#### Books

#### US 01.01.01

As an owner, I want to add a book in my books, each denoted with a clear, suitable description (at least title, author, and ISBN).

Use Case Name	US 01.01.01
Participating Actor	Book owner
Goal	add a book , each denoted with a clear, suitable description
Trigger	The owner clicks the "add" button in "own" interface
Precondition	The book owner is qualified to add a book(there may be some restrictions later, like credit)
Postcondition	On success, a book is added and it has a clear, suitable description
Basic Flow	1.The book owner click the "add" button in own interface
	2. System turns to a new interface to edit the book
	3. The book owner fills basic information about the book, name, author, ISBN.
	4. The book owner clicks the "save" button to save or "cancel" to leave the edit page.
Exception	4. The book owner doesn't fill all the required information about the book, but he clicks the "save" button.
	4.1 Display an error message
	4.2 The information will not be saved, user stay in the this interface.

#### US 01.02.01

As an owner, I want the book description by scanning it off the book (at least the ISBN).

Use Case Name	US 01.02.01
Participating Actor	Book owners

Goal	Get the description after scanning the book's ISBN
Trigger	The owner scan the book or enter the ISBN
Precondition	The user has a camera or a picture of the book, or knows the ISBN of it
Postcondition	On success, the book owner gets the description of the book
Basic Flow	1. The book owner scan the book or enter the ISBN
	2. The system records the ISBN and add it to description automatically.
	3. The user clicks "finish" button, and see ISBN occur on the description.
Exception	The ISBN is wrong (doesn't match the name of the book)
	1.1 show error message
	1.2 prompt the user to enter ISBN or scan it again

# US 01.03.01

As an owner or borrower, I want a book to have a status of one of: available, requested, accepted, or borrowed.

Use Case Name	US 01.03.01
Participating Actor	Book owner or borrower
Goal	A book has a status of one of: available, requested, accepted or borrowed.
Trigger	The user clicks the book to see the status.
Precondition	The owner updates the status.
Postcondition	On success, the status of the book is shown.
Basic Flow	1.The owner or borrower click the book to view the status
	2. The system shows the status of a book
Exception	No, this is a "click and then show information" case.

As an owner, I want to view a list of all my books, and their descriptions, statuses, and current borrowers.

Use Case Name	US 01.04.01
Participating Actor	Owner of books
Goal	view a list of all the books and their description, status, and current borrowers.
Trigger	The owner click the button "My Books"
Precondition	The owner owns at least one book, or the list is empty
Postcondition	On success, a list of all the books he owns is shown with status.
Basic Flow	The owner click the button "My Books"
	2. The system turns to another interface and list all the books the user owns and their status.
	3. The book owner clicks one of his books.
	4. The system turns to another interface, show the detailed information of the book he chose like descriptions and current borrower.
Exception	No, this is a "click and then show information" case.

## US 01.05.01

As an owner, I want to view a list of all my books, filtered by status.

Use Case Name	US 01.05.01
Participating Actor	Owner of books
Goal	view a list of all the books I own which are filtered by status
Trigger	The owner click the button "My Books",and then clicks the button "filtered by status"
Precondition	The owner owns at least one book, if not the list is empty.
	The owner is in the "My Book" interface.
Postcondition	On success, the list of all the books I own is shown and filtered by status

Basic Flow	1.The owner clicks the button "filtered by status".
	2.The system sort the books in the order: available, requested, accepted, borrowed. and shows it to the owner.
Exception	No, this is a "click and then show information" case.

# US 01.06.01

As an owner, I want to view and edit a book description in my books.

Use Case Name	US 01.06.01
Participating Actor	Owner of books.
Goal	View and edit a book description.
Trigger	The owner clicks the "edit" button in each book's information interface
Precondition	1.The owner has chosen a book in "My Books" interface.
	2. The system has turned to a single book information interface.
Postcondition	On success, the owner views and edits a book description and saves data.
Basic Flow	1.The owner chooses a single book from the book list in "own" interface.
	2. The system turns to the single book information interface.
	3. The owner click the "edit" button.
	4. The information of the book can be edit, like status( choose from the 4 status) description, book name, author.
	5. The owner clicks the "save" button, the system saved those changes. or the owner click "cancel", then go back to step 2.
Exception	5. The owner tries to edit the description, but left it empty.
	5.1 The system shows the error message: "The description cannot be empty"
	5.2 The system stay in the edit interface to continue edit

# US 01.07.01

As an owner, I want to delete a book in my books.

Use Case Name	US 01.07.01
Participating Actor	Owner of books
Goal	Delete a book in my books.
Trigger	The user clicks the delete button in the edit interface.
Precondition	The status of the chosen book is available (Deleting this book will not affect the owner's borrowers.
Postcondition	On success, 1.the book is deleted from the owner's book list.
	2. The book is deleted from the borrower's list.
Basic Flow	1.The user chooses one book in "own" interface
	2. The system turns to single book information interface
	3. The owner click the delete button.
	4. The book is delete from the owner's book list.
Exception	The user clicks the delete button for books with their status not available.
	1.1 The system shows error message: "Deleting is not permit until it's statu is available"
	1.2 System stay in the edit interface.

# User profile

## US 02.01.01

As an owner or borrower, I want a profile with a unique username and my contact information.

Use Case Name	US 02.01.01
Participating Actor	Book owner or borrower
Goal	Have a profile with a unique username and my contact information
Trigger	Book owner or borrower choose "my profile" option
Precondition	1.The owner or the borrower has logged in

	2.User of the system has a unique username and contact information saved
Postcondition	On success, a unique username and contact information displayed
Basic Flow	1.The user press "my profile" button
	2. A unique username and contact information displayed
Exception	1.There is no saved profile( the user doesn't log in)
	1.1 prompt the user to login

## US 02.02.01

As an owner or borrower, I want to edit the contact information in my profile.

Use Case Name	US 02.02.01
Participating Actor	Book owner or borrower
Goal	Edit the contact information in "my profile"
Trigger	The user presses the "edit" button in "my profile"
Precondition	1.The owner or the borrower has logged in.
	2. The owner or the borrower has already had an unique username and contact information.
Postcondition	On success, new information is saved and displayed on the screen.
Basic Flow	The user clicks the "edit" button in "my profile"
	2. Every row except user name in the profile is editable
	3. User changes his profile.
	4. The use click the save button to save or cancel the change.
Exception	4. The user leaves the edit profile interface without saving or canceling
	4.1 The system prompt the user to save profile or cancel his change

As an owner or borrower, I want to retrieve and show the profile of a presented username.

Use Case Name	US 02.03.01
Participating Actor	Book owner or borrower
Goal	retrieve and show the profile of a presented username.
Trigger	The user enter an username in the search bar and click search button
Precondition	The user has input some username that is not empty
Postcondition	On success, the system displays the person you searched( if exist), and then you can click it to see his profile.
Basic Flow	1.The user enter an username in the search bar and click search button.
	2. The system displays the user you searched( if exist). If it doesn't exist, show nothing.
	The system turns to the profile interface of the person the user searched.
Exception	1.The user enters nothing and click the button
	1.1 The system shows error message: username cannot be empty
	1.2 The system prompt the user continue to search
	3. The username is unused
	3.1The system shows the error message "There is no such person".

## Searching

US 03.01.01

As a borrower, I want to specify a set of keywords, and search for all books that are not currently accepted or borrowed whose description contains all the keywords.

Use Case Name	US 03.01.01
Participating Actor	Borrower of books

Goal	specify keywords and search for all books that are available and contain the keywords in its description
Trigger	The borrower enter keywords in the search bar in "all" interface and click the search button.
Precondition	The borrower enter some words in the search bar.
Postcondition	On success, the books list is shown, all the descriptions of books in the list contain the keywords.
Basic Flow	1.The borrower enter keywords in the search bar and click the search button.
	2.The system search the keyword among all the descriptions of the books with state available.
	3.The system shows the book list to the borrower
Exception	1.The user enters nothing and click the search button
	1.1 The system shows error message: "You must enter something"
	1.2 The system prompt the user continue to search
	2.There is no description contains the keyword
	2.1 Show the borrower an error message: "No match book"
	2.2 The system prompt the user continue to search

#### US 03.02.01

As a borrower, I want search results to show each book not currently accepted or borrowed with its description, owner username, and status.

Use Case Name	US 03.02.01
Participating Actor	Borrower of books
Goal	The system show search results of each book not currently accepted or borrowed with its description, owner username, and status.
Trigger	The borrow click the button: "Not available search" in the borrow

	interface.
Precondition	The user has entered something in the search bar .
Postcondition	On success, a list of books with status unavailable i.s shown
Basic Flow	1.The borrower click the button "Not available search"
	2.The system search the keyword among books with status "accepted" and "borrowed".
	3.The system shows the book list to borrowers.
	4. The borrower clicks one book in the new list.
	5. The system turns to a new interface to show the description, owner username and status of that single book.
Exception	3. There is no match book found
	3.1 The system shows an error message "No match book is found"
	3.2 The system goes back to the result of available books.

# Requesting

US 04.01.01

As a borrower, I want to request a book that is not currently accepted or borrowed.

Use Case Name	US 04.01.01
Participating Actor	Borrower of books
Goal	The borrower requests a book that is not currently accepted or borrowed
Trigger	The borrower click the "borrow" button in the single book information interface.
Precondition	The borrower is in single book information interface and the status of the book is available.
Postcondition	On success, the status of the book becomes "requested" from "available".
Basic Flow	1.The borrower click the "borrow" button in the single book information

	interface.
	2.The system change the status of the book to request.
	3.The system send request notice to the owner of the book.
Exception	No.

#### US 04.02.01

As a borrower, I want to view a list of books I have requested, each book with its description, and owner username.

Use Case Name	US 04.02.01
Participating Actor	Borrower of books
Goal	The borrower view a list of books he requested, each book with its description, and owner username.
Trigger	The borrower click the "borrow" button at the bottom of screen.
Precondition	The borrower has requested some books.
Postcondition	On success, the list of books the borrower has requested is shown, if the borrower click a single book, he can view its description and owner username.
Basic Flow	1.The borrower click the "borrow" button at the bottom of the screen.
	2.The system turns to a new interface shows a list of books that the user has requested.(share the same page with books you have borrowed successfully)
	3. The borrower click one of the book to view its description and owner username
Exception	1.The borrower has not borrowed any book yet.
	1.1The list shown is empty

## US 04.03.01

As an owner, I want to be notified of a request.

Use Case Name	US 04.03.01
Participating Actor	Owner of books
Goal	The owner is notified of a request
Trigger	One borrower sends requests to the owner and the owner click the request button at the bottom of the screen.
Precondition	The owner owns some books with status "available"
Postcondition	On success, the owner receives a request
Basic Flow	1.One borrower sends requests to borrow a book.
	2.The system finds the owner of the book and sends request.
	3. The owner of the book click the request button at the bottom of the screen.
	4. The owner receive the request.
Exception	No.

# US 04.04.01 As an owner, I want to view all the requests on one of my books.

Use Case Name	US 04.04.01
Participating Actor	owner
Goal	View all the requests on one of my books
Trigger	The owner clicks the request button at the bottom of the screen
Precondition	Owner has at least request on one of his books.
Postcondition	On success, all requests of a book will be shown on the screen.(
Basic Flow	1. The owner clicks the request button at the bottom of the screen
	2. The system displays the list of books that received requests.
	3. The owner click one of the book in the book list.

	4. The system turns to a new interface to show the requests from borrowers.
Exception	3. If there is no book has received request.
	3.1 System will display an error message "no request now"
	3.2 system returns to the profile interface

# Accepting

US 05.01.01

As an owner, I want to accept a request on one of my books. (Any other requests are declined.)

Use Case Name	US 05.01.01
Participating Actor	Owner
Goal	Accept a request on one of my books(any other requests are declined)
Trigger	Click the button "accept" on one request.
Precondition	There is at least one request for the book.
Postcondition	On success, all other requests of this book will be automatically declined, and the borrower of this request will get the message.
Basic Flow	The owner click the accept on one request.
	2. The status of this request is "accepted", and other requests' status of this book will become "declined"
	3. The accepting message will send to the borrower.
	4. The status of the book becomes "accepted".

#### US 05.02.01

As an owner, I want to decline a request on one of my books.

Use Case Name	US 05.02.01
Participating Actor	Owner
Goal	Decline a request on one of by books.
Trigger	Click the button "decline"
Precondition	There is at least one request for the book.

Postcondition	On success, the status for the request will transfer to "declined", and the borrower will get the message.
Basic Flow	The owner click the decline icon on one request.
	2.The status of this request is "declined"
	3. The declined message will be sent to the borrower.

## US 05.03.01

As a borrower, I want to be notified of an accepted request.

Use Case Name	US 05.03.01
Participating Actor	Borrower
Goal	Be notified of an accepted request.
Trigger	The owner accept the request.
Precondition	Borrower send a request of the book before, and in pending.
Postcondition	On success, the borrower can see the location that he/she can get the book from owner.
Basic Flow	1. A notification in borrow→ Notification is shown
	2. Borrower clicks the Notification button
	3. The system display the notification lists.
	4. The borrower clicks one of the notification.
	5.The information of the request will be shown on the screen, which also contain the location that the owner chooses.

#### US 05.04.01

As a borrower, I want to view a list of books I have requested that are accepted, each book with its description, and owner username.

Use Case Name	US 05.04.01
Participating Actor	Borrower
Goal	View a list of books I have requested that are accepted, each book with its description,and owner username

Trigger	Click the button "accepted request"
Precondition	The borrower has at least one request which is accepted by owner.
Postcondition	On success, the information of the request will be shown.
Basic Flow	The system will show the list of requests which are accepted.
	2. Borrower chooses one request and click it.
	3. The system will show the requests information, which has book's description and owner username.

# Borrowing

## US 06.01.01

As an owner, I want to hand over a book by scanning the book ISBN code and denoting the book as borrowed.

Use Case Name	US 06.01.01
Participating Actor	Owner
Goal	Hand over a book by scanning the book ISBN code and denoting the book as borrowed.
Trigger	Owner clicks the button "scan" (icon) on profile.
Precondition	The book in "Available" status.
Postcondition	On success, the book will transfer to "borrowed" status.
Basic Flow	System shows the scanning interface.
	2. Owner scans the ISBN code on book.
	3. System will show "successful" message.
	4. The book will transfer to borrowed status.
Exception	2. The ISBN code is unavailable.
	2.1. An error message will come out.
	2.2 System return to step 1.

US 06.02.01

As a borrower, I want to receive an accepted book by scanning the book ISBN code to confirm I have borrowed it.

Use Case Name	US 06.02.01
Participating Actor	Borrower
Goal	Receive an accepted book by scanning the book ISBN code to confirm I have borrowed it.
Trigger	Borrower clicks the button "scan"(icon) on profile.
Precondition	The book in "Available" status.
Postcondition	On success, the book will transfer to "borrowed" status.
Basic Flow	System shows the scanning interface.
	2. Borrower scans the ISBN code on book.
	3. System will show "successful" message.
	4. The book will transfer to borrowed status.
Exception	2. The ISBN code is unavailable.
	2.1. An error message will come out.
	2.2 System return to step 1.
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#### US 06.03.01

As a borrower, I want to view a list of books I am borrowing, each book with its description and owner username.

Use Case Name	US 06.03.01
Participating Actor	borrower
Goal	View a list of books I am borrowing, each book with its description

	and owner username.
Trigger	Click the icon borrow at the bottom of the screen
Precondition	I am borrowing at least one book.
Postcondition	On success, the borrower will see the books' information on screen.
Basic Flow	1. The borrower clicks the icon borrow at the bottom of the screen.
	2. The system will show all the books which he/she is borrowing in a list(only the book's name).
	3. The borrower click a book in the list.
	4. The book's whole information will be shown on the screen.

# Returning

US 07.01.01

As a borrower, I want to hand over a book I borrowed by scanning the book ISBN code to denote the book as available.

Use Case Name	US 07.01.01
Participating Actor	Borrower
Goal	Hand over a book which I borrowed by scanning the book ISBN code to denote the book as available
Trigger	Borrower clicks the button "scan"(icon) on profile.
Precondition	The book is in "borrowed" status.
Postcondition	On success, the book will transfer to available status.
Basic Flow	System shows the scanning interface.
	2. Borrower scans the ISBN code on book.
	3. System will show "successful" message.
	4. The book will transfer to available status.(after both owner and borrower have scanned it)

Exception	2. The ISBN code is unavailable.
	2.1. An error message will come out.
	2.2 System return to step 1.

#### US 07.02.01

As an owner, I want to receive a returned book by scanning the book ISBN code to confirm I have it available.

Use Case Name	US 07.02.01
Participating Actor	Owner of the book
Goal	Receive a returned book by scanning the book ISBN code to confirm I have it available
Trigger	Owner click the button "scan"(icon) on profile.
Precondition	The book is in "borrowed" status.
Postcondition	On success, the book will transfer to available status.
Basic Flow	System shows the scanning interface.
	2. Owner scans the ISBN code on book.
	3. System will show "successful" message.
	4. The book will transfer to available status.
Exception	2. The ISBN code is unavailable.
	2.1. An error message will come out.
	2.2 System return to step 1.

# **Photographs**

US 08.01.01

As an owner, I want to optionally attach a photograph to a book of mine.

Use case name	US 08.01.01
Participating actors	Owner of the book
goal	Optionally attach a photograph to a book
trigger	The owner press the button "ADD PHOTO".
precondition	The book belongs to the right owner.
postcondition	On success, the photograph will be shown in the book's information.
Basic flow	System prompts owner to choose a photo, there is two buttons on the bottom which are "submit" and "cancel".
	2. Owner submits the photo.
	3. System return to the book's information interface, people can see the photo in the book's information.
Exceptions	2a. If the type of the file which user chooses is not acceptable
	2a.1 System displays an error
	2a.2 System returns to step1
	2b. If the type owner click button "cancel"
	2b.1 System return to book's information interface.

# US 08.02.01

As an owner, I want to delete any attached photograph for a book of mine.

Use case name	US 08.02.01
Participating actors	Owner of the book
goal	Delete an specific photograph for his/her book
trigger	Owner long_time_click the photo which he/she wants to delete.
precondition	There exists some photos.
postcondition	On success, the specific photo will disappear from the book's information.
Basic flow	1. The system will ask "Do you want to delete this photograph?", and there are two buttons on the bottom with are "YES" and "NO".

	2. Owner chooses "YES".
	3. System return to book's information interface, there is no that deleted photo any more.
Exceptions	2. Owner choses "NO"
	2.1 System return to book's information interface, nothing changed.

## US 08.03.01

As an owner or borrower, I want to view any attached photograph for a book.

Use Case Name	US 08.03.01
Participating Actor	Owner or borrower
Goal	View any attached photograph for a book
Trigger	Owner or borrower click the photograph.
Precondition	
Postcondition	The specific photo will show in full screen.
Basic Flow	System show the photo in full screen.
Exception	

#### Location

US 09.01.01

As an owner, I want to specify a geo location on a map of where to receive a book when I accept a request on the book.

Use Case Name	US 09.01.01
Participating Actor	Owner of the book
Goal	Decide a location on map of where to receive a book.
Trigger	Owner click the "edit" button in profile interface under location.
Precondition	The owner accept the request on the book.
Postcondition	On success, the location will be shown on the accepted request information page.

Basic Flow	System prompts the map of earth.
	2. Owner chooses the country, province, and city.
	3. System will show the city's map instead of the earth's.
	4. The owner types the whole address of the location.
	5. The owner submit the address.
	6. The address will be shown on the accepted request information page.
Exception	4a. The owner click a place on the map.
	4a.1 The system will show the address of that clicked point.
	4a.2 The owner submit the address
	4a.3 return to step 6
	4b. The owner typed a wrong location which does not exist in that city.
	4b.1 System will show an error
	4b.2 Return step3

## US 09.02.01

As a borrower, I want to view the geo location of where to receive a book I will be borrowing.

Use Case Name	US 09.02.01
Participating Actor	Borrower of the book
Goal	View the geo location of where to receive a book he/she will be borrowing.
Trigger	Click the accepted request information of that book.
Precondition	The borrowing request is already be accepted.
Postcondition	On success, the borrower can see the details of location on the page of accepted request information of the book.
Basic Flow	Click the information of the book request.

	2. The location will be shown on the interface.
Exception	

# Wow\_1

US 10.01.01

As a borrower, I want to write a comment while returning the book.

Use Case Name	US 10.01.01
Participating Actor	borrower
Goal	Write a comment while returning the book.
Trigger	Once scanning the ISBN code successfully.
Precondition	You borrowed the book and have not returned.
Postcondition	On success, the comment will be shown on the book's information page.
Basic Flow	System prompts borrower to enter comments.
	2. Borrower submits the comment.
	3. The comment can be find on the book's information page.
Exception	2. Borrower does not enter anything, and click submit.
	2.1 Nothing will be saved for the book's comment.

## US 10.02.01

As a borrower/owner, I want to see the comment of a book.

Use Case Name	US 10.02.01
Participating Actor	borrower/owner
Goal	See the comment of a book.
Trigger	Click a book.
Precondition	

Postcondition	On success, you can see the comments on the book's information page.
Basic Flow	1. borrower/owner click the book which he/she wants to view.
	2. System will show the interface of book's information
	3. On the bottom of the interface, you can see the comments.
Exception	3. Nobody wrote the comment for the book before.
	3.1 Nothing will be shown in the comment part.

# Wow\_2

## US 11.01.01

As a borrower, I want to see some recommended books when I do not know what to look for.

Use Case Name	US 11.01.01
Participating Actor	borrower
Goal	See some recommended books when I do not know what to look for.
Trigger	Click the button "recommend".
Precondition	The borrower has borrowed at least one book before.
Postcondition	On success, you can see some recommended books on the screen.
Basic Flow	Borrower clicks the button "recommend"
	2. Some bubbles which contain book's name will appear on the screen.
	3. Borrower click one of the bubbles which he/she is interested
	4. The book's information page will be shown on the screen.

Exception	3. Borrower cannot find any book which he/she is interested.
	3.1 Borrower click the any place on the screen except the bubbles.
	3.2 The system will return to the book list.