

Milestone 2:

Identify your stakeholders, and discover the actual needs of your customers.

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1. Identify Stakeholders:

Stakeholders:

- Librarians
- Librarian assistants
- Administrators
- Students
- Educators
- Software developers
- Software maintenance
- WSU / the school using the system

2. Use cases

To assist in the development of the use cases, we interviewed a Librarians Assistant in Owen Science Library.

We asked her to describe her current job tasks and the tasks of library patrons and the librarian.

Actors:

- | | |
|---------------------------------------|-------------|
| - Librarians | - primary |
| - Librarian assistants | - primary |
| - Students | - primary |
| - Educators | - primary |
| - Unregistered patron (public patron) | - primary |
| - Database server | - secondary |
| - Access terminal | - secondary |

Librarians: (*inherits from Librarian Assistant*)

- Goals:
 - Maintain system
- Preconditions:
 - Registered super user
- Main tasks:
 - Add / delete books
- Exceptions:
- Variations:
- Information – acquire; produce; change:
- Inform about external changes:
- Information desired:
- Inform of changes:

Librarian assistant: (*inherits from Educator*)

Goals:

Assist patrons

Preconditions:

Registered as assistant user

Main tasks:

Checkout books

Check in books

Scan requested books for inter-library transfer

Reshelving

Educator: (*inherits from student*)

- Goals:
 - Reserve book for a semester
 - Restrict it to in-library use, checkout for 2 hours, cannot leave library
- Preconditions:
 - Registered educator patron
- Main tasks:
 - Reserve books
- Exceptions:
- Variations:
- Information – acquire; produce; change:
- Inform about external changes:
- Information desired:
- Inform of changes:

Students: (*inherits from public patron*)

- Goals:
 - Get books
- Preconditions:
 - Registered patron
- Main tasks:
 - Search for a book
 - Check out a book
 - Return a book
 - Place a hold on a book
 - Renew checkout
 - Request summit book
- Exceptions:
 - Can't check out a book if you have overdue books
 - Can't check out reserved books
- Variations:
- Information – acquire; produce; change:
- Inform about external changes:
- Information desired:
- Inform of changes:

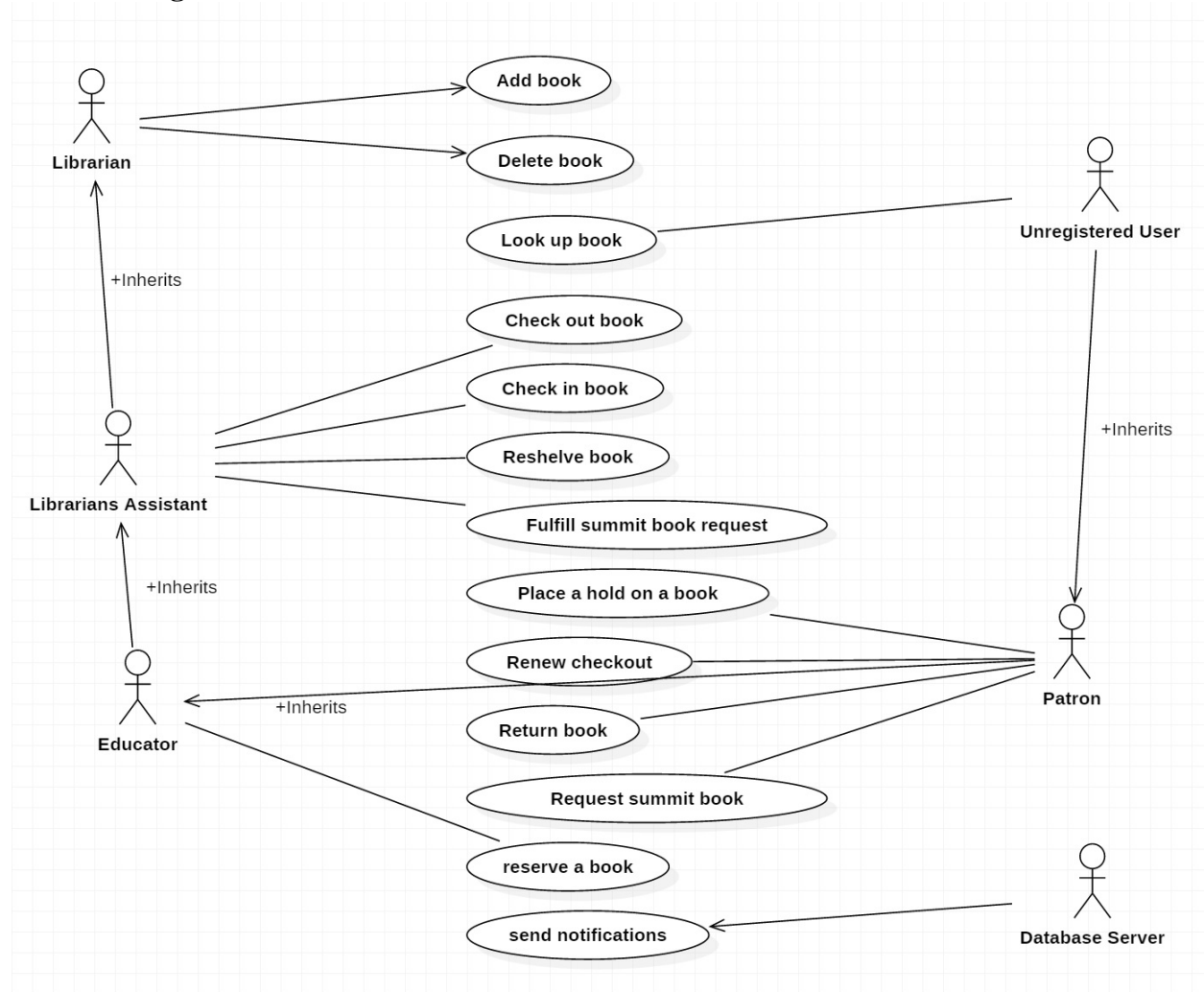
Public patron: (*base case*)

- Goals:
 - Look up a book
- Preconditions:
 - Access to internet connected computer
- Main tasks:
- Exceptions:
- Variations:
- Information – acquire; produce; change:
- Inform about external changes:
- Information desired:
- Inform of changes:

Database Server:

- Goals:
 - Track books
- Preconditions:
- Main tasks:
 - Send notifications
- Exceptions:
- Variations:
- Information – acquire; produce; change:
- Inform about external changes:
- Information desired:
- Inform of changes:

Use case diagram:



Scenario based elements:

1. Use Case Template for “Checkout a book”

Primary Actor:	Patron
Goal in context:	Check out a book to read at leisure outside the library
Preconditions:	Patron has found a book they want to check out
Trigger:	Patron decides to check out a book
Scenario:	<ol style="list-style-type: none">1. Patron looks up a book through the access terminal2. The book availability is determined3. Book location is provided to patron4. Patron locates book in library and decides to check out book5. Patron visits librarian assistant to checkout book6. Librarian assistant authenticates patron with their Cougar Card7. Librarian assistant checks out book to patron8. Patron leaves with book
Exceptions:	Patron has overdue books, they are not allowed to check out more books
Priority:	High, to be implemented in first iteration
When Available:	During library hours
Frequency of use:	High, hundreds of transactions per day
Channel to Actor:	Physical access to library
Secondary Actors:	Librarian assistant, database server
Channels to Secondary Actors:	Physical access to library, access to database server
Open Issues:	None

Use Case Template for “Return a book”

Primary Actor:	Patron
Goal in context:	Return a checked out book
Preconditions:	A book has been checked out
Trigger:	Book is no longer needed
Scenario:	<ol style="list-style-type: none">1. Patron has finished using book, book is no longer needed2. Patron goes to physical library and puts book in return book slot
Exceptions:	
Priority:	
When Available:	24 hours through internal and external drop boxes
Frequency of use:	Hundreds of times daily
Channel to Actor:	Physical access to drop box
Secondary Actors:	Library
Channels to Secondary Actors:	Physical library
Open Issues:	None

Use Case Template for “Place a book on hold”

Primary Actor:	Patron
Goal in context:	Prevent a needed book from being checked out until patron can check out book
Preconditions:	Book is available User is registered and authenticated to online system
Trigger:	Book has been located in online resource, patron needs the book but is not at the physical library
Scenario:	<ol style="list-style-type: none"> 1. Patron looks up book online 2. Book availability is determined to be available 3. Patron clicks a button on the web page to indicate they want to check out the book 4. A Hold is placed on the book so that if someone other than the registered patron tries to check it out, the librarian assistant will not check it out to them
Exceptions:	Patron has overdue books and is ineligible to check out books
Priority:	High,
When Available:	24 hours via online interface
Frequency of use:	Daily, multiple times
Channel to Actor:	Via web interface
Secondary Actors:	Database server
Channels to Secondary Actors:	Via web interface
Open Issues:	None

4. Use Case Template for Request a book from a different library

Primary Actor:	Patron
Goal in context:	To check out a book that is not available at the current working library but is available at one in the area.
Preconditions:	Current working library must not have the book available Different library in the area has book
Trigger:	Patron needs book, not at current library. System will check if at a local library.
Scenario:	<ol style="list-style-type: none">1. Patron looks up book2. Book is unavailable at current working library3. Patron requests book from local library
Exceptions:	Patron has overdue books and is ineligible to check out books.
Priority:	High
When Available:	24 rs available online
Frequency of use:	Daily, multiple time
Channel to Actor:	Via web interface
Secondary Actors:	Database server
Channels to Secondary Actors:	Via web interface
Open Issues:	none

5. Use Case Template for Send notifications

Primary Actor:	Database Server
Goal in context:	Send patrons any information about overdue fees, dates, or other important information.
Preconditions:	There must be an alert in the system
Trigger:	If there is any alert and the date and time meets.
Scenario:	<ol style="list-style-type: none"> 1. Patron has checked out book 2. Patron has 2 days left to turn in book or renew, etc
Exceptions:	None
Priority:	High
When Available:	24 Hours online
Frequency of use:	High, Hundreds or thousands everyday
Channel to Actor:	Online
Secondary Actors:	
Channels to Secondary Actors:	
Open Issues:	

6. Use Case Template for Renew checkout

Primary Actor:	Patron
Goal in context:	Allow Patrons to extend the allowed time they have to borrow a book
Preconditions:	Patron has a book or media already checked out. Patron must also not have any overdue charges.
Trigger:	Patron selects that they would like to renew a book already checked out.
Scenario:	<ol style="list-style-type: none"> 1. Patron has a book or media checked out 2. Patron chooses that he/she would like to extend book. 3. Patron has no outstanding charges or overdues 4. System extends book due date
Exceptions:	<ol style="list-style-type: none"> 1. Patron has overdue charges or books
Priority:	High
When Available:	Must be in person during library hours with book or media in hand.
Frequency of use:	Hundreds of times per day
Channel to Actor:	Web interface
Secondary Actors:	Database server
Channels to Secondary Actors:	Web interface
Open Issues:	None

7. Use Case Template for Search for book

Primary Actor:	Librarian Librarian assistant Student Educator Public patron Database server
Goal in context:	To find a book given a certain parameter or set of parameters
Preconditions:	Database must be populated
Trigger:	Person is looking for book
Scenario:	1. Person accesses website 2. Person enters parameters 3. Web portal populates list of matching books
Exceptions:	Database is empty Invalid input
Priority:	High
When Available:	Whenever database is available
Frequency of use:	High
Channel to Actor:	Whenever database is available
Secondary Actors:	None
Channels to Secondary Actors:	None
Open Issues:	None

8. Use Case Template for Add a book

Primary Actor:	Librarian Database server
Goal in context:	To add a new book to library database
Preconditions:	Librarian has physical copy of book
Trigger:	Librarian receives new shipment of books
Scenario:	<ol style="list-style-type: none"> 1. Librarian receives shipment of books 2. Librarian logs into web portal 3. L accesses add book function 4. L inputs book information or selects existing book 5. L inputs number of books received 6. Web portal sends message to update database server 7. Web portal outputs barcodes 8. L prints and attaches barcodes
Exceptions:	L is unable to log in
Priority:	High
When Available:	When librarian is available
Frequency of use:	Whenever shipment is received
Channel to Actor:	Web portal
Secondary Actors:	
Channels to Secondary Actors:	
Open Issues:	

9. Use Case Template for Remove a book

Primary Actor:	Librarian (L) Database server
Goal in context:	To remove a book from the database
Preconditions:	L must have physical book
Trigger:	L wants to remove book
Scenario:	<ol style="list-style-type: none">1. L receives damaged book2. L logs in to web portal3. L accesses book removal function4. L scans barcode5. Web portal sends message to database server to delete book
Exceptions:	Book has already been removed Book is missing/lost
Priority:	High
When Available:	When librarian is available
Frequency of use:	High
Channel to Actor:	Web portal
Secondary Actors:	None
Channels to Secondary Actors:	None
Open Issues:	What to do if book is missing/lost?

10. Use Case Template for **Reshelving**

Primary Actor:	Librarian Librarian Assistant
Goal in context:	Print out the list of books needing to be reshelved, marking as they are shelved.
Preconditions:	Books must have been returned or brought to desk and added to physical reshelving location and to a reshelving list in the software.
Trigger:	Either the temporary location is full or at the end of the day the assistant shelves the books.
Scenario:	<ol style="list-style-type: none"> 1. Patrons periodically return books and/or take them off of shelves and return to front desk. 2. Librarian (Assistant) adds book to reshelving list and places book in reshelving location.. 3. Either the end of day is reached or the reshelving location reaches maximum capacity. 4. Librarian (Assistant) enters reshelving interface and looks at list of books. 5. Takes locations listed and shelves book to their appropriate locations. Scan each book as it is shelved, removing each book from list.
Exceptions:	No books have been returned, no list is printed
Priority:	Low Priority - All other functions do not rely on reshelving. Books can be reshelved without the software.
When Available:	During library hours.
Frequency of use:	A few times per day.
Channel to Actor:	Any access terminal, library or internet.
Secondary Actors:	None
Channels to Secondary Actors:	None
Open Issues:	Will people lose the book in the temporary shelving?

11. Use Case Template for **Reserving a Book**

Primary Actor:	Librarian Librarian Assistant Students Educators
Goal in context:	Reserve a book so that it is available for use when you want to use it
Preconditions:	Book is available for checkout (then a hold is placed)
Trigger:	A book is needed by an educator.
Scenario:	<ol style="list-style-type: none"> 1. Educator needs to use a book periodically for class/research. 2. They then reserve a book for a certain amount of time for use when they need it.
Exceptions:	Book is unavailable.
Priority:	Medium Priority - Needed for educators but everything will work fine without.
When Available:	When a book is available.
Frequency of use:	A few times per semester.
Channel to Actor:	Access terminal over internet or library.
Secondary Actors:	None
Channels to Secondary Actors:	None
Open Issues:	None

12. Use Case Template for **Book Availability**

Primary Actor:	Any Human Actor
Goal in context:	Get whether a book is available and in what location.
Preconditions:	The database has been filled.
Trigger:	An actor has interest in the availability of a book.
Scenario:	<ol style="list-style-type: none">1. Patron needs a book.2. Patron goes onto website.3. Patron enters search parameters.4. Clicks on appropriate book.5. Checks the availability.
Exceptions:	None
Priority:	High Priority - Main function of library is to access books
When Available:	All times.
Frequency of use:	Many times daily.
Channel to Actor:	Any access terminal.
Secondary Actors:	None
Channels to Secondary Actors:	None
Open Issues:	None