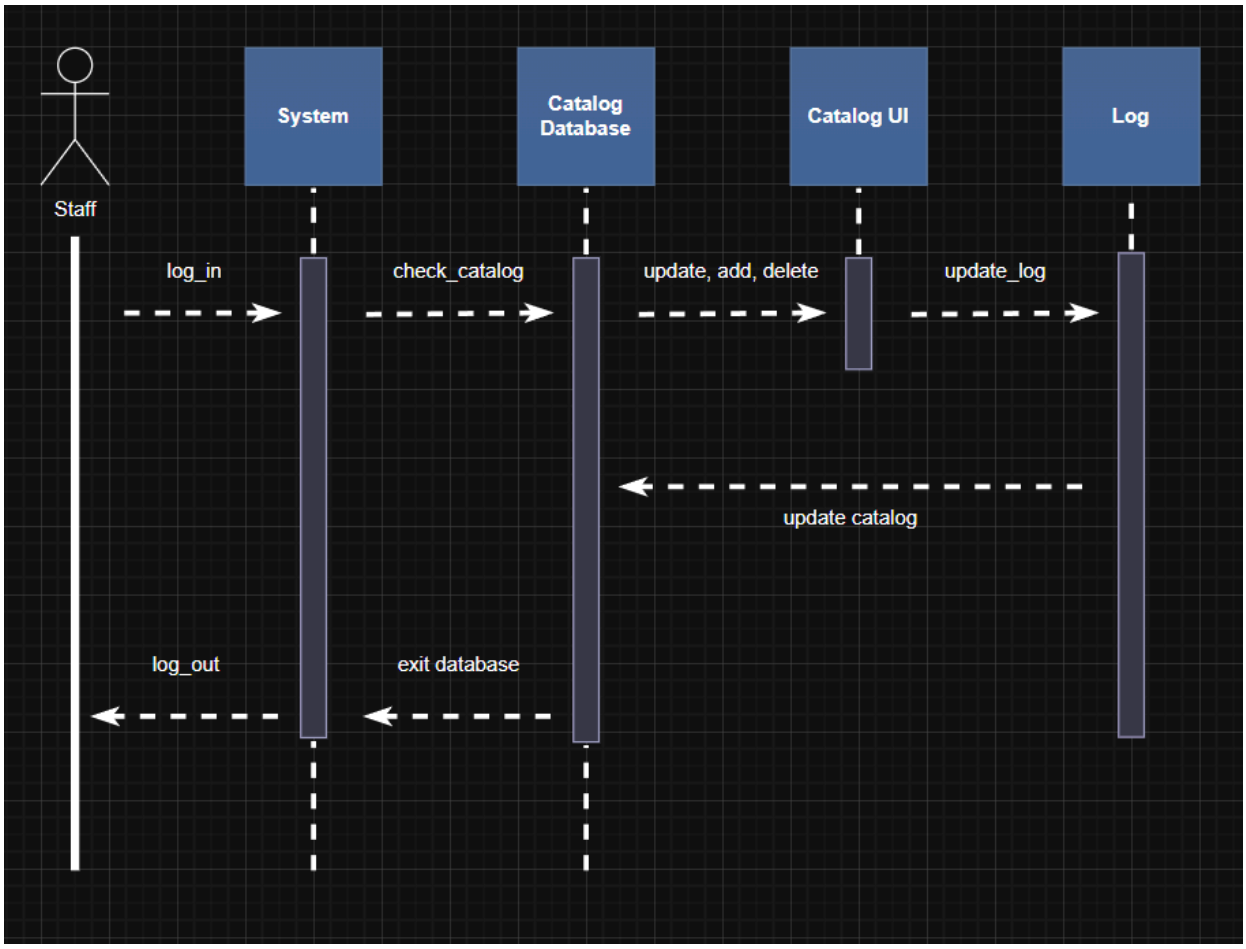
Extensions:

Exceptions:

- No duplicates
- Borrowed resources can't be deleted

Related use case:

- ID01 Returning a Resource
- ID02 Checking Out a Resource



Catalog Search

Use case id: 05

Use case name: Catalog Search
Relevant requirements:
Primary actor:

- Staff

Pre-condition:

- Staff is logged into the application.
- The library catalog database is accessible.

Post-condition:

- The staff user is presented with the relevant media information

Basic flow or main scenario

- Staff logs in
- Staff selects the “Search Catalog” option from main menu
- Staff enters and submits search criteria
- System returns a list of matching items with their details and current status

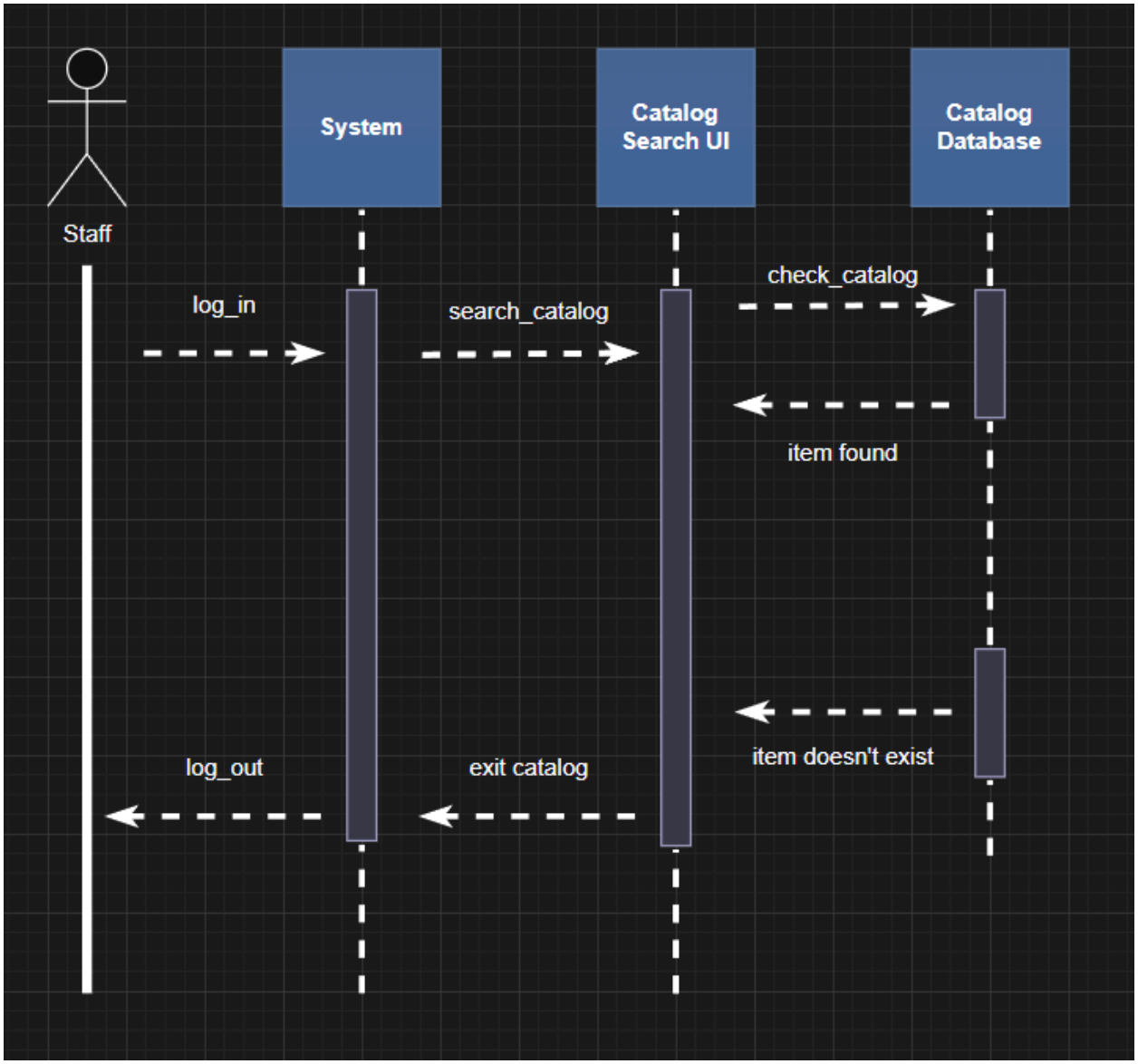
Extensions: (alternate scenarios)

Exceptions:

- If the search returns no results, the system indicates “no items match the search”

Related use cases:

- ID04 Update catalog
- ID02 Check out media



Manage Member Account

Use case id: 06

Use case name: Add, Update, and Delete Member Information
Relevant requirements:

- 3.1.6.1

Primary actor:

- Staff

Pre-condition:

- Staff should be logged in with a valid username and password
- Members should have an account

Post-condition:

- Member information is updated in the system

Basic flow or main scenario

- Staff decides to update a member's account info.
- Staff chooses to add a new member, update member account details or delete a member
- The system validates the entered information
- The system is updated

Extensions: (alternate scenarios)

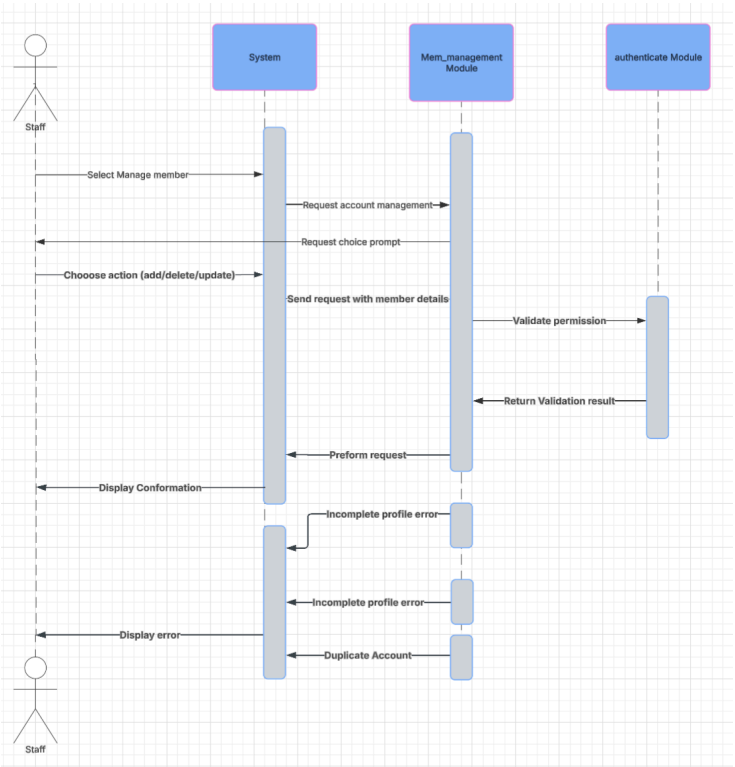
- Adding members with missing information should be flagged as an incomplete profile
- A member profile shouldn't be allowed to be deleted if the member has any resources that haven't been returned

Exceptions:

- The system shouldn't allow duplicate accounts

Related use cases:

- ID01 Checking out a resource
- ID02 Returning a resource



Staff Login

Use case id: 07
Use case name: Authenticate staff into the system
Relevant requirements: 3.1.1.1
Primary actor:

- Staff

Pre-condition:

- Staff has valid login credentials

Post-condition:

- Staff gains access to system features

Basic flow or main scenario

- Staff enters username and password
- The system validates credentials against stored records
- The system grants access to the staff member

Extensions: (alternate scenarios)

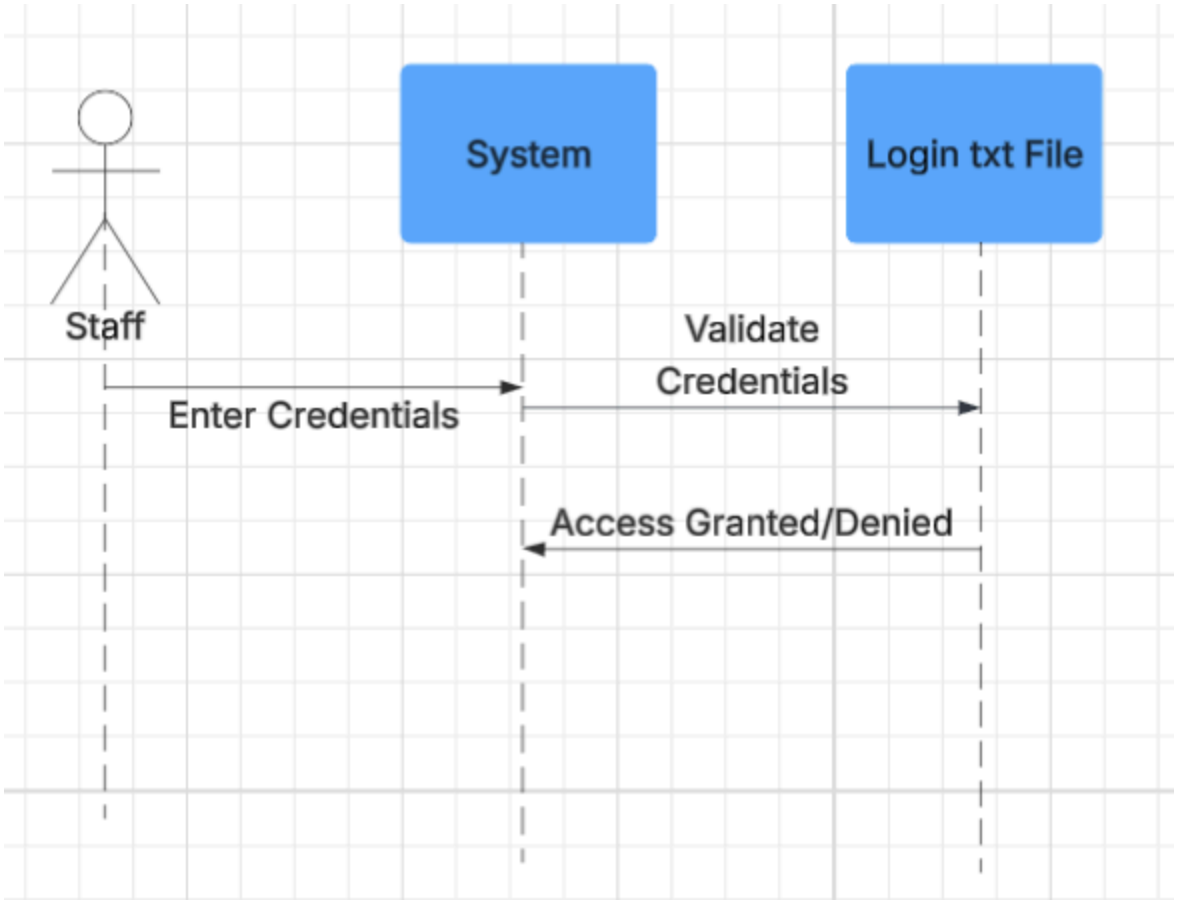
- Multi-factor authentication may be required for security reasons

Exceptions:

- Incorrect credentials result in a displayed error message

Related use cases:

- ID06: Manage Member Account
- ID04: Update Catalog


System
Login txt File
Staff
Validate
Credentials
Enter Credentials
Access Granted/Denied