

# Web Project Documentation

## “Skyline Public Library”

Logo



**Git Link** – [Click Here](https://github.com/rutushah/Library_Management_System)

Or Visit

[https://github.com/rutushah/Library\\_Management\\_System](https://github.com/rutushah/Library_Management_System)

BY Team 3

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# 1 Introduction.

The project Library Management System aims at developing a fully functional computerized system to maintain all the day-to-day activity of a library.

library management falls under “Service providing category”, This project has many features such as the facility of user login and Staff login. Also, on top of all this, there is an admin who will be managing the entire system.

## 1.1 Scope.

If any author wishes to sign up and reserve a meeting space for the launch of his book. In order to schedule the book launch event, he has to visit the library.

If the user wants to rent DVDs, CDs, or projectors, then he needs to visit the library front desk to rent those items.

Meeting spaces can't be booked online as of now.

## 1.2 Project Overview.

A library management system is used to maintain library records. It tracks the records of the number of books in the library, how many books are issued, or how many books have been returned or renewed, or late fine charges, etc.

In the Skyline Library management, there are three different users who will be accessing the website: The Admin, The Library Staff, and the Users, i.e., the members of the library.

The members need to register themselves by paying a bi-annual membership charge of \$60.

The user who wants to register should also submit a photo ID proof for the address proof, which will be viewed by the staff, and he will get an acknowledgement as soon as the registration is successful.

The member can go through a lot of catalogues and select the book he wants to rent.

A member can rent 3 books at a time, and he needs to deposit one of the 3 pre-issued books if he wants to take away the new book.

A book is issued for 3 weeks, and after that, there is a fine of \$5 per week on the user's account.

A user can also download the available e-books free of charge. For a hard copy book, the member needs to visit the library and get it issued. The location of the book can be seen online on which rack it is in the library.

The staff will be responsible for keeping track of the books, issuing the books to the members, and updating them in the database. The staff will be reviewing the submitted photo ID and approving or declining the request.

The staff can block and unblock the members, and based on this, the members will be able to rent books.

The staff will be adding new books and categories.

The admin can edit the library information fields, i.e. Address, Timings, Book return limit, fines to be Imposed, And Even display an Urgent Message on the Website.

The Admin can view, add, or block the staff members. The Admin can also view the library members as well. The Admin can also block a specific book from the list of books.

## 2. Design Wireframe from First time visitors Perspective.

### 1. Dashboard Page



## 2. Select Role Page



The screenshot shows a web browser window with the address bar displaying `https://skylinelibrary.com`. The page content is divided into two main sections. The left section contains the text **-logo-** followed by **Skyline Public Library**. Below this is the heading **Select Role** and three radio button options: **Admin**, **Staff**, and **User**. At the bottom of this section are two buttons: **Continue** and **Back**. The right section is a large rectangular area with a green-to-white gradient, labeled **Image** in the center.

### 3. Design Wireframe from User Perspective.

#### 1. Log In page.

The wireframe shows a web browser window with the URL `https://skylinelibrary.com`. The page layout is divided into two main sections. The left section contains the following elements: a logo placeholder labeled "-logo-", the text "Skyline Public Library", a heading "Access My Account", two input fields labeled "Registered Email \*" and "Password \*", a link "Forgot ?", two buttons labeled "Continue" and "Back", and a link "New user sign up for a free account". The right section is a large rectangular area labeled "Image", which is currently filled with a solid green color.

## 2. Registration.

https://skylinelibrary.com

-logo-

Skyline Public Library

Register here to be member of Skyline Public Library

First name\*

Last name\*

Email

Password

Confirm Password

Contact Number

Address

Upload Profile Picture

Choose File

No File Selected

Upload Photo ID

Choose File

No File Selected

Security Questions !!

Enter your Pet Name

Enter your Mother Name

Enter your Birth Place

Registration

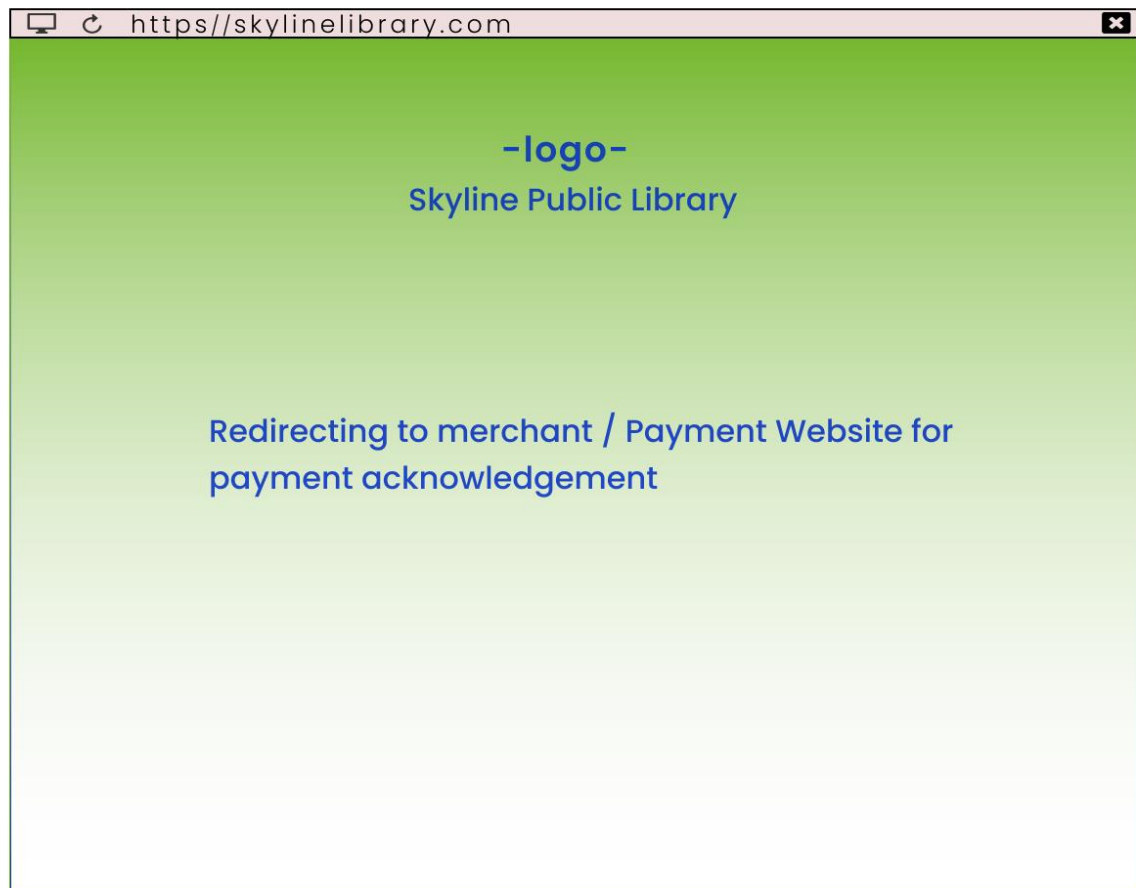
Back

Already have an account ? Login

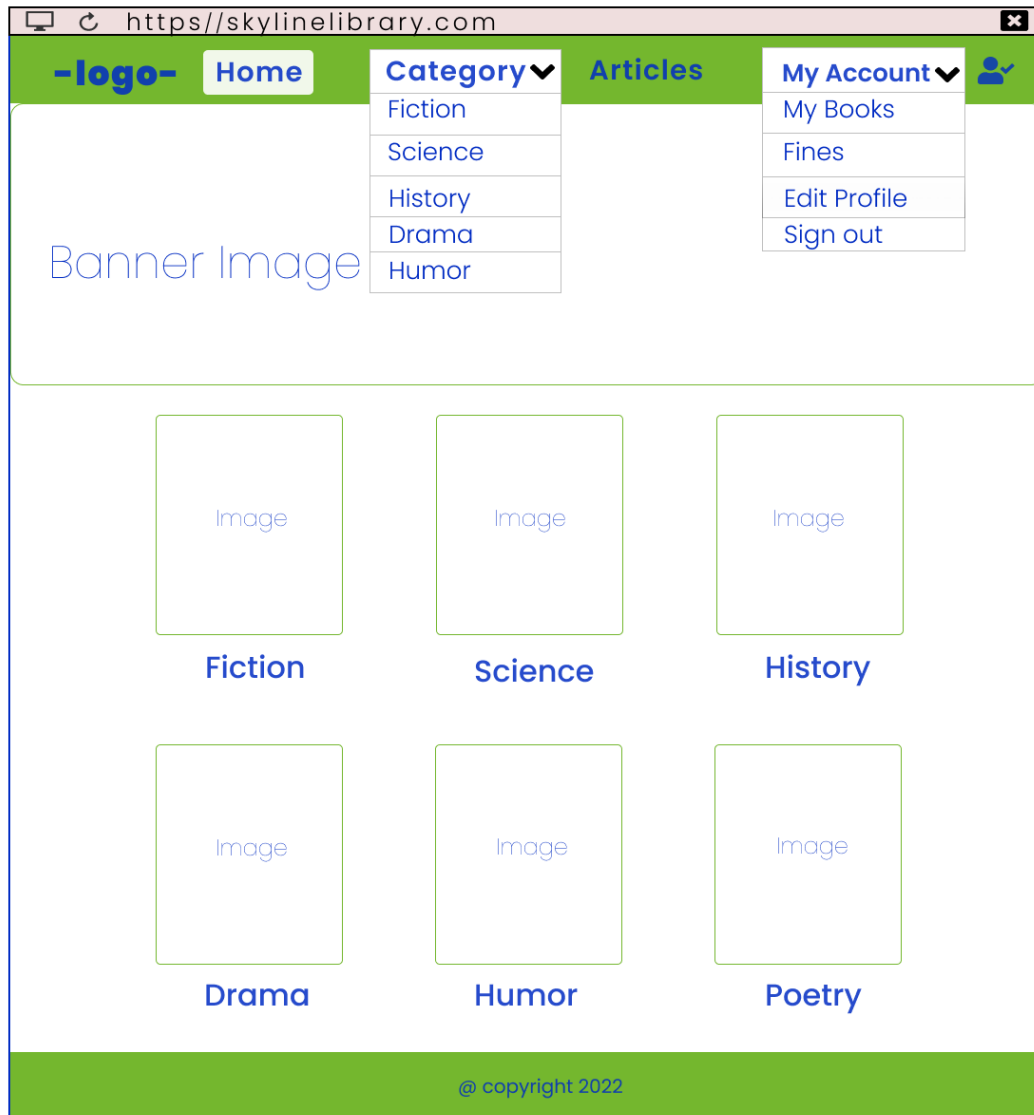
Image



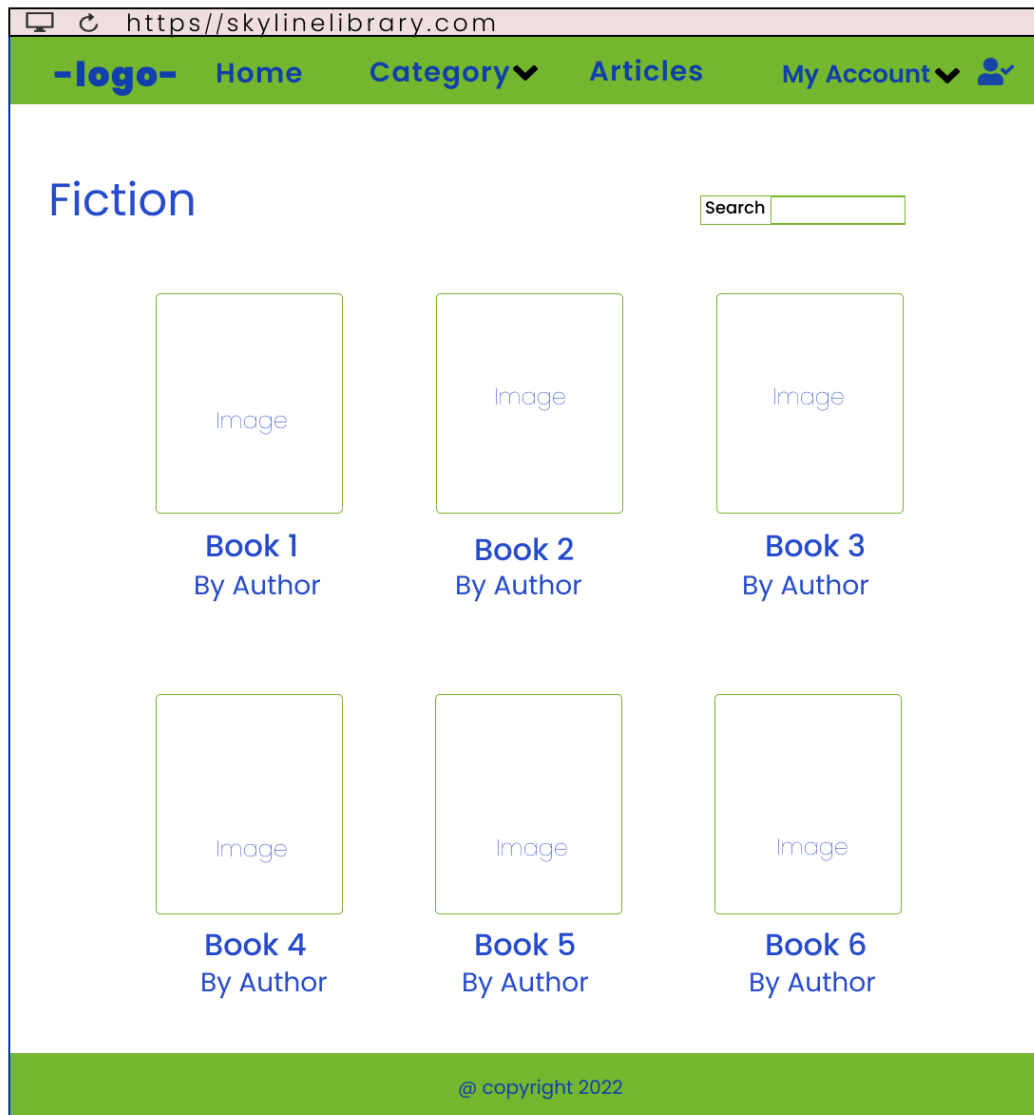
### 3. Payment Authorisation Page / After receiving Confirmation Email.

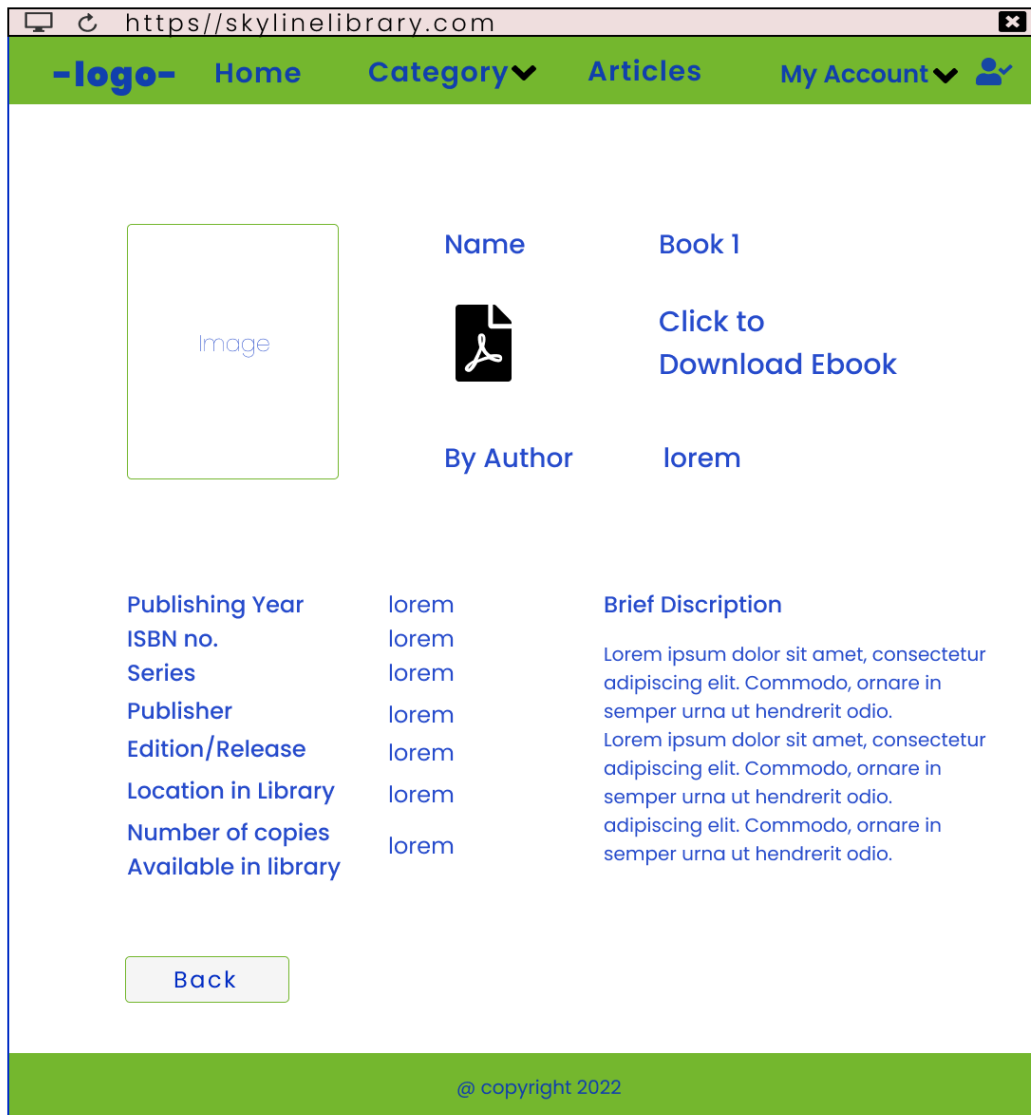


#### 4. Home Page After successful login.



## 5. Select a book page



**6. More details about the selected book page .**

**7. List of all rented books by user.**

The screenshot shows a web browser window with the URL <https://skylinelibrary.com>. The website has a green header with a logo, navigation links (Home, Category, Articles), and a 'My Account' dropdown menu. The main content area displays the 'Skyline Public Library' title and a 'Rented Books' section. Below this is a table with 7 columns: S no, Book Name, Edition, Issue Date, Return Date, Book ID, and Fine. The table contains one row of data and four empty rows. A pagination link '1. 2. 3. ... 12' is visible at the bottom right of the table area. The footer of the website is green and contains the text '@ copyright 2022'.

https://skylinelibrary.com

-logo- Home Category Articles My Account

My Books

Fines

Edit Profile

Sign out

Skyline Public Library

Rented Books

S no	Book Name	Edition	Issue Date	Return Date	Book ID	Fine
1.	lorem	Lorem ipsum				

1. 2. 3. ... 12

@ copyright 2022

**8. Page showing how much fine is to pay by user .**

The screenshot shows a web browser window with the URL <https://skylinelibrary.com>. The website has a green header with navigation links: **-logo-**, **Home**, **Category** (with a dropdown arrow), **Articles**, **My Account** (with a dropdown arrow and a user icon), **My Books**, **Fines**, **Edit Profile**, and **Sign out**. The main content area is white and contains the text **Skyline Public Library** in blue. Below this is the heading **Pay Your Fines Here** in blue. Underneath is the label **Amount** in blue. A text box displays **\$ 12.50 /**. At the bottom of the form are two buttons: **Pay Now** and **Back**. The footer is green and contains the text **@ copyright 2022**.

## 9. Edit personal info page .

The screenshot displays the 'Edit My Personal Info' page on the Skyline Public Library website. The browser address bar shows 'https://skylinelibrary.com'. The header is green with a logo, 'Home', 'Category' (with a dropdown arrow), 'Articles', and a 'My Account' dropdown menu. The dropdown menu contains 'My Books', 'Fines', 'Edit Profile', and 'Sign out'. The main content area has the title 'Skyline Public Library' and the heading 'Edit My Personal Info'. Below this are three input fields: 'Email', 'Contact No.', and 'Address'. A 'Save' button is located at the bottom right of the form. The footer is green and contains the text '@ copyright 2022'.

https://skylinelibrary.com

-logo- Home Category▼ Articles My Account▼

My Books

Fines

Edit Profile

Sign out

Skyline Public Library

Edit My Personal Info

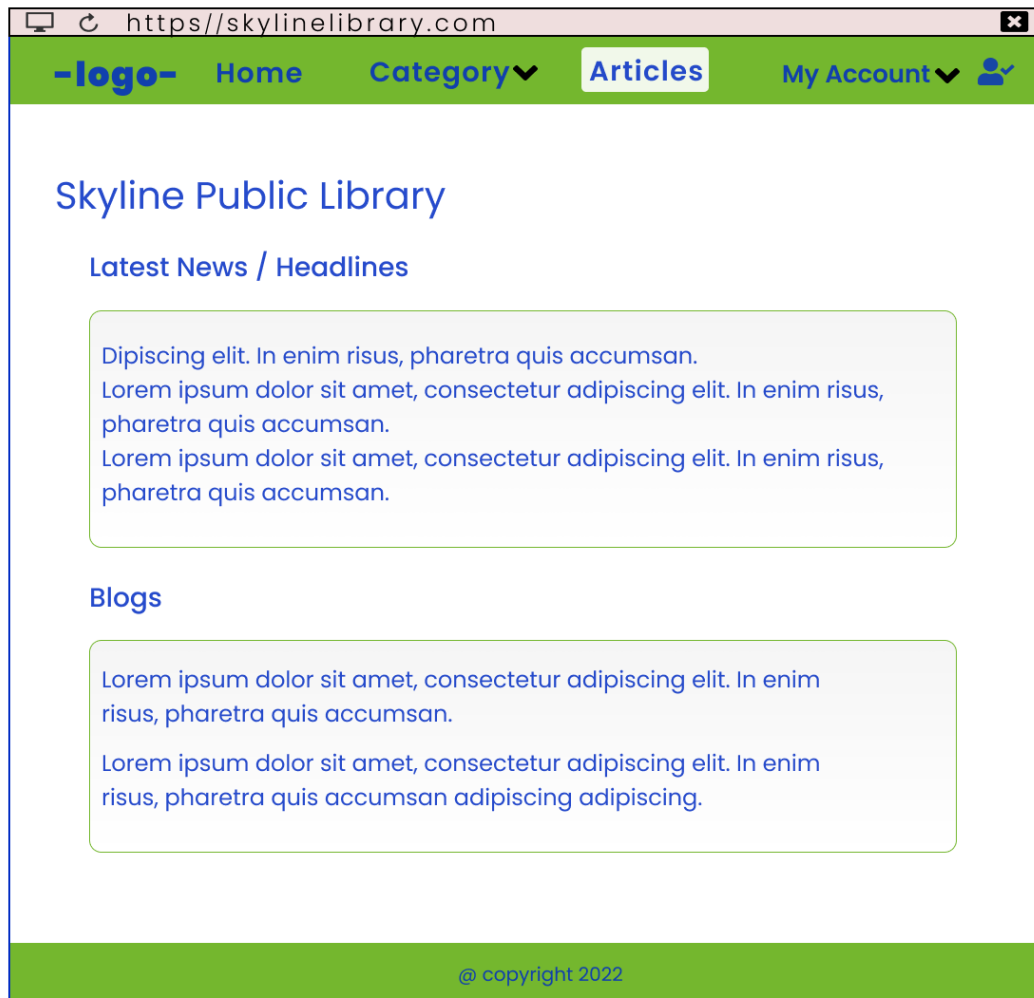
Email

Contact No.

Address

Save

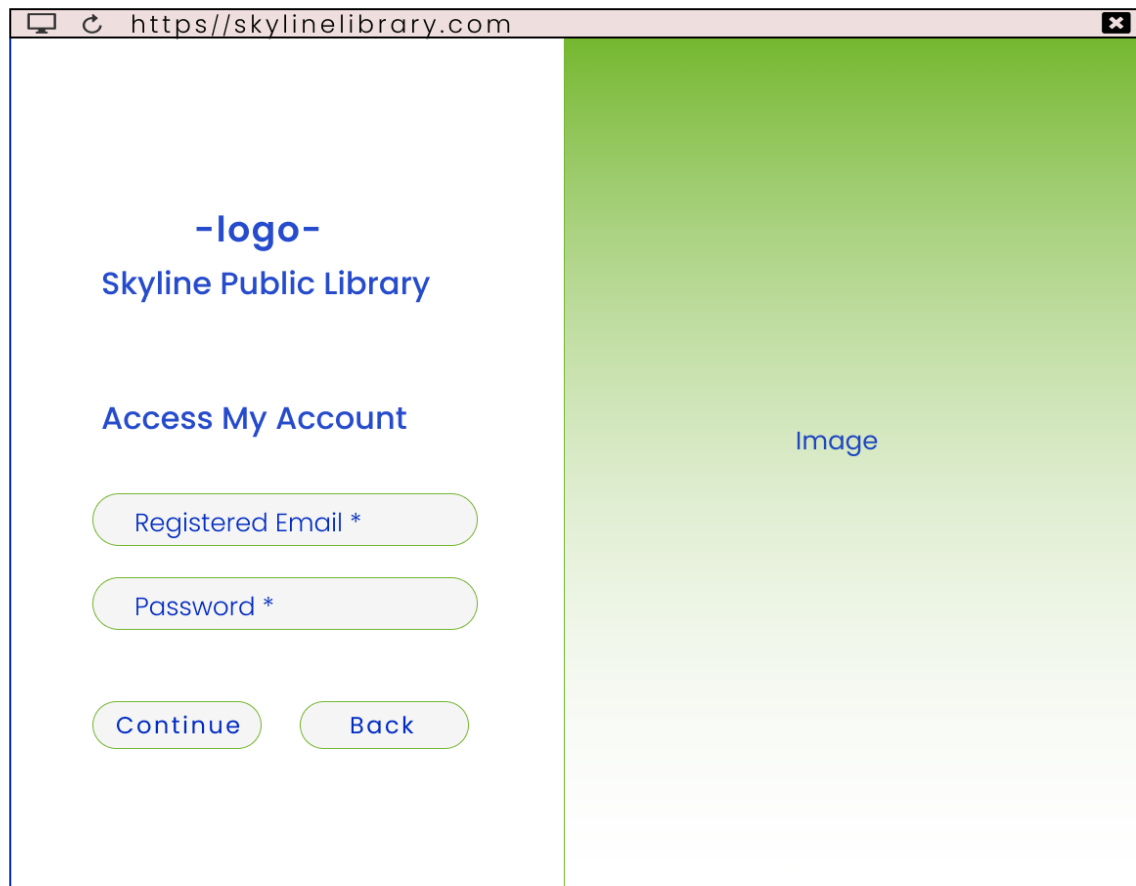
@ copyright 2022

**10. Access online resources page .**



## 4. Design Wireframe from Admin Perspective.

### 1. Login page Admin .

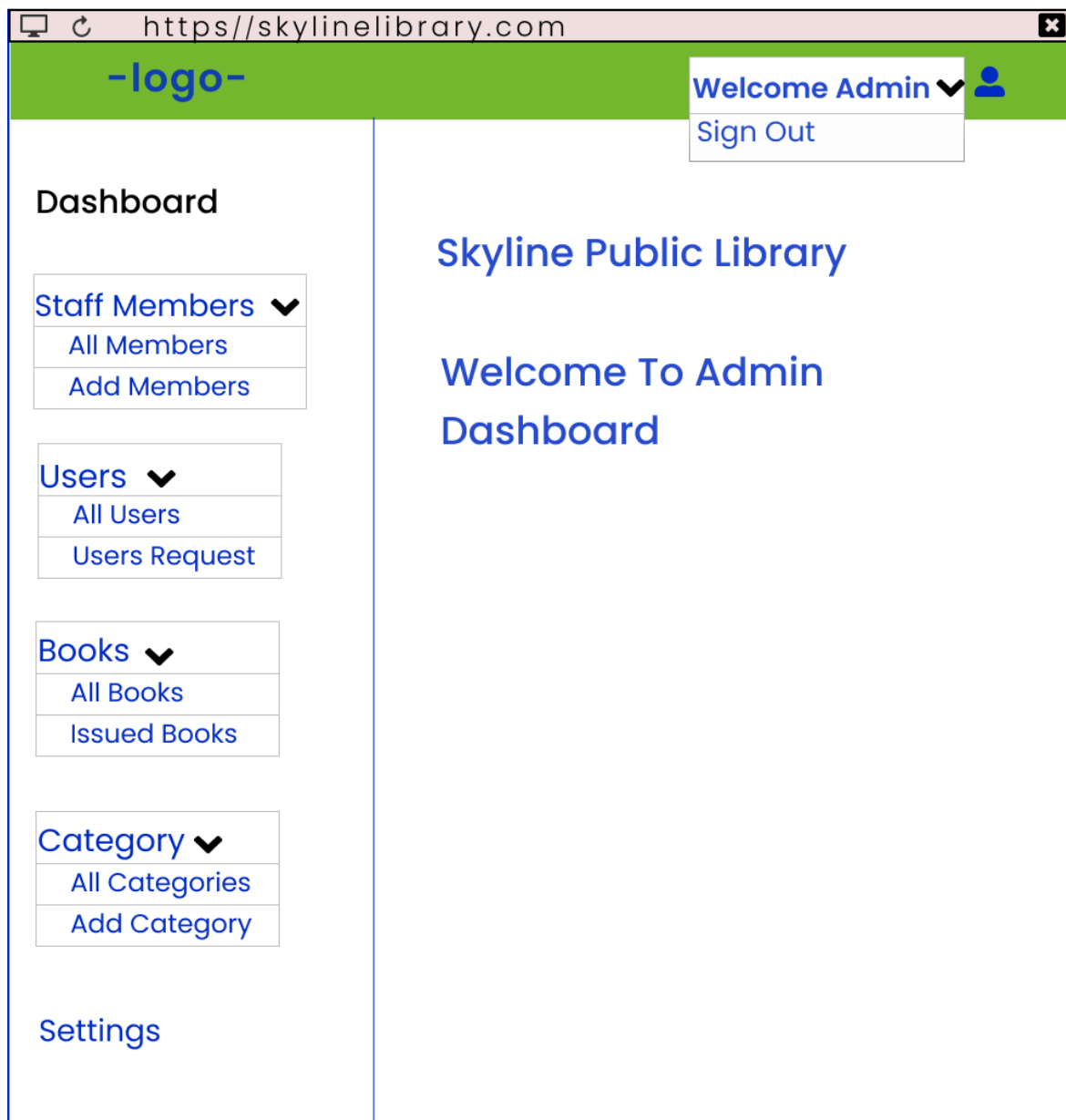


The wireframe shows a web browser window with the URL `https://skylinelibrary.com`. The page is divided into two main sections. The left section contains the following elements:

- A blue logo placeholder labeled `-logo-` above the text `Skyline Public Library`.
- A section header `Access My Account`.
- A text input field labeled `Registered Email *`.
- A text input field labeled `Password *`.
- Two buttons: `Continue` and `Back`.

The right section of the page is a large green rectangle labeled `Image`, which serves as a placeholder for a background image or banner.


## 2. Admin Dashboard Page .




### 3. List of all Staff Members Page .

https://skylinelibrary.com

-logo-


Welcome Admin 


Dashboard


Staff Members 

All Members

Add Members

Users 

Books 


Category 

Settings

Skyline Public Library

List of All Staff Members

Search

S no	Name	Picture	E mail /Contact	Actions	Full Profile
1.	lorem		lorem@gmail	<input type="radio"/> Block <input type="radio"/> Un-Block	<input type="button" value="View"/>

#### 4. View a Staff Members Page .

https://skylinelibrary.com

-logo-

Welcome Admin

Dashboard

Staff Members

All Members

Add Members

Users

Books

Category

Settings

Skyline Public Library

View Staff Member

First Name

lore

Last Name

lore

Email

lore

Contact

lore

Profile Picture

Photo Id

Address

**5. Add a Staff Members Page .**

https://skylinelibrary.com

-logo-

Welcome Admin

Dashboard

Staff Members

All Members

Add Members

Users

Books

Category

Settings

Skyline Public Library

Add Staff Member

First Name

Last Name

Email

Password

Confirm password

Contact

Profile Picture

Choose File

No File Selected

Photo Id

Choose File

No File Selected

Address

Staff memner is Admin ?

Save

Back

## 6. List of All Users Page .

https://skylinelibrary.com

-logo-

Welcome Admin

Dashboard

Staff Members

Users

All Users

Users Request

Books

Category

Settings

Skyline Public Library

List of all users

Search

S no	Name	Picture	E mail	Contact	Full Profile	Status
1.	lorem		lorem@gmail	5144525523	View	<input type="radio"/> Block <input type="radio"/> Un Block

## 7. View a User Details Page .

https://skylinelibrary.com

-logo-

Welcome Admin

Dashboard

Staff Members

Users

All Users

Users Request

Books

Category

Settings

Skyline Public Library

View User Details

First Name

lore

Last Name

lore

Email

lore

Contact

lore

Profile Picture

Photo Id


Address

Back


## 8. User Request Page .


https://skylinelibrary.com

-logo-

Welcome Admin 

Dashboard


Staff Members 

Users 

All Users

Users Request


Books


Category 

Settings

Skyline Public Library

List of all User Request 

Search  

S no	Name	Picture	E mail	Contact	Full Profile
1.	lorem		lorem@gmail	5144525523	<div>View</div>



**9. To Approve/Disapprove User Requests page.**

https://skylinelibrary.com

-logo-Welcome Admin

Dashboard

Staff Members

Users

All Users

Users Request

Books

Category

Settings

Skyline Public Library

View User Details

First Name

loremlorem

Last Name

loremlorem

Email

loremlorem

Contact

loremlorem

Profile Picture

Photo Id

Address

Approve

Decline

Back

## 10. All books page.

https://skylinelibrary.com

-logo-

Welcome Admin

Dashboard

Staff Members

Users

Books

All Books

Issued Books

Category

Settings

Skyline Public Library

Books

ADD a New Book


Search

S no	Name	ISBN No.	Author Name	Category	Edition	Qty	Publishing Year	Rack Location	Book Status
1.	lorem		lorem@gmail	Fiction		12	2000		<div><div></div>Enable</div> <div><div></div>Disable</div>


## 11. Add new book page.


https://skylinelibrary.com


-logo-

Welcome Admin 

Dashboard


Staff Members 

Users 

Books 

All Books

Issued Books

Category 

Settings

Add a Book


Book Name

ISBN no.

Author Name

Price

Short Description

Category  

Quantity

Edition

Publish Year

E\_book 

Choose File

No File Selected

Rack Information

Book Image 

Choose File

No File Selected

Save

Back

## 12. Issued books page.

The screenshot shows a web browser window with the URL <https://skylinelibrary.com>. The page has a green header with a logo placeholder and a welcome message for 'Admin'. A left sidebar contains navigation links: Dashboard, Staff Members, Users, Books (with sub-links for All Books and Issued Books), Category, and Settings. The main content area is titled 'Skyline Public Library' and 'List of all Issued Books'. It features a search bar and a table of issued books. The table has columns for S no, Book isbn no, User unique id, Issue date, Return date, Late Fee, Status, and Actions. One book is listed with S no 1, Book isbn no lorem, User unique id lorem@gmail, Issue date 2022-09-25, and a 'View' button in the Actions column.

Dashboard

Staff Members

Users

**Books**

- All Books
- Issued Books

Category

Settings

**Skyline Public Library**

List of all Issued Books

Issue a New Book

Search

S no	Book isbn no	User unique id	Issue date	Return date	Late Fee	Status	Actions
1.	lorem		lorem@gmail	2022-09-25			<button>View</button>

**13. Viewing Details of Issued books page / To check booked as Return.**

https://skylinelibrary.com

-logo-

Welcome Admin

Dashboard

Staff Members

Users

Books

All Books

Issued Books

Category

Settings

Skyline Public Library

Book Details

User Details

Book isbn no

Book title

Author

Book issue date

Book return date

Book issue status

Total fines

I acknowledge that i have received the book

lorem

lorem

lorem

lorem

lorem

lorem

lorem

☐

User Unique Id

User Name

User Address

User Email

User Image

lorem

lorem

lorem

lorem

lorem

Issue Book Details

Back

**14. Admin issue New Book page.**

The screenshot shows a web browser window with the URL <https://skylinelibrary.com>. The page has a green header bar with a logo placeholder "-logo-" on the left and "Welcome Admin" with a user icon on the right. A left sidebar contains navigation links: Dashboard, Staff Members (with a dropdown arrow), Users (with a dropdown arrow), Books (with a dropdown menu showing "All Books" and "Issued Books"), Category (with a dropdown arrow), and Settings. The main content area is titled "Skyline Public Library" and contains two search boxes. The first search box is for "Book" and the second is for "Member"; both have a "Search" label and a magnifying glass icon. At the bottom of the main area are two buttons: "Issue" and "Back".

https://skylinelibrary.com

-logo- Welcome Admin

Dashboard

Staff Members

Users

Books

- All Books
- Issued Books

Category

Settings

Skyline Public Library

Book Search

Member Search

Issue Back

**15. List of all Categories page.**

The screenshot shows a web browser window with the URL <https://skylinelibrary.com>. The page has a green header bar with a logo placeholder and a 'Welcome Admin' message with a user icon. A left sidebar contains navigation links: Dashboard, Staff Members, Users, Books, Category (with a dropdown), and Settings. The 'Category' dropdown is open, showing 'All Categories' and 'Add Category'. The main content area is titled 'Skyline Public Library' and 'List of Category'. It features an 'ADD a New Category' button and a search input field. Below these is a table with columns 'S no', 'Name', and 'Status'. The first row contains the value '1.' under 'S no' and 'lorem' under 'Name'. An 'Edit' button is located in the third column of this row. The 'Status' column contains two radio buttons labeled 'Block' and 'Un Block'. Two additional empty rows are visible in the table.

Dashboard

Staff Members

Users

Books

Category

All Categories

Add Category

Settings

Skyline Public Library

List of Category

ADD a New Category Search

S no	Name		Status
1.	lorem	Edit	<input type="radio"/> Block <input type="radio"/> Un Block

**16. Edit a Category page.**

The screenshot shows a web browser window with the URL <https://skylinelibrary.com>. The page has a green header bar with a logo placeholder "-logo-" on the left and "Welcome Admin" with a dropdown arrow and a user icon on the right. The main content area is divided into a left sidebar and a right main panel. The sidebar contains links for Dashboard, Staff Members (with a dropdown arrow), Users (with a dropdown arrow), Books (with a dropdown arrow), a Category dropdown menu (which is open, showing "All Categories" and "Add Category"), and Settings. The main panel displays the title "Skyline Public Library" and the subtitle "Edit a Category". Below this is a form with a label "Category Name" and an empty text input field. At the bottom of the main panel are two buttons: "Save" and "Back".

Dashboard

Staff Members ▼

Users ▼

Books ▼

Category ▼

- All Categories
- Add Category

Settings

## Skyline Public Library

### Edit a Category

Category Name

Save Back



**17. Add a Category page.**

The screenshot shows a web browser window with the URL <https://skylinelibrary.com>. The page has a green header bar with a logo placeholder "-logo-" on the left and "Welcome Admin" with a user icon on the right. A left sidebar contains navigation links: Dashboard, Staff Members (with a dropdown arrow), Users (with a dropdown arrow), Books (with a dropdown arrow), Category (with a dropdown arrow), and Settings. The "Category" dropdown menu is open, showing "All Categories" and "Add Category". The main content area is titled "Skyline Public Library" and "Add a Category". It features a "Category Name" label next to an empty text input field. At the bottom, there are two buttons: "Save" and "Back".

Dashboard

Staff Members ▼

Users ▼

Books ▼

Category ▼

- All Categories
- Add Category

Settings

Skyline Public Library

Add a Category


Category Name

Save Back


**18. Edit Library Info. / Settings page.**


https://skylinelibrary.com


-logo-


Welcome Admin 

Dashboard

Staff Members 

Users 

Books 

Category 

Settings

Edit Library Information

Address

Contact

Book Return  
Day Limit

Email

Fine per day

Per user book  
issue limit

Opening Time

Closing Time

Today library is closed

☐

Important  
Message

Save

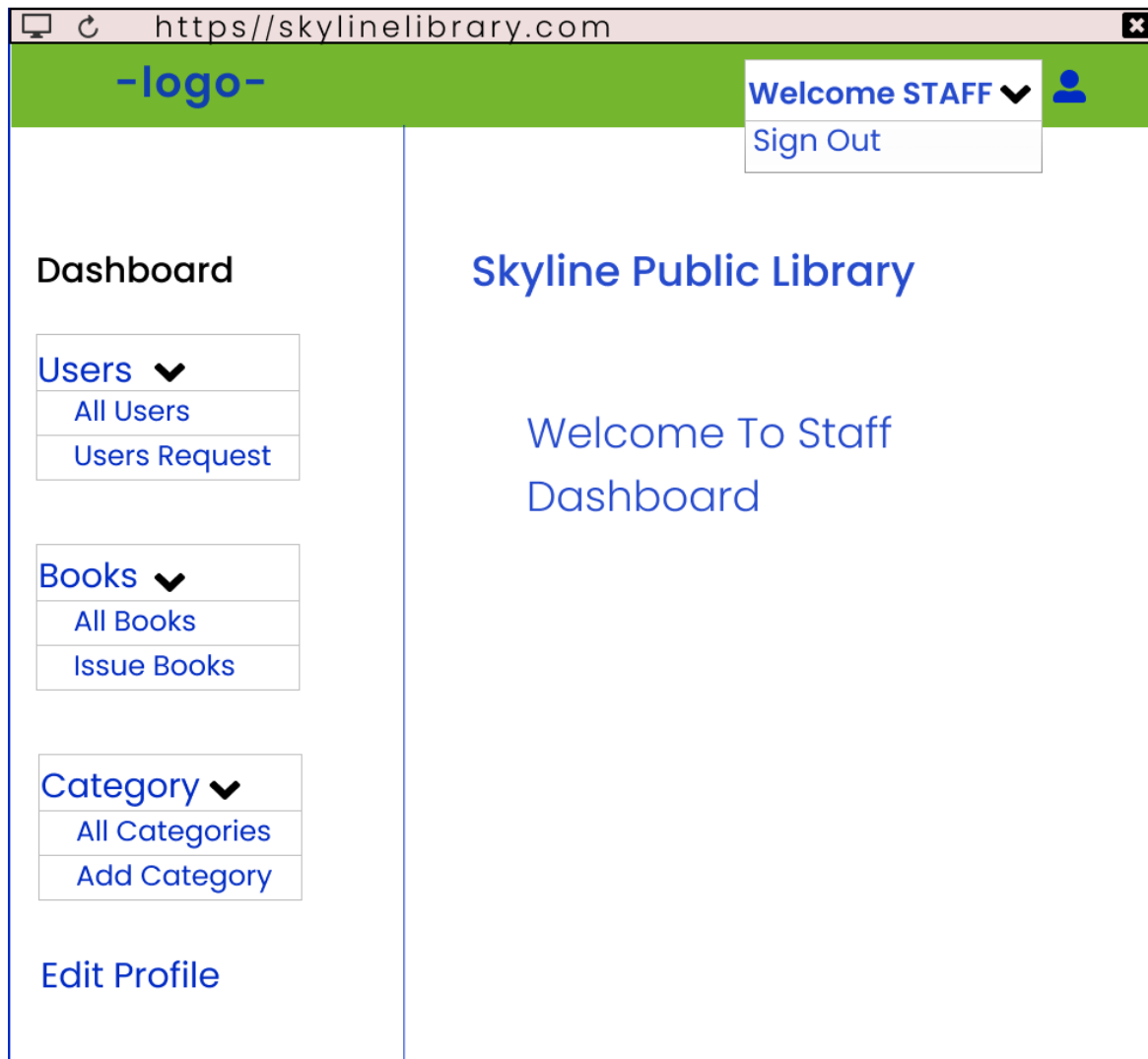
Back

## 5. Design Wireframe from Staff Perspective.

### 1. Login page Staff .

The wireframe shows a web browser window with the URL `https://skylinelibrary.com`. The page is divided into two main sections. The left section contains the library's logo, the text "Skyline Public Library", a heading "Access My Account", and two input fields labeled "Registered Email \*" and "Password \*". Below these fields are two buttons: "Continue" and "Back". The right section is a large green rectangle labeled "Image", representing a placeholder for a staff member's photo or a library banner.


## 2. Staff Dashboard page.




### 3. List of all Users.

https://skylinelibrary.com

-logo-


Welcome STAFF 


Dashboard

Users 

All Users

Users Request


Books 


Category 

Edit Profile

Skyline Public Library

List of all users


Search  

S no	Name	Picture	E mail	Contact	Full Profile	Status
1.	lorem		lorem@gmail	5144525523	<div>View</div>	<div><input type="radio"/> Block <input type="radio"/> Un Block</div>


#### 4. View Users Profile page.

https://skylinelibrary.com

-logo-


Welcome STAFF 


Dashboard

Users 

All Users

Users Request

Books 

Category 

Edit Profile

Skyline Public Library

View User Details

First Name

lore

Last Name

lore

Email

lore

Contact

lore

Profile Picture

Photo Id


Address

Back


**5. List of all User Requests.**

https://skylinelibrary.com

-logo-


Welcome STAFF 


Dashboard

Users 

All Users

Users Request


Books 


Category 

Edit Profile

Skyline Public Library

List of all User Request

Search  

S no	Name	Picture	E mail	Contact	Full Profile
1.	lorem		lorem@gmail	5144525523	<div>View</div>

**6. To Approve/Disapprove User Requests page.**

The screenshot displays a web application interface for Skyline Public Library. The browser address bar shows <https://skylinelibrary.com>. The page has a green header bar with a logo placeholder and a 'Welcome STAFF' message with a dropdown arrow and a user icon. The left sidebar contains a 'Dashboard' link and a 'Users' dropdown menu with 'All Users' and 'Users Request' options. Below this are 'Books', 'Category', and 'Edit Profile' links. The main content area is titled 'Skyline Public Library' and 'View User Details'. It contains several form fields: 'First Name', 'Last Name', 'Email', and 'Contact', each with a 'lorem' placeholder. Below these are 'Profile Picture' and 'Photo Id' fields, each with a large square placeholder. An 'Address' field is located below these, with a rectangular placeholder. At the bottom of the main content area are three buttons: 'Approve', 'Decline', and 'Back'.

Skyline Public Library		
View User Details		
First Name	lorem	
Last Name	lorem	
Email	lorem	
Contact	lorem	
Profile Picture	Photo Id	
Address		
Approve	Decline	Back



**7. List of all Books page.**

https://skylinelibrary.com

-logo-

Welcome STAFF

Dashboard

Users

Books

All Books

Issued Books

Category

Edit Profile

Skyline Public Library

Books

ADD a New Book

Search

Q

S no	Name	ISBN No.	Author Name	Category	Edition	Qty	Publishing Year	Rack Location	Book Status
1.	lorem		lorem@gmail	Fiction		12	2000		<input type="radio"/> Enable <input type="radio"/> Disable

**8. Issued Book page.**

https://skylinelibrary.com

-logo-

Welcome STAFF

Dashboard

Users

Books

All Books

Issued Books

Category

Edit Profile

Skyline Public Library

List of all Issued Books

Issue a New Book

Search

S no	Book Isbn no	User unique Id	Issue date	Return date	Late Fee	Status	Actions
	lorem		lorem@gmail	2022-09-25			View

**9. Viewing Details of Issued books page / To check booked as Return.**

https://skylinelibrary.com

-logo-

Welcome STAFF  

Dashboard

Users 

Books 

All Books

Issued Books

Category 

Edit Profile

Skyline Public Library

Book Details

Book Isbn no	lorem
Book title	lorem
Author	lorem

User Details

User Unique Id	lorem
User Name	lorem
User Address	lorem
User Email	lorem
User Image	lorem

Issue Book Details

Book issue date	lorem
Book return date	lorem
Book issue status	lorem
Total fines	lorem

I acknowledge that i have received the book ☐

Back

**10. To Issue Book page.**

The screenshot displays the 'Issue a Book' page on the Skyline Public Library website. The browser address bar shows <https://skylinelibrary.com>. The page header is green with a logo placeholder and a 'Welcome STAFF' message with a dropdown arrow and a user icon. The left sidebar contains navigation links: 'Dashboard', 'Users' with a dropdown arrow, 'Books' with a dropdown arrow containing 'All Books' and 'Issued Books', 'Category' with a dropdown arrow, and 'Edit Profile'. The main content area is titled 'Skyline Public Library' and 'Issue a Book'. It features two search sections: 'Book' and 'Member', each with a 'Search' label, an input field, and a magnifying glass icon. At the bottom, there are two buttons: 'Issue' and 'Back'.

https://skylinelibrary.com

-logo-

Welcome STAFF ▾

Skyline Public Library

Issue a Book

Dashboard

Users ▾

Books ▾

All Books

Issued Books

Category ▾

Edit Profile

Book Search

Member Search

Issue Back


**11. List of all Categories page.**

The screenshot displays the 'List of Category' page in the Skyline Public Library system. The page layout includes a sidebar on the left with navigation options: Dashboard, Users, Books, Category, and Edit Profile. The main content area features the title 'Skyline Public Library' and 'List of Category'. Below the title, there is a button to 'ADD a New Category' and a search bar. A table lists the categories, with columns for 'S no', 'Name', and 'Status'. The first category listed is '1.' with the name 'lorem'. It has an 'Edit' button and two radio buttons for 'Block' and 'Un Block'.

S no	Name	Status
1.	lorem	<input type="radio"/> Block <input type="radio"/> Un Block

**12. Edit a Category page.**

https://skylinelibrary.com

-logo- Welcome STAFF ▼ 

Dashboard

Users ▼

Books ▼

Category ▼

- All Categories
- Add Category

Edit Profile

## Skyline Public Library

### Edit a Category

Category Name

Save Back

**13. Add a new Category page.**

https://skylinelibrary.com

-logo- Welcome STAFF

Dashboard

Users

Books

Category

- All Categories
- Add Category

Edit Profile

## Skyline Public Library

### Add a Category

Category Name

Save Back

**14. Edit Profile page for Staff.**

The screenshot shows a web browser window with the URL <https://skylinelibrary.com>. The page has a green header bar with a logo placeholder "-logo-" on the left and "Welcome STAFF" with a dropdown arrow and a user icon on the right. The main content area is divided into two columns. The left column contains a sidebar with links: "Dashboard", "Users" (with a dropdown arrow), "Books" (with a dropdown arrow), "Category" (with a dropdown arrow), and "Edit Profile" (which is highlighted). The right column displays the "Skyline Public Library" title and the heading "Update My Personal Info". Below this, there are two form fields: "Contact" with a single-line text input box, and "Address" with a larger multi-line text input box. At the bottom of the form, there are two buttons: "Back" and "Save".

Skyline Public Library	
Update My Personal Info	
Contact	<input type="text"/>
Address	<input type="text"/>
<input type="button" value="Back"/>	<input type="button" value="Save"/>



## 5. User Story.

<u>User Id</u>	<u>Description</u>	<u>USP</u>	<u>Priority</u>
US01	As an admin, I can do login.	5	H
US02	As an admin, I can view registered members.	5	M
US03	As admin, I can register staff member.	13	H
US04	As an admin, I can view staff.	8	M
US05	As an admin, I can block unblock staff members.	8	M
US06	As an admin, I can view all books.	5	M
US07	As an admin, I can alter library information.	13	H
US08	As an admin, I can block/unblock the member.	8	M
US09	As an admin, I can approve decline new membership request.	13	H
US10	As an admin, I can view all book categories.	5	M
US11	As an admin, I can add new books categories.	8	M
US12	As an admin, I can add new book.	13	H
US13	As an admin, I can edit/modify a book.	5	M
US14	As an admin, I can issue a book to the member in library.	8	H
US15	As a staff, I can edit my profile.	5	L
US16	As a staff, I can do login myself.	8	M
US17	As a staff, I can view registered users.	5	M
US18	As a staff, I can block unblock members.	8	M
US19	As a staff, I can staff, I can approve decline new membership request.	13	H
US20	As a staff, I can view all book categories.	5	M
US21	As a staff, I can block unblock book categories.	13	M
US22	As a staff, I can staff add new categories.	8	M
US23	As a staff, I can add new book.	8	M
US24	As a staff, I can edit /modify a book.	8	L

US25	As a staff, I can issue books to the members.	8	H
US26	As a user, I can register myself.	8	M
US27	As a user, I can login myself.	5	M
US28	As a user, Forgot password.	5	M
US29	As a user, Edit my profile.	5	L
US30	As a user, I can pay membership (bi annual) charges.	13	H
US31	As a user, I can choose the book from the available Categories.	13	H
US32	As a user, I can rent 3 books at a time.	8	H
US33	As a user, I can pay fines.	13	H
US34	As a user, Download E-books.	13	H
US35	As a user, I can view all categories.	5	L
US36	As a user, I can view all books from a category.	5	M
		299	

## 5. Poker Game Screenshots.

**As an admin I can alter Library information**

**STORY 1/1**

8 5 8 8

Unnati Pat... chetan ba... Komal Ve... Rutu Shah

SPONSORED CONTENT

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8

0 1 2 3 5 13 21 34 55 89 ? Pass

**+ Add Story**

**8**

**1** As an admin I can alter Library information **8**

**Results** **End Game**

**As a user, I can choose the book from the available categories**

**STORY 2/5**

13 8 8 8

Unnati Pat... chetan ba... Komal Ve... Rutu Shah

SPONSORED CONTENT

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13

0 1 2 3 5 8 13 21 34 55 89 ? Pass

**13**

**2** As a user, I can choose the book from the available categories. **13**

**3** As a user, I can pay a biannual charges. **8**

**As a user, I can pay a biannual charges.**

STORY 3/5

8 8 8 8

Unnati Pat... chetan ba... Komal Ve... Rutu Shah

SPONSORED CONTENT

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Advertise With Us

0 1 2 3 5 13 21 34 55 89 ? Pass

8

1 As an admin I can alter Library information 8

2 As a user, I can choose the book from the available categories. 13

3 As a user, I can pay a biannual charges. 8

Edit Story Close

**As a staff, I can edit/modify a book.**

STORY 4/5

5 13 8 8

Unnati Pat... chetan ba... Komal Ve... Rutu Shah

SPONSORED CONTENT

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Advertise With Us

0 1 2 3 5 8 13 21 34 55 89 ? Pass

13

3 As a user, I can pay a biannual charges. 8

4 As a staff, I can edit/modify a book. 13

5 As a staff I can approve/decline new membership request. -

Edit Story Close

Playing Second Round as there was a difference in outcome.

**As a staff, I can edit/modify a book.**

**STORY 4/5**

8 8 8 8

Unnati Pat... chetan ba... Komal Ve... Rutu Shah

SPONSORED CONTENT

Looking to reach a technical audience of programmers and agile practitioners. [Advertise With Us](#)

8

0 1 2 3 5 13 21 34 55 89 ? Pass

8

3 As a user, I can pay a biannual charges. 8

4 As a staff, I can edit/modify a book. 8

5 As a staff I can approve/decline new membership request. -

**As a staff I can approve/decline new membership request.**

**STORY 5/5**

8 5 8 8

Unnati Pat... chetan ba... Komal Ve... Rutu Shah

SPONSORED CONTENT

Looking to reach a technical audience of programmers and agile practitioners. [Advertise With Us](#)

8

0 1 2 3 5 13 21 34 55 89 ? Pass

8

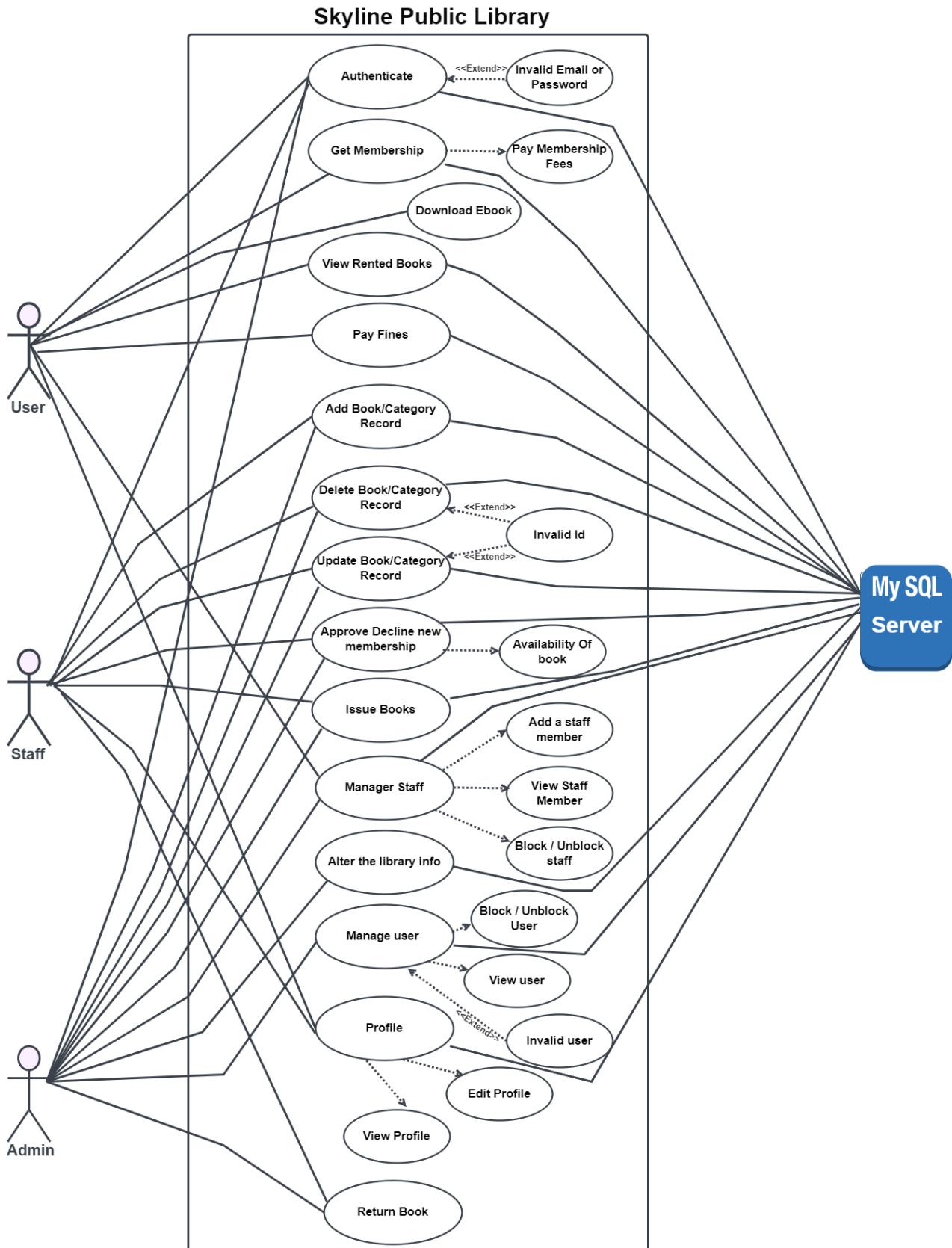
4 As a staff, I can edit/modify a book. 8

5 As a staff I can approve/decline new membership request. 8

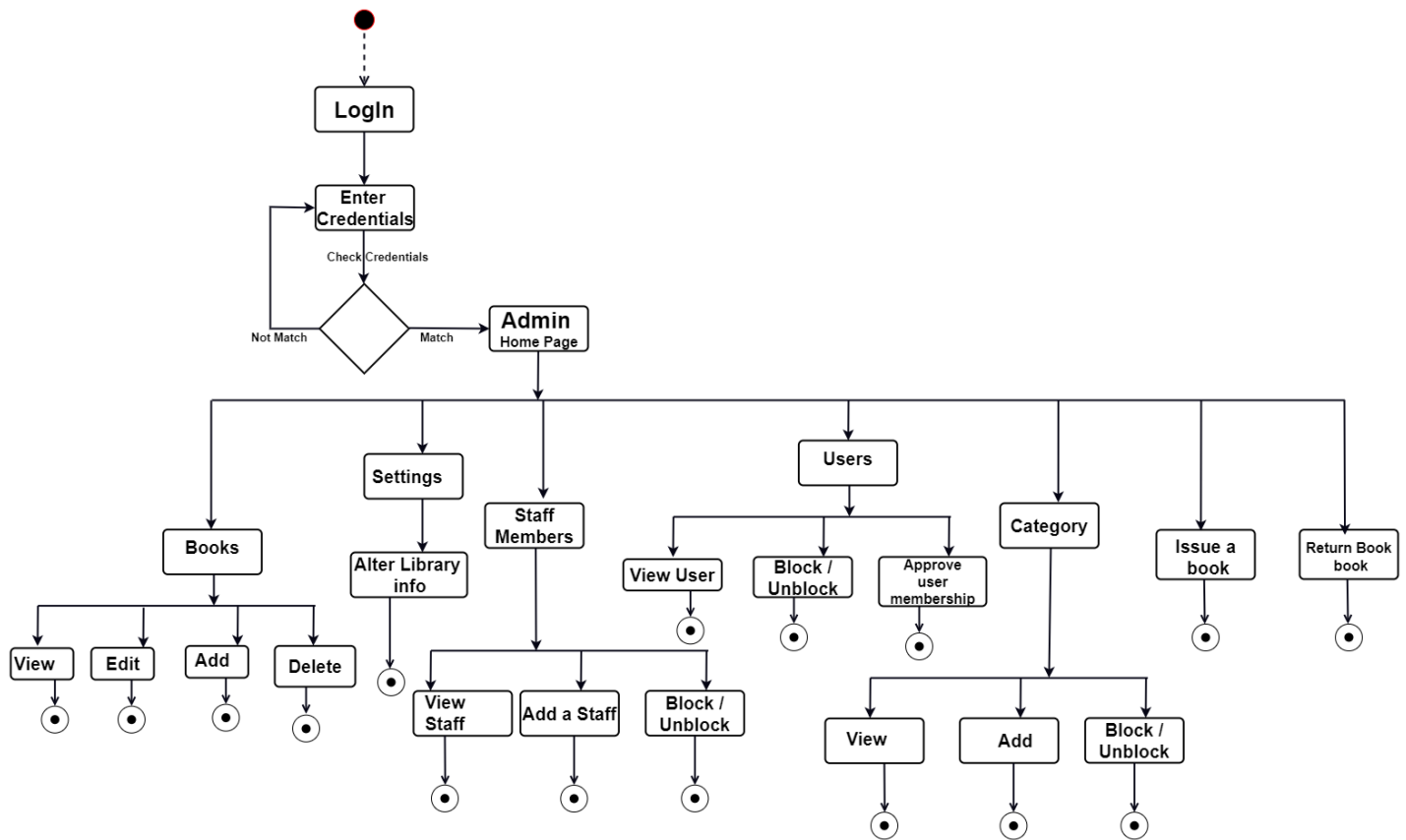
[+ Add Story](#)

[Results](#) [End Game](#)

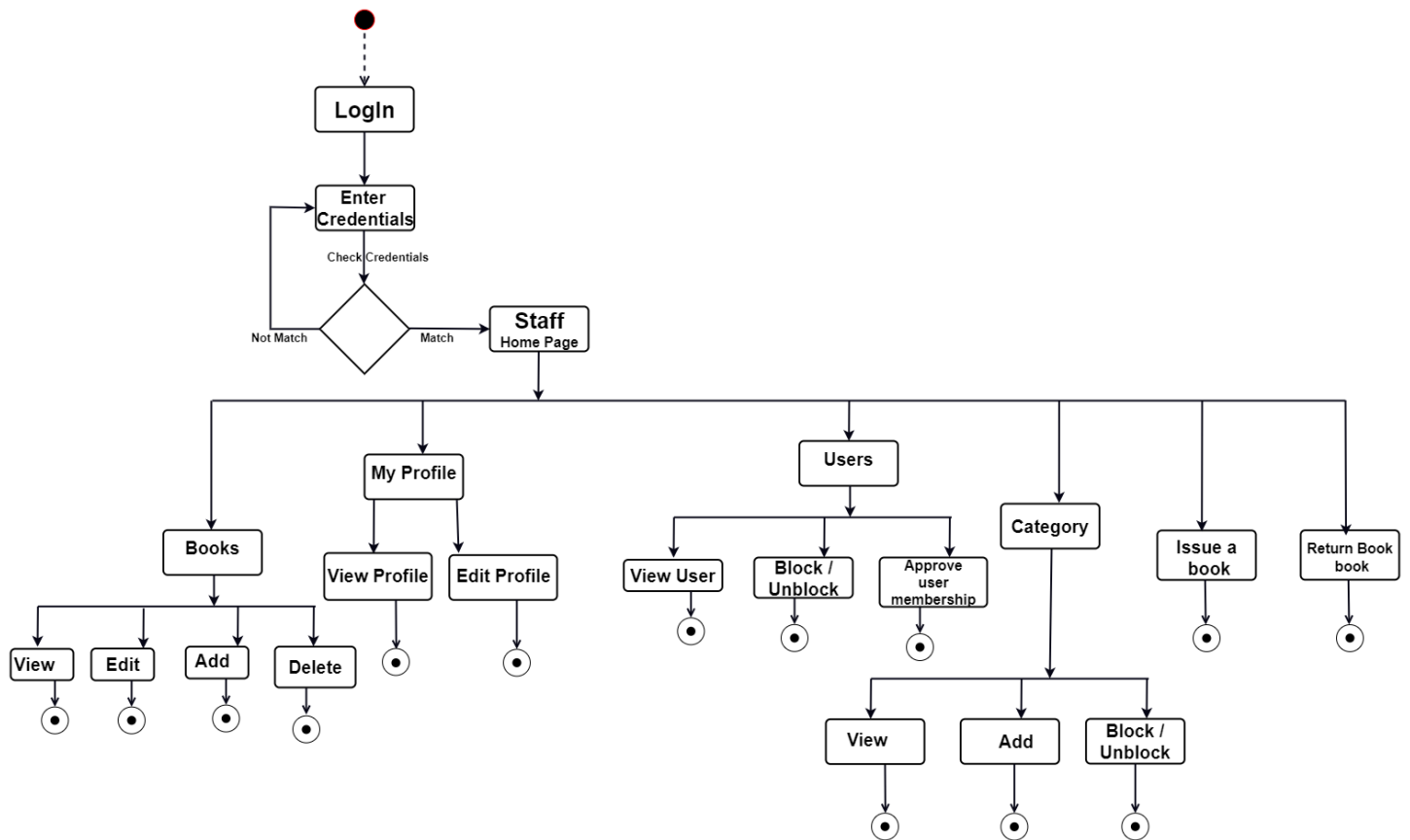
## 6. Use Case Diagram.



## 7. Activity Diagram from Admin End.

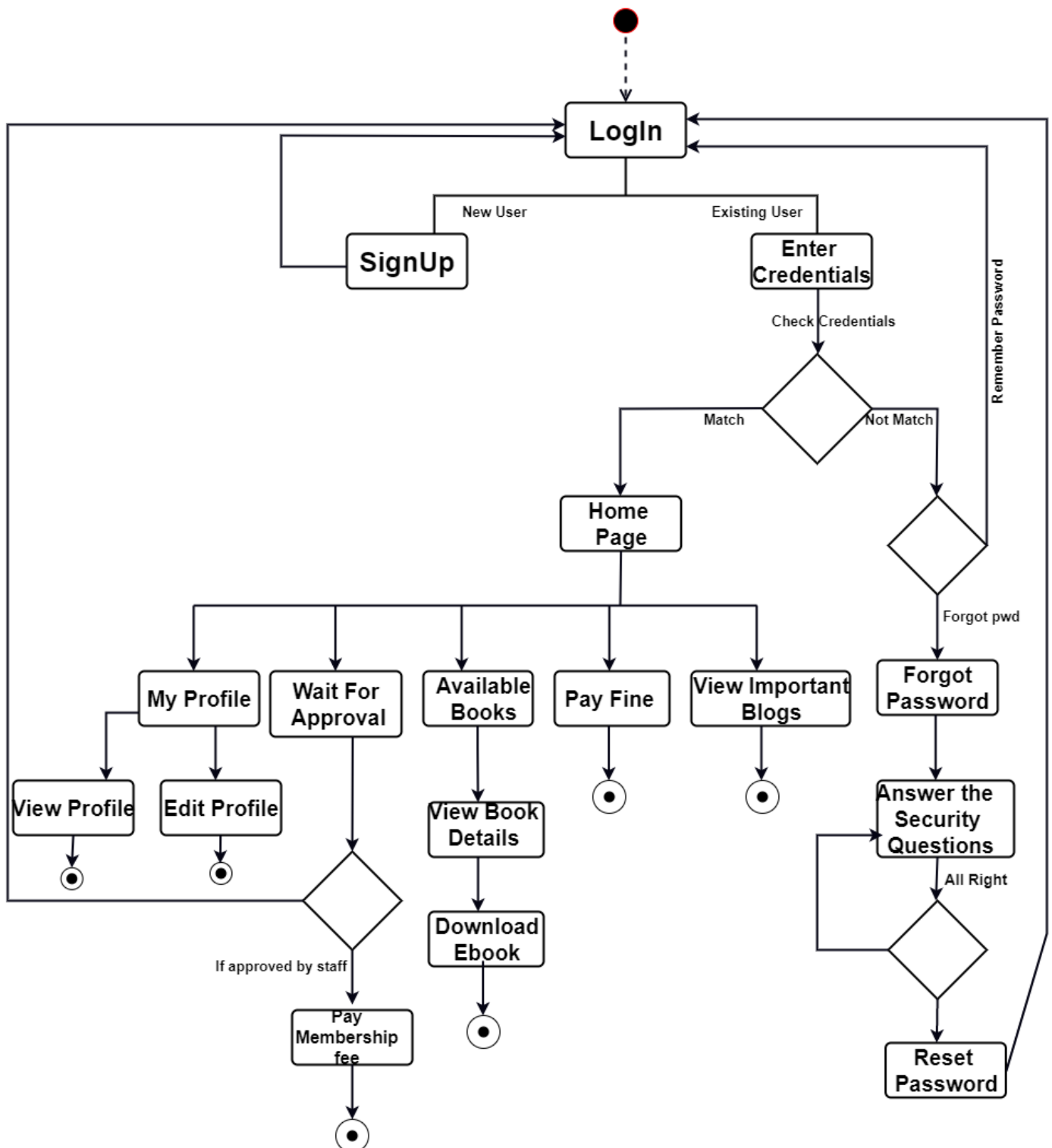


## 8. Activity Diagram from Staff End.

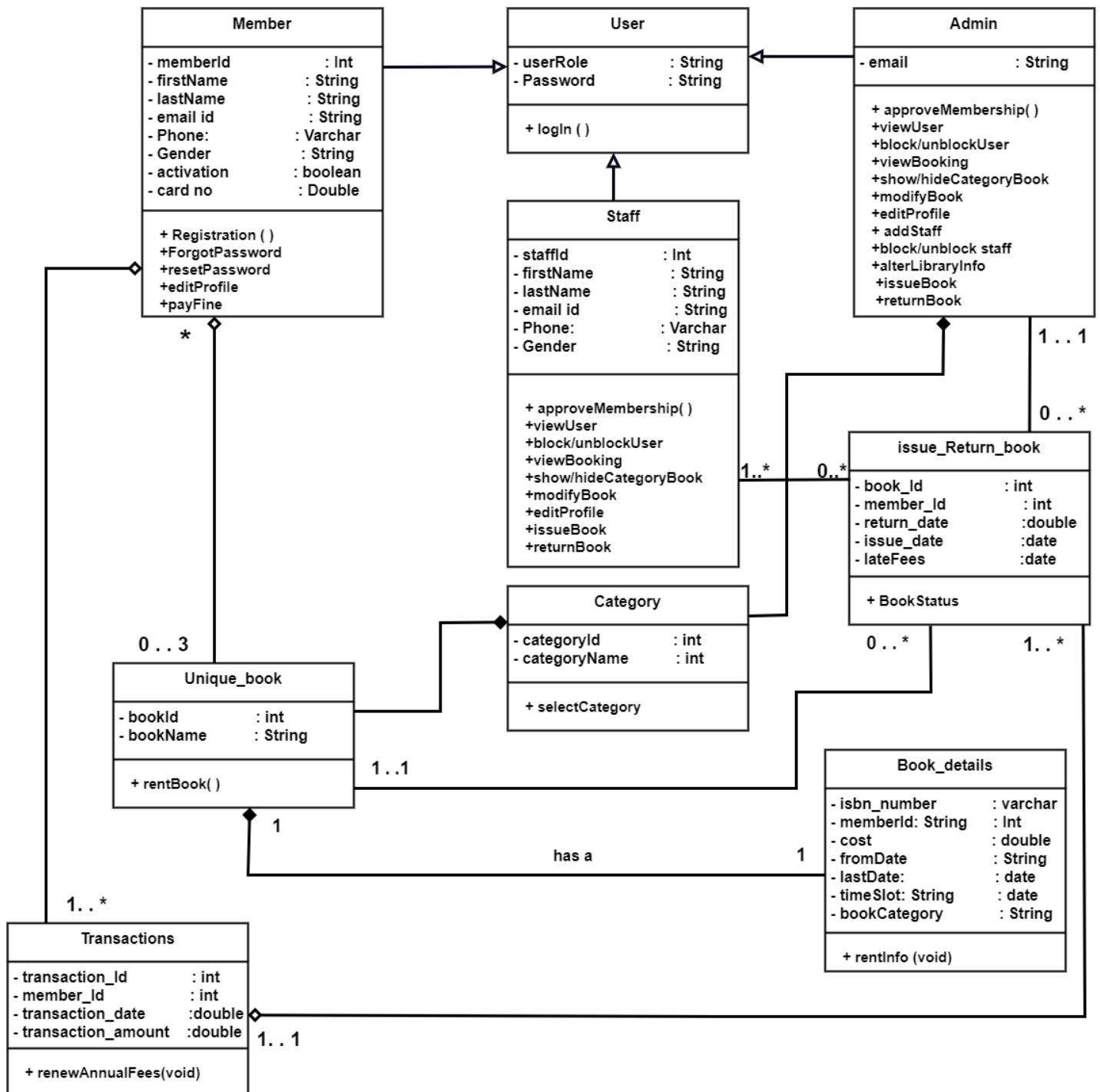




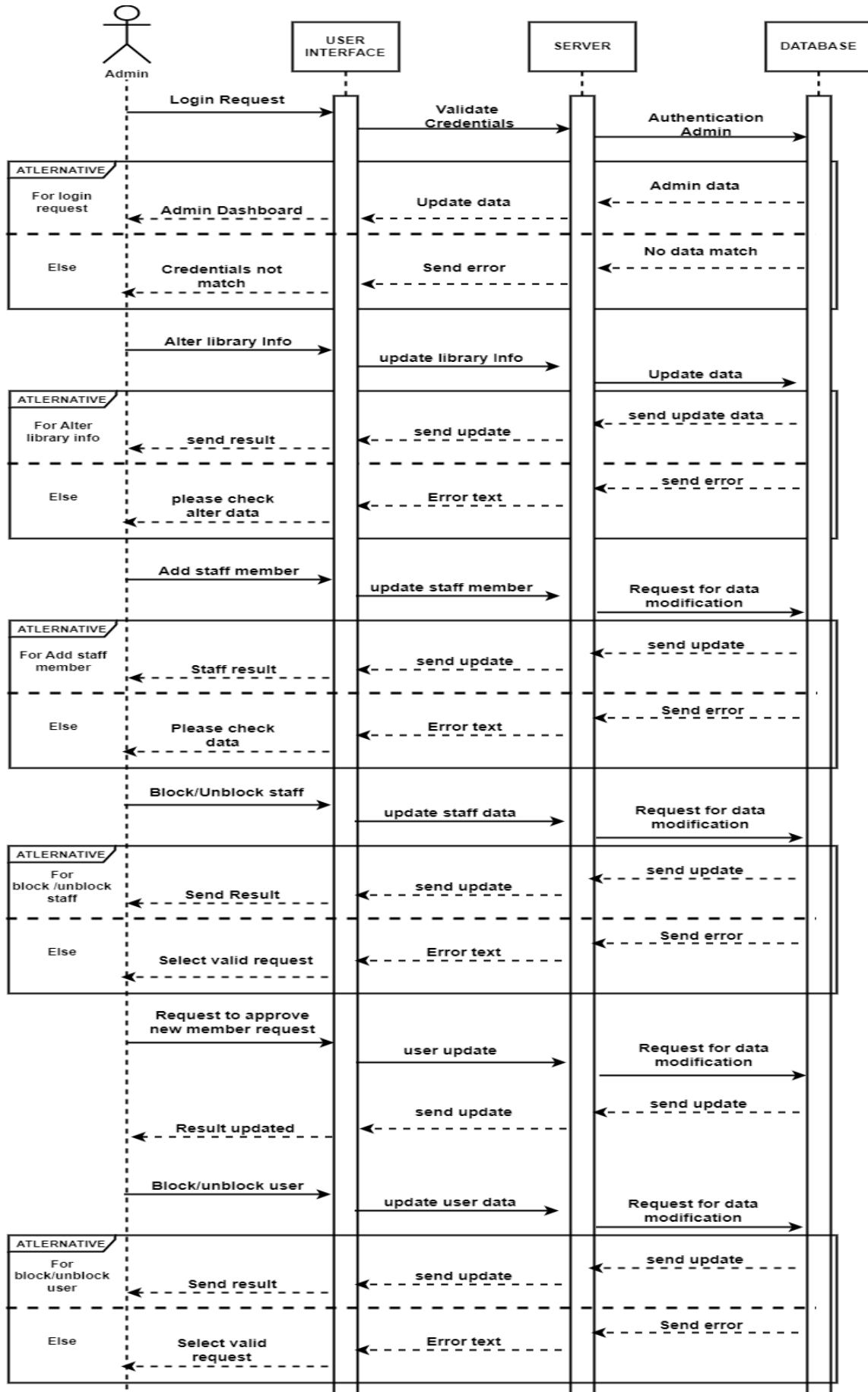
## 9. Activity Diagram from User End.

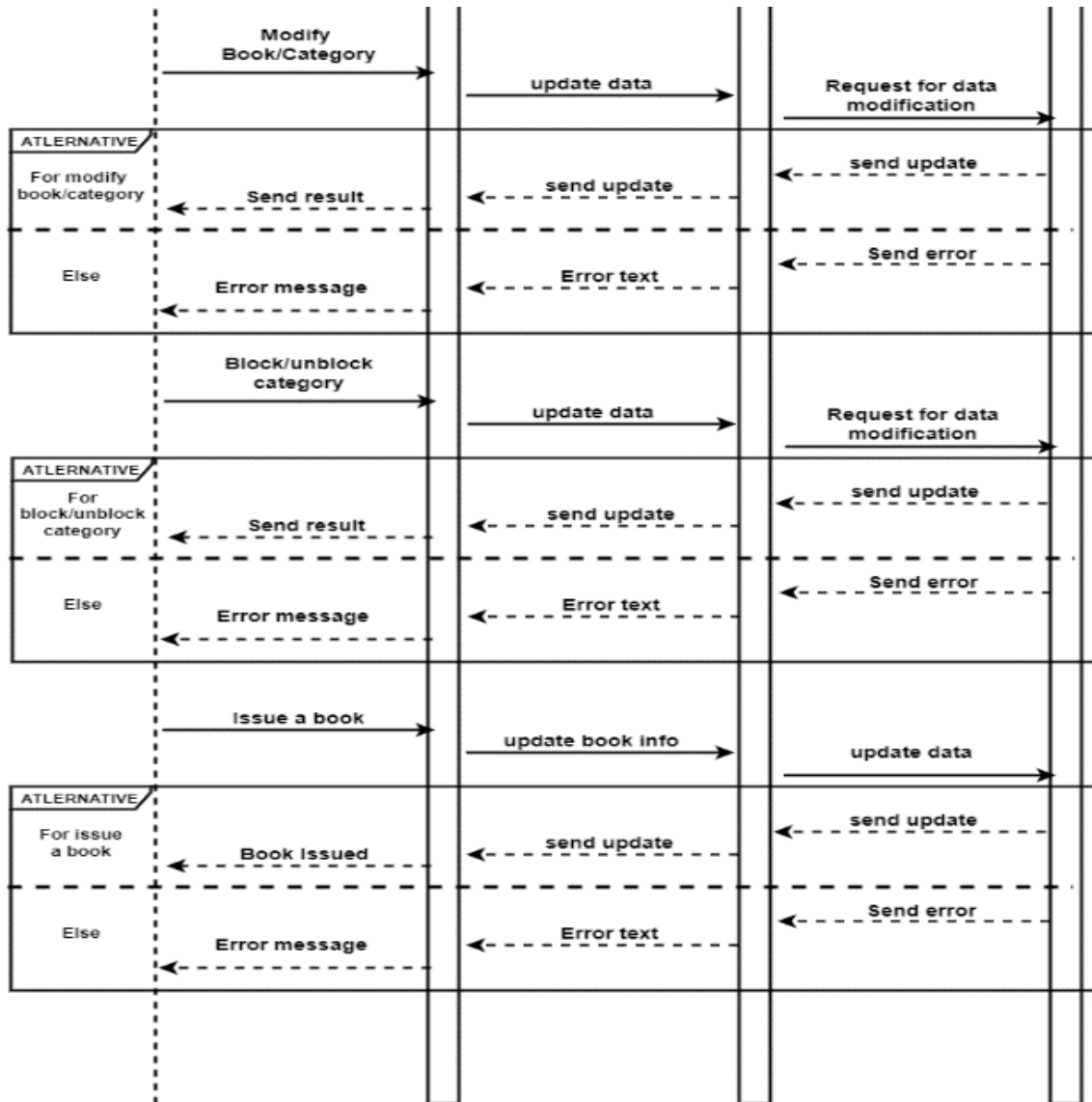


## 10. Class Diagram.

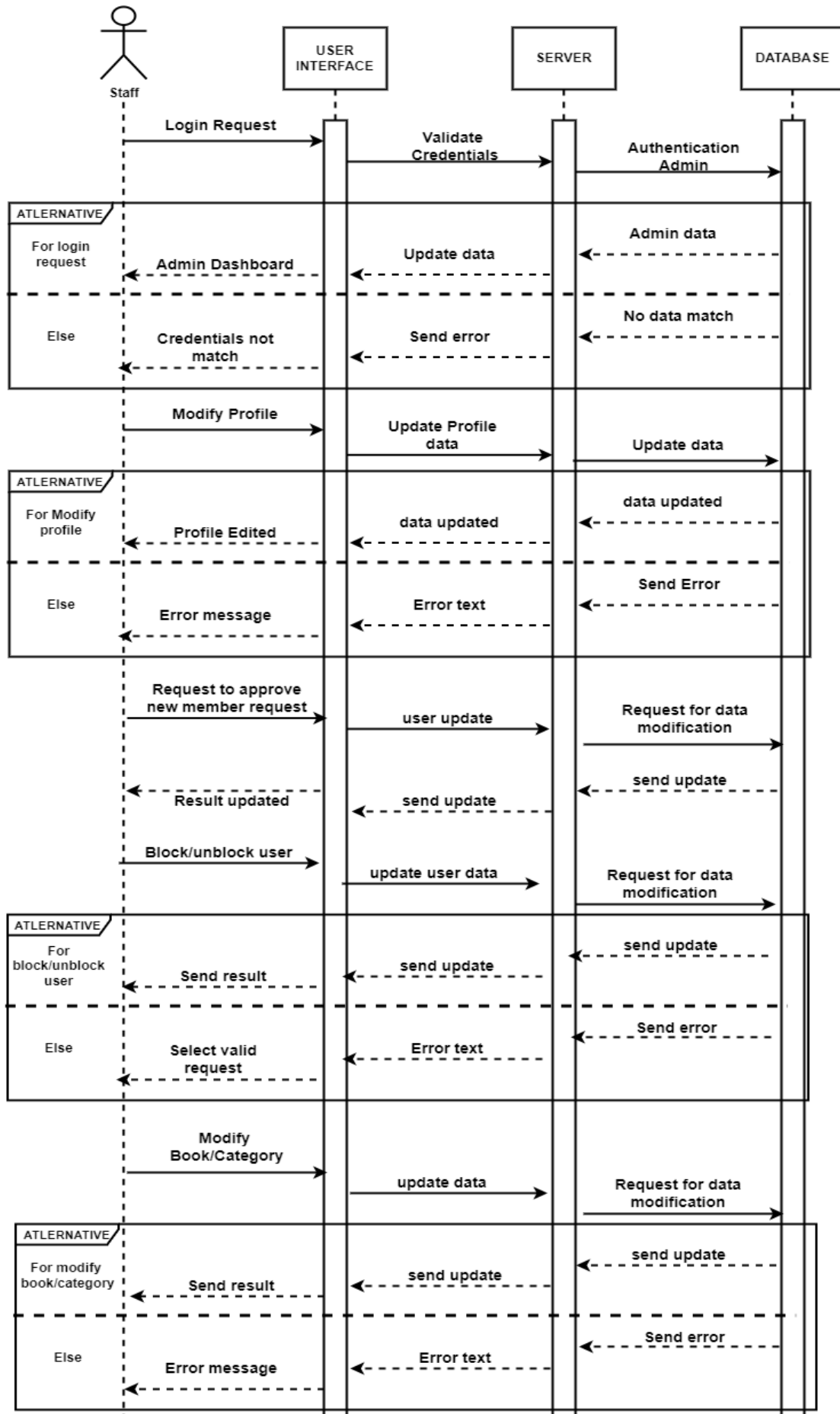


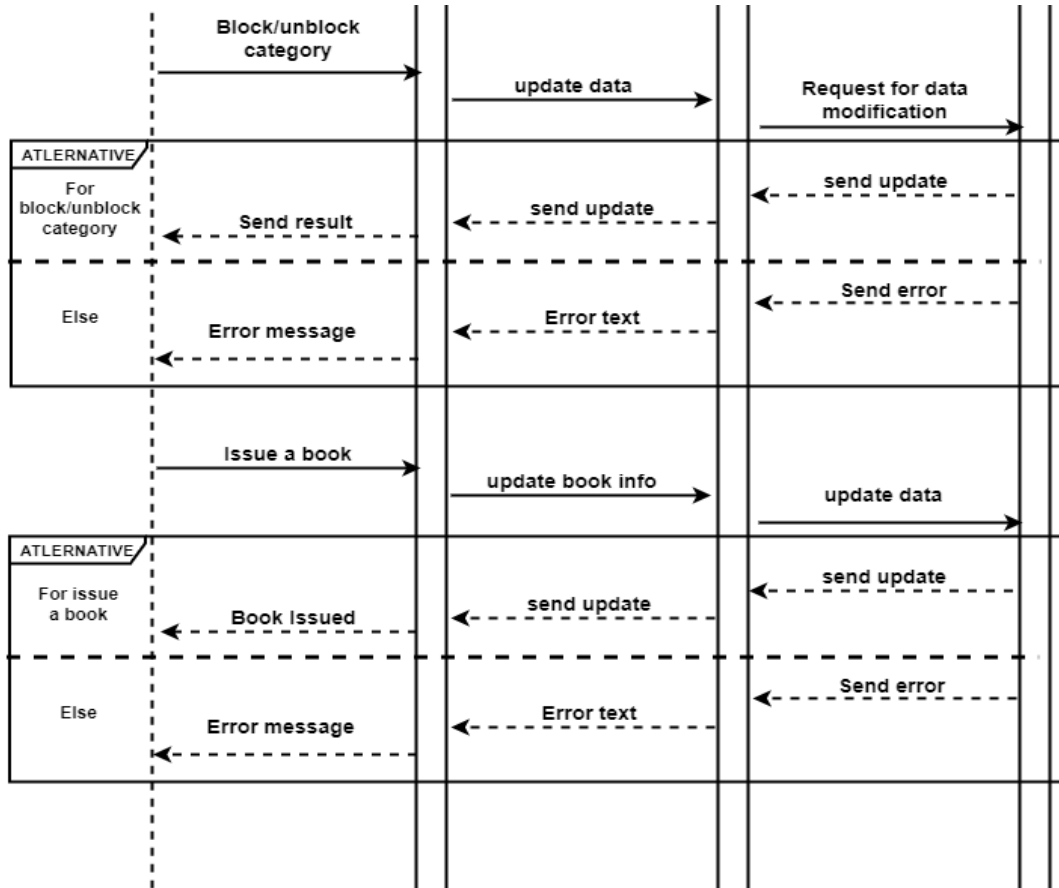
## 11. Sequence Diagram from Admin End.



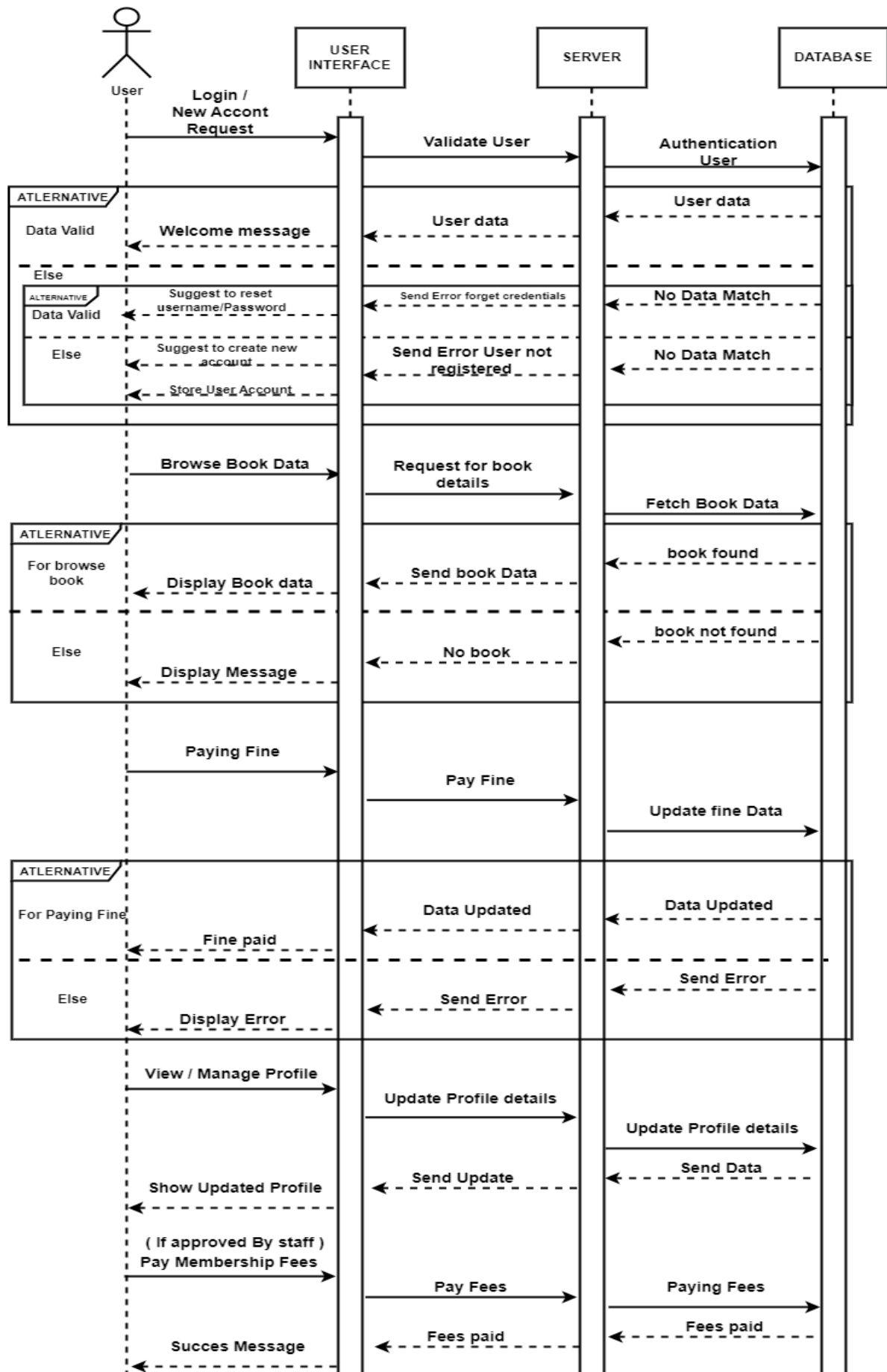


## Sequence Diagram from Staff End.





## Sequence Diagram from User End.



## 12. Fully Dressed Use Case

<b>Use Case Id</b>	US01
<b>Use Case Name</b>	login Admin.
<b>Actors</b>	Admin, Database.
<b>Preconditions</b>	Admin indicates to have login credentials.
<b>Success Scenario</b>	1 Admin indicates to enter correct user name and password. 2 Admin indicates to access admin home page.
<b>Alternatives</b>	1(a) Admin indicates to have the wrong username and password.
<b>Post conditions</b>	Admin indicate to successfully logged into web site.

<b>Use Case Id</b>	US02
<b>Use Case Name</b>	View registered members Admin.
<b>Actors</b>	Admin, Database.
<b>Preconditions</b>	Admin indicates to have username (email id).
<b>Success Scenario</b>	1. Admin has to login successfully 2. Admin can see all the registered members of the library.
<b>Alternatives</b>	1(a) Admin indicates to that he/she entered the wrong username and password.
<b>Post conditions</b>	Admin can see all the registered members.



<b>Use Case Id</b>	US03
<b>Use Case Name</b>	Registration of staff by Admin.
<b>Actors</b>	Admin, Database.
<b>Preconditions</b>	Staff indicates to be a new user.
<b>Success Scenario</b>	<ol style="list-style-type: none"> <li>1. Admin has to login successfully into website.</li> <li>2. Admin has to go into add staff section.</li> <li>3. Admin has to fill the staff registration form successfully.</li> </ol>
<b>Alternatives</b>	<p>1(a) Admin indicates to that he/she entered the wrong username or password.</p> <p>3(a) Admin indicate to full fill all conditions of the registration form.</p>
<b>Post conditions</b>	Staff successfully registered.

<b>Use Case Id</b>	US04
<b>Use Case Name</b>	View staff Members, Admin.
<b>Actors</b>	Admin, Database.
<b>Preconditions</b>	<ol style="list-style-type: none"> <li>1. Admin indicates to have login credentials.</li> <li>2. Admin indicates to successfully Login.</li> <li>3. Staff Member indicates to be a Registered Staff.</li> </ol>
<b>Success Scenario</b>	<ol style="list-style-type: none"> <li>1. Admin indicate to click on view staff member.</li> <li>2. Admin redirect to the view staff member page.</li> </ol>
<b>Alternatives</b>	1(a) Admin indicates to that he/she entered the wrong username or password.
<b>Post conditions</b>	Admin can see all registered staff member.

<b>Use Case Id</b>	US05
<b>Use Case Name</b>	Block unblock staff members, Admin.
<b>Actors</b>	Admin, Database.
<b>Preconditions</b>	<ol style="list-style-type: none"> <li>1 Admin indicates to have login credentials.</li> <li>2. Admin indicates to successfully Login.</li> <li>3. Staff Member indicates to be a Registered Staff.</li> </ol>
<b>Success Scenario</b>	<ol style="list-style-type: none"> <li>1. Admin indicates to be logged in.</li> <li>2. Admin indicates to click on staff members.</li> <li>3. Admin indicates to open all staff members.</li> <li>4. Admin indicates to block/unblock staff member.</li> </ol>
<b>Alternatives</b>	<ol style="list-style-type: none"> <li>1. Admin indicates to failed to logged in.</li> <li>4. Admin indicates to failed to block/unblock staff.</li> </ol>
<b>Post conditions</b>	Admin indicates to successfully block or Unblock staff member.

<b>Use Case Id</b>	US06
<b>Use Case Name</b>	View all books, Admin.
<b>Actors</b>	Admin, Database.
<b>Preconditions</b>	<ol style="list-style-type: none"> <li>1 Admin indicates to have login credentials.</li> <li>2 Admin indicates to successfully Login.</li> </ol>
<b>Success Scenario</b>	<ol style="list-style-type: none"> <li>1.Admin indicates to be logged in.</li> <li>2.Admin indicates to click on books.</li> <li>3.Admin indicates to open all books.</li> <li>4.Admin indicates to see all books list.</li> </ol>
<b>Alternatives</b>	<ol style="list-style-type: none"> <li>1. Admin failed to logged in.</li> <li>4. Admin indicates to fail to see all books list.</li> </ol>
<b>Post conditions</b>	Admin indicates to successfully view all books list.

<b>Use Case Id</b>	US07
<b>Use Case Name</b>	Alter library information Admin.
<b>Actors</b>	Admin, Database.
<b>Preconditions</b>	1 Admin indicates to have login credentials. 2 Admin indicates to successfully Login.
<b>Success Scenario</b>	1. Admin indicates to be logged in. 2.Admin indicates to click on alter library info. 3.Admin indicates to edit library info. 4.Admin indicates to successfully edit Library info.
<b>Alternatives</b>	1 Admin failed to logged in. 4 Admin indicates to open alter library info.
<b>Post conditions</b>	Admin indicates to successfully edit Library info.

<b>Use Case Id</b>	US08
<b>Use Case Name</b>	Block/unblock the member, Admin.
<b>Actors</b>	Admin, Database.
<b>Preconditions</b>	Admin indicates to have login credentials.
<b>Success Scenario</b>	1. Admin indicates to be logged in. 2. Admin indicates to click on users. 3. Admin indicates to open all users. 4. Admin indicates to block/unblock user.
<b>Alternatives</b>	1. Admin indicates to failed to logged in. 4. Admin indicates to failed to block/unblock member.
<b>Post conditions</b>	Admin indicates to successfully block or Unblock library member.

<b>Use Case Id</b>	US09
<b>Use Case Name</b>	Approve decline new membership request, Admin.
<b>Actors</b>	Admin, Database.
<b>Preconditions</b>	Admin indicates to have login credentials.
<b>Success Scenario</b>	1. Admin indicates to be logged in. 2 Admin indicates to click on the new membership request. 3 Admin indicates all new membership request. 4 Admin indicates to approve/decline membership request.
<b>Alternatives</b>	1. Admin indicates to failed to logged in. 4. Admin indicates to failed to approve/decline new membership request.
<b>Post conditions</b>	Admin successfully approve/decline new membership request.

<b>Use Case Id</b>	US10
<b>Use Case Name</b>	View all book categories Admin.
<b>Actors</b>	Admin, Database.
<b>Preconditions</b>	1 Admin indicates to have login credentials. 2 Admin indicates to successfully Login.
<b>Success Scenario</b>	1.Admin indicates to be logged in. 2.Admin indicates to click on categories. 3.Admin indicates to open all categories. 4.Admin indicates to see all book categories.
<b>Alternatives</b>	1. Admin failed to logged in. 4. Admin indicates to fail to see all categories.
<b>Post conditions</b>	Admin indicates to successfully view all Book categories.

<b>Use Case Id</b>	US11/US12
<b>Use Case Name</b>	Add new books categories/new book Admin.
<b>Actors</b>	Admin, Database.
<b>Preconditions</b>	Admin indicate to successfully logged in.
<b>Success Scenario</b>	1.Admin indicates to be logged in. 2.Admin indicates to click on add new book/add new category 3 Admin indicates to open add new book/add new category. 4.Admin indicates to successfully enter all data.
<b>Alternatives</b>	1(a)Admin failed to logged in. 4(a) Admin indicates to open add new book/ add new category.
<b>Post conditions</b>	Admin indicate that book/category successfully added.

<b>Use Case Id</b>	US013
<b>Use Case Name</b>	Edit/modify a book/category Admin.
<b>Actors</b>	Admin, Database.
<b>Preconditions</b>	Admin indicate to successfully logged in
<b>Success Scenario</b>	1.Admin indicates to be logged in. 2.Admin indicates to click on edit book/category. 3 Admin indicates to open edit book/ category. 4.Admin indicates to successfully enter all data.
<b>Alternatives</b>	1(a)Admin failed to logged in. 4(a) Admin indicates to open edit book/category.
<b>Post conditions</b>	Admin indicate that book/category successfully edited.

<b>Use Case Id</b>	US014
<b>Use Case Name</b>	issue a book Admin.
<b>Actors</b>	Admin, Database.
<b>Preconditions</b>	Admin indicate to successfully logged in
<b>Success Scenario</b>	1.Admin indicates to be logged in. 2.Admin indicates to click on issue book. 3 Admin indicates to open issue book. 4.Admin indicates to search book and member id. 5. admin indicates to click on issue button.
<b>Alternatives</b>	1(a)Admin failed to logged in. 3(a) Admin indicates to open edit book/category. 4(a) Admin indicates that entered book or member id not found.
<b>Post conditions</b>	Admin indicate that book issued successfully

<b>Use Case Id</b>	US015
<b>Use Case Name</b>	edit my profile Staff.
<b>Actors</b>	Staff, Database.
<b>Preconditions</b>	Staff indicate to successfully logged in
<b>Success Scenario</b>	1.staff indicates to be logged in. 2.staff indicates to click on edit my profile. 3 staff indicate to open edit my profile. 4 staff indicate to modify their data.
<b>Alternatives</b>	1(a)staff failed to logged in. 3(a) staff indicate to open edit my profile. 4(a) staff indicate to full fill all condition.
<b>Post conditions</b>	Staff indicated that profile successfully edited.

<b>Use Case Id</b>	US016
<b>Use Case Name</b>	login Staff.
<b>Actors</b>	Staff, Database.
<b>Preconditions</b>	staff indicates to have login credentials.
<b>Success Scenario</b>	2 Staff indicates to enter correct user name and password. 3 Staff indicate to access admin home page.
<b>Alternatives</b>	1(a) Staff indicate to have the wrong username and password.
<b>Post conditions</b>	Staff indicate to successfully logged into web site.

<b>Use Case Id</b>	US017
<b>Use Case Name</b>	View registered users Staff.
<b>Actors</b>	Staff, Database.
<b>Preconditions</b>	staff indicates to have username (email id).
<b>Success Scenario</b>	1 Staff has to login successfully 2 Staff can see all the registered members of the library.
<b>Alternatives</b>	1(a) staff indicate to that he/she entered the wrong username or password.
<b>Post conditions</b>	Staff can see all the registered members.

<b>Use Case Id</b>	US018
<b>Use Case Name</b>	Block unblock members.
<b>Actors</b>	Staff, Database.
<b>Preconditions</b>	Staff indicates to have login credentials.
<b>Success Scenario</b>	<ol style="list-style-type: none"> <li>1. Staff indicates to be logged in.</li> <li>2. Staff indicates to click on users.</li> <li>3. Staff indicates to open all users.</li> <li>4. Staff indicates to block/unblock user.</li> </ol>
<b>Alternatives</b>	<ol style="list-style-type: none"> <li>1. Staff indicates to failed to logged in.</li> <li>4. Staff indicates to failed to block/unblock member.</li> </ol>
<b>Post conditions</b>	Staff indicates to successfully block or Unblock library member.

<b>Use Case Id</b>	US019
<b>Use Case Name</b>	Approve decline new membership request Staff.
<b>Actors</b>	Staff, Database.
<b>Preconditions</b>	Staff indicates to have login credentials.
<b>Success Scenario</b>	<ol style="list-style-type: none"> <li>1 . Staff indicates to be logged in.</li> <li>2 Staff indicates to click on the new membership request.</li> <li>3 Staff indicates all new membership request.</li> <li>4 Staff indicates to approve/decline membership request.</li> </ol>
<b>Alternatives</b>	<ol style="list-style-type: none"> <li>1. Staff indicates to failed to logged in.</li> <li>4. Staff indicates to failed to approve/decline new membership request.</li> </ol>
<b>Post conditions</b>	Staff successfully approve/decline new membership request.



<b>Use Case Id</b>	US20
<b>Use Case Name</b>	View all book categories Staff.
<b>Actors</b>	Staff, Database.
<b>Preconditions</b>	1 Staff indicates to have login credentials. 2 Staff indicate to successfully Login.
<b>Success Scenario</b>	1. Staff indicates to be logged in. 2. Staff indicates to click on books. 3. Staff indicates to open all books. 4. Staff indicates to see all books list.
<b>Alternatives</b>	1. Staff failed to logged in. 4. Staff indicates to fail to see all books list.
<b>Post conditions</b>	Staff indicates to successfully view all books list.

<b>Use Case Id</b>	US021
<b>Use Case Name</b>	Block unblock book categories.
<b>Actors</b>	Staff, Database.
<b>Preconditions</b>	Staff indicates to have login credentials.
<b>Success Scenario</b>	1. Staff indicates to be logged in. 2. Staff indicates to click block/unblock category. 3. Staff indicates to open block/unblock category. 4. Staff indicates to select which category wants to block/unblock
<b>Alternatives</b>	1. Staff indicates to failed to logged in. 4. Staff indicates to failed to block/unblock category.
<b>Post conditions</b>	Staff indicates to successfully block or Unblock book's category

<b>Use Case Id</b>	US22/US23
<b>Use Case Name</b>	Add new categories/Book Staff.
<b>Actors</b>	Staff, Database.
<b>Preconditions</b>	Staff indicate to successfully logged in.
<b>Success Scenario</b>	1. Staff indicates to be logged in. 2. Staff indicates to click on add new book/add new category. 3 Staff indicates to open add new book/add new category. 4. Staff indicates to successfully enter all data.
<b>Alternatives</b>	1(a) Staff failed to logged in. 4(a) Staff indicates to open add new book/ add new category.
<b>Post conditions</b>	Staff indicate that book/category successfully added.

<b>Use Case Id</b>	US24
<b>Use Case Name</b>	Edit /modify a book/category Staff.
<b>Actors</b>	Staff, Database.
<b>Preconditions</b>	Staff indicate to successfully logged in
<b>Success Scenario</b>	1. Staff indicates to be logged in. 2. Staff indicates to click on edit book/category. 3 Staff indicates to open edit book/ category. 4. Staff indicates to successfully enter all data.
<b>Alternatives</b>	1(a) Staff failed to logged in. 4(a) Staff indicates to open edit book/category.
<b>Post conditions</b>	Staff indicate that book/category successfully edited.

<b>Use Case Id</b>	US025
<b>Use Case Name</b>	Issue books Staff.
<b>Actors</b>	Staff, Database.
<b>Preconditions</b>	Staff indicate to successfully logged in
<b>Success Scenario</b>	<ol style="list-style-type: none"> <li>1. Staff indicates to be logged in.</li> <li>2. Staff indicates to click on issue book.</li> <li>3 Staff indicates to open issue book.</li> <li>4. Staff indicates to search book and member id.</li> <li>5. Staff indicates to click on issue button.</li> </ol>
<b>Alternatives</b>	<ol style="list-style-type: none"> <li>1(a) Staff failed to logged in.</li> <li>3(a) Staff indicates to open edit book/category.</li> <li>4(a) Staff indicates that entered book or member id not found.</li> </ol>
<b>Post conditions</b>	Staff indicate that book issued successfully

<b>Use Case Id</b>	US26
<b>Use Case Name</b>	Registration User.
<b>Actors</b>	User, Database.
<b>Preconditions</b>	The user does not have an account before.
<b>Success Scenario</b>	<ol style="list-style-type: none"> <li>1 User indicate to click on registration link.</li> <li>2 User indicate to open the registration form.</li> <li>3 User indicate to full fill the registration form with all conditions</li> <li>4 User indicate to click on the register button.</li> </ol>
<b>Alternatives</b>	<ol style="list-style-type: none"> <li>1(a) User indicate to open registration link</li> <li>3(a) User does not full fill all conditions.</li> </ol>
<b>Post conditions</b>	User successfully registered in website.

<b>Use Case Id</b>	US27
<b>Use Case Name</b>	login User.
<b>Actors</b>	User, Database.
<b>Preconditions</b>	User indicates to be a Registered User.
<b>Success Scenario</b>	1. User indicates to have right LogIn credentials. 2. User indicates to redirect to user home page.
<b>Alternatives</b>	1 (a) User indicates to have wrong username and password. 1 (b) User indicates to redirect to forgot Password.
<b>Post conditions</b>	1. User indicates to access Users home page. 2. User indicates to book/View activities.

<b>Use Case Id</b>	US28
<b>Use Case Name</b>	Forgot Password User.
<b>Actors</b>	User, Database.
<b>Preconditions</b>	User indicates to be Registered user.
<b>Success Scenario</b>	1 User indicates to entered wrong credentials. 2 User indicates to click on forgot password link. 3 Admin indicates to answer all security question correctly. 4 User indicates to enter new password and confirm password. 5 User indicates to redirect to login.
<b>Alternatives</b>	1(a) user indicates to enter right username and password. 3(a) user indicates to check all security question answer to reset password.
<b>Post conditions</b>	User successfully login with new credentials.

<b>Use Case Id</b>	US29
<b>Use Case Name</b>	Edit profile User.
<b>Actors</b>	User, Database.
<b>Preconditions</b>	User indicate to successfully logged in
<b>Success Scenario</b>	1. User indicates to be logged in. 2. User indicates to click on edit my profile. 3 User indicates to open edit my profile. 4 User indicates to modify their data.
<b>Alternatives</b>	1(a) User failed to logged in. 3(a) User indicates to open edit my profile. 4(a) User indicates to full fill all condition.
<b>Post conditions</b>	User indicated that profile successfully edited.

<b>Use Case Id</b>	US30
<b>Use Case Name</b>	pay membership charges User.
<b>Actors</b>	User, Database.
<b>Preconditions</b>	User indicate to successfully logged in
<b>Success Scenario</b>	1. User indicates to be logged in. 2. User indicates to click on Pay my membership fees.. 3 User indicates to open Pay my membership fees.. 4 User indicates to modify their data.
<b>Alternatives</b>	1(a) User failed to logged in. 3(a) User indicates to openpay my membership fees.
<b>Post conditions</b>	User indicate that membership fees successfully paid.

<b>Use Case Id</b>	US31
<b>Use Case Name</b>	Choosing a book from category User.
<b>Actors</b>	User, Database.
<b>Preconditions</b>	User indicate to successfully logged in
<b>Success Scenario</b>	1 User indicates to be logged in. 2 User indicate to click on the particular category. 3 User indicate to choose the book from the list of the books.
<b>Alternatives</b>	1(a) User failed to logged in. 3(a) User indicates to not choosing the book.
<b>Post conditions</b>	User indicate the book successfully choose.

<b>Use Case Id</b>	US32
<b>Use Case Name</b>	Renting Books User.
<b>Actors</b>	User, Database.
<b>Preconditions</b>	User indicate to successfully logged in
<b>Success Scenario</b>	1 User indicates to be logged in. 2 User indicate to choose a book from particular category. 3 User indicate to click on book details button. 4 User indicate to click on rent book link.
<b>Alternatives</b>	1(a) User failed to logged in. 2(a) User indicate to book is not available for the rent today.
<b>Post conditions</b>	User indicate that book is successfully rented.

<b>Use Case Id</b>	US33
<b>Use Case Name</b>	pay fines User.
<b>Actors</b>	User, Database.
<b>Preconditions</b>	User indicate to successfully logged in
<b>Success Scenario</b>	1 user indicates to be logged in. 2 user indicates to click on the pay my fines. 3 user indicates to open pay my fines. 4 user indicates to enter amount user wants to pay right now.
<b>Alternatives</b>	1(a) User failed to logged in. 3(a)User indicate that all fine was paid. 4(a) user indicates that please enter correct amount for the pay.
<b>Post conditions</b>	User indicates the fine is successfully paid.

<b>Use Case Id</b>	US034
<b>Use Case Name</b>	Download E-books User.
<b>Actors</b>	User, Database.
<b>Preconditions</b>	User indicate to successfully logged in
<b>Success Scenario</b>	1 user indicates to be logged in. 2 user indicate to click on the particular category. 3 user indicate to choose the book from the list of the books. 4 user indicates to click on the download E-books link.
<b>Alternatives</b>	1(a) User failed to logged in. 3(a) User indicates to not choosing the book. 4(a)User indicates the download e-book is failed.
<b>Post conditions</b>	User indicate the e-book successfully downloaded.

<b>Use Case Id</b>	US35
<b>Use Case Name</b>	View all categories User.
<b>Actors</b>	User, Database.
<b>Preconditions</b>	User indicate to successfully logged in
<b>Success Scenario</b>	1. User indicates to be logged in. 2. User indicates to click on all categories 3 User indicates to open all categories.
<b>Alternatives</b>	1(a) User failed to logged in. 3(a) User indicates to open all categories page.
<b>Post conditions</b>	User successfully view all categories.

<b>Use Case Id</b>	US036
<b>Use Case Name</b>	View all books from a category User.
<b>Actors</b>	User, Database.
<b>Preconditions</b>	User indicate to successfully logged in
<b>Success Scenario</b>	1. User indicates to be logged in. 2. User indicates to click on all books. 3 User indicates to open all books.
<b>Alternatives</b>	1(a) User failed to logged in. 3(a) User indicates to open all books page.
<b>Post conditions</b>	User successfully view all books.



## **13. Functional / Non-functional Requirements.**

### **Functional Requirements.**

1. Updating stock details - The stock details are updated each and every time a new stock arrives or when an item is taken out.
2. Providing Identification number - It should provide separate identification number to its members
3. Maintaining Records: It must maintain library assets, members and staffs and keep each and every detail that are relevant for running the library smoothly.
4. The software must able to provide information of the library.
5. The software must able to provide the details of book.
6. The software must able to record the book details which gave to people.
7. The software must able to find the books
8. There should be a maximum limit (3) on how many books a member can check-out
9. The system shall allow members to update their profile information.
10. The system allows online payment for late fines from the members.
11. The members can access all the online copies of books, PDFs, and magazines digitally using the online software.
12. The software must able to enter issue and return date in database.

## Non-Functional Requirements

1. Performance - The Server would be able to perform desired tasks in reasonable unit of time.
2. Reliability - The Server would perform desired tasks as expected. The system does its work with more accuracy like user registration to the system, user validation and authorization, book search and issue operation, return status, and updating the database by synchronizing between database and application.
3. Security - The system would provide access to only legitimate users.
4. Scalability - The system would be scalable to support extended number of users.
5. Ease of Use - The system would be user-friendly and would provide Graphical User Interface (GUI).
6. Maintainability - The proposed system would be easy to maintain and extend. Minor modification to the system would not cause harm to the running application.
7. Usability -The system should allow the users to access the system from the Internet using HTML or it's derivative technologies like XML/CSS. The system uses a web browser as an interface.
8. Accuracy - The system shall provide 100% access reliability.
9. Hardware Constraints - The system requires a database in order to store persistent data.
- 10.Backup & Disaster recovery - The database may get crashed at any certain time due to virus or operating system failure. Therefore, it is required to take the database backup.

## 14. Database Schema.

