

Software Engineering Project

Online Book Renting Application

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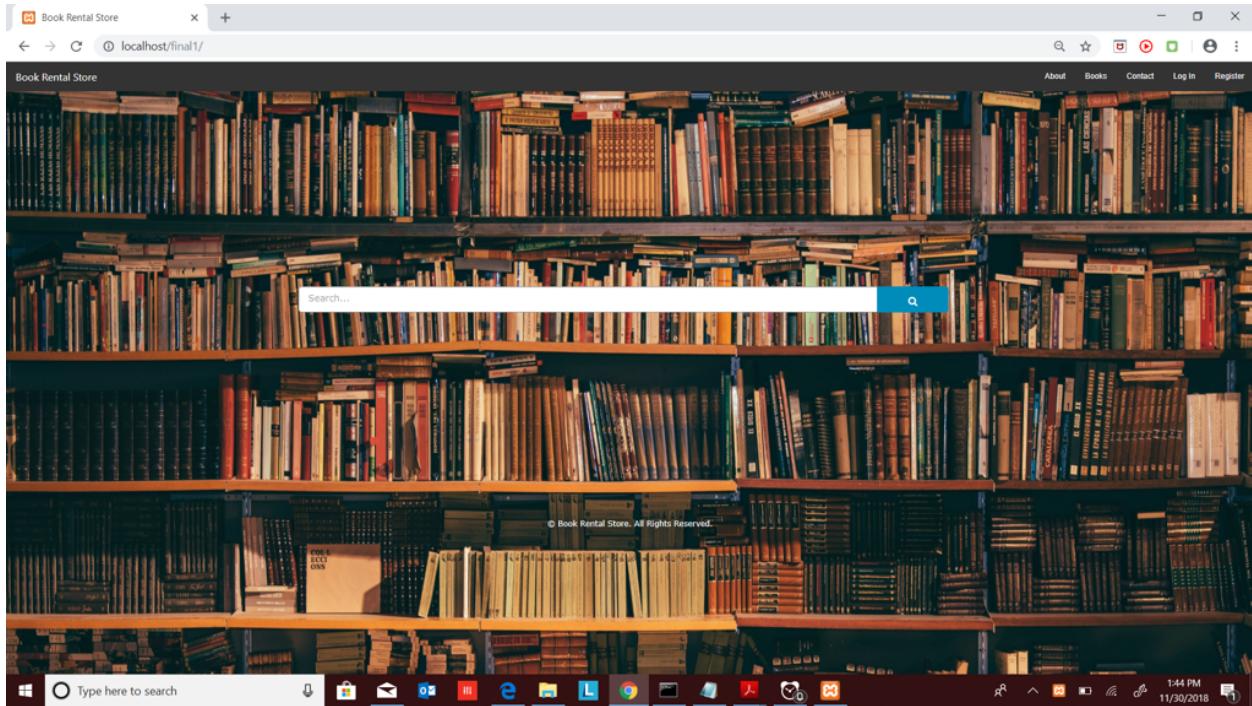
IMT2016033

Design Document

Note:

Not every screen has been placed in the documentation but only the main screens has been placed.

INDEX PAGE:



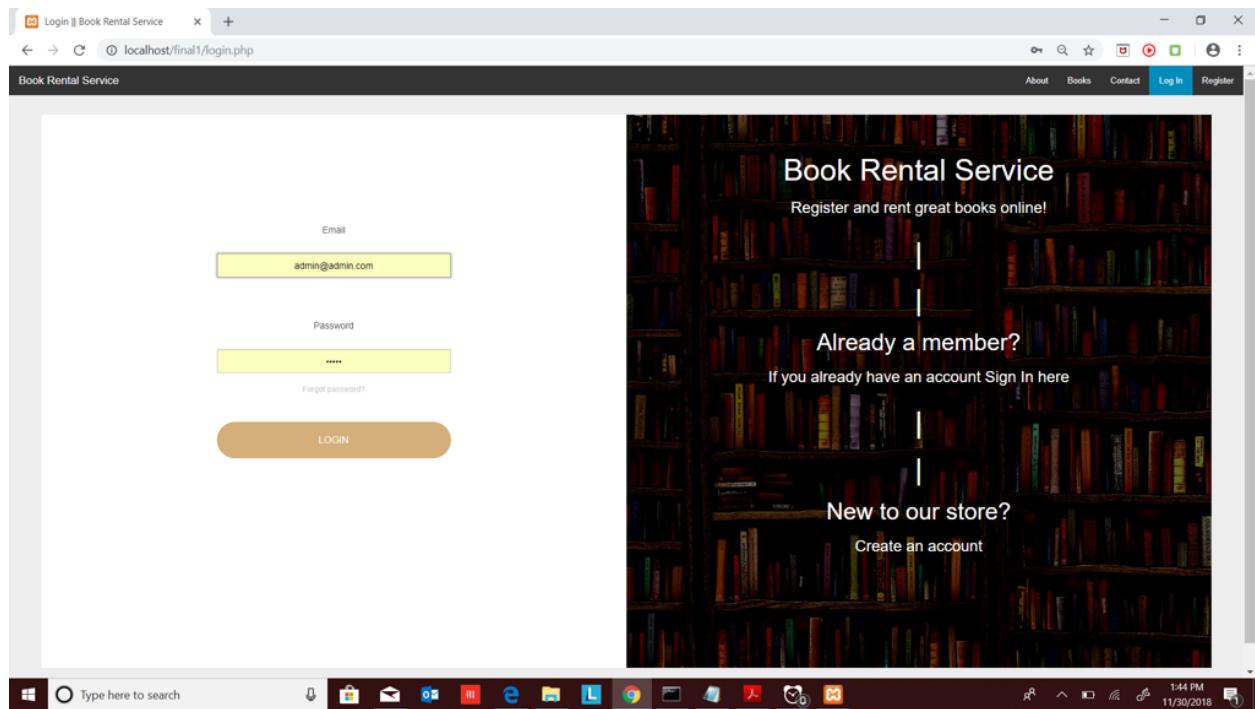
User Stories Involved:

- As a user, I want to search for a book.(based on isbn number, author name, book name, keyword)
- As a guest , I want to search for a book (based on ISBN number,author name,publication,book name)

Validation: Name has to be exact to implement the search operation.

Navigation: (Search-->Books Page)

Login screen:



User Stories Involved:

- As a user, I want to log-in to my account..

Validation: Passwords must be Alphanumeric.

Navigation: (login button, guest button → Home screen)

Register screen:

The screenshot shows a web browser window titled "Register || Book Rental Service". The URL in the address bar is "localhost/final1/register.php". The page has a header "Book Rental Service" and a navigation menu with links for "About", "Books", "Contact", "Log In", and "Register". Below the header, there are seven input fields labeled "First Name", "Last Name", "Address", "City", "Pin Code", "E-Mail", and "Password". At the bottom of the form are two buttons: "Register" and "Reset". A small copyright notice "© Book Rental Service. All Rights Reserved." is at the very bottom.



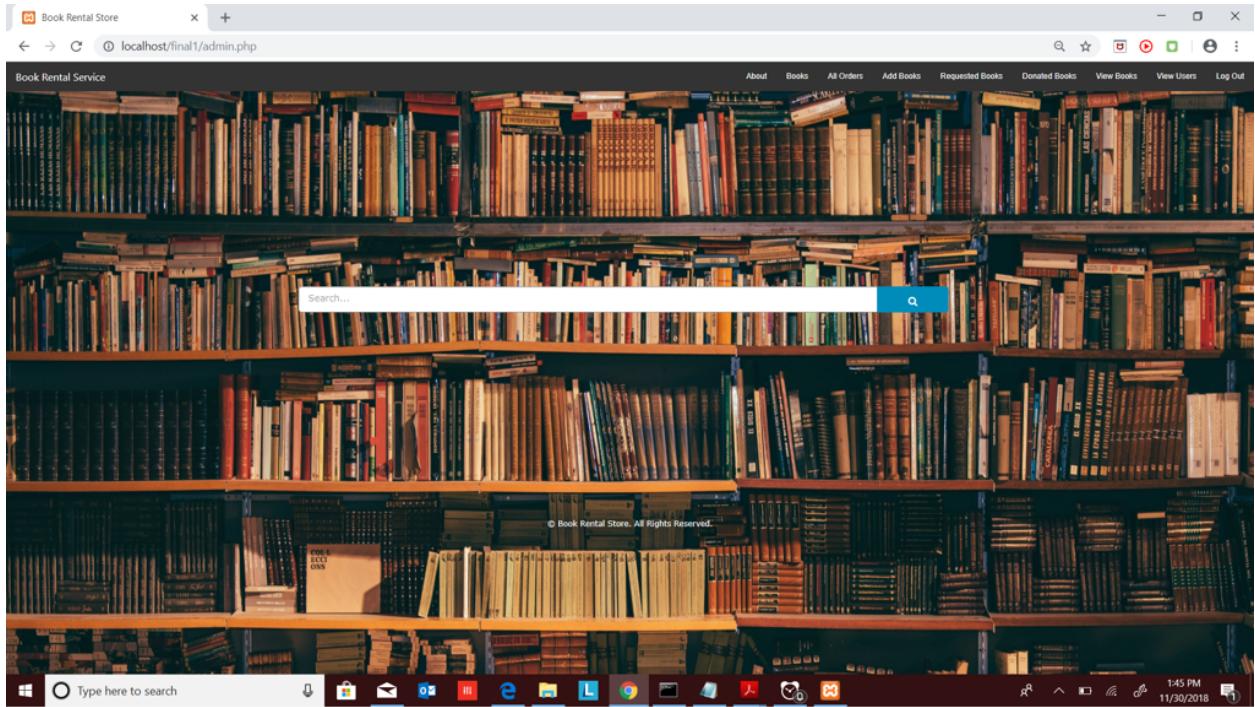
User Stories Involved:

- As a user, I want to sign-up to my account
- As a guest, I want to create an account in the website.

Validation: Passwords must be Alphanumeric.

Navigation: (Register Button → Home screen)

Admin screen:



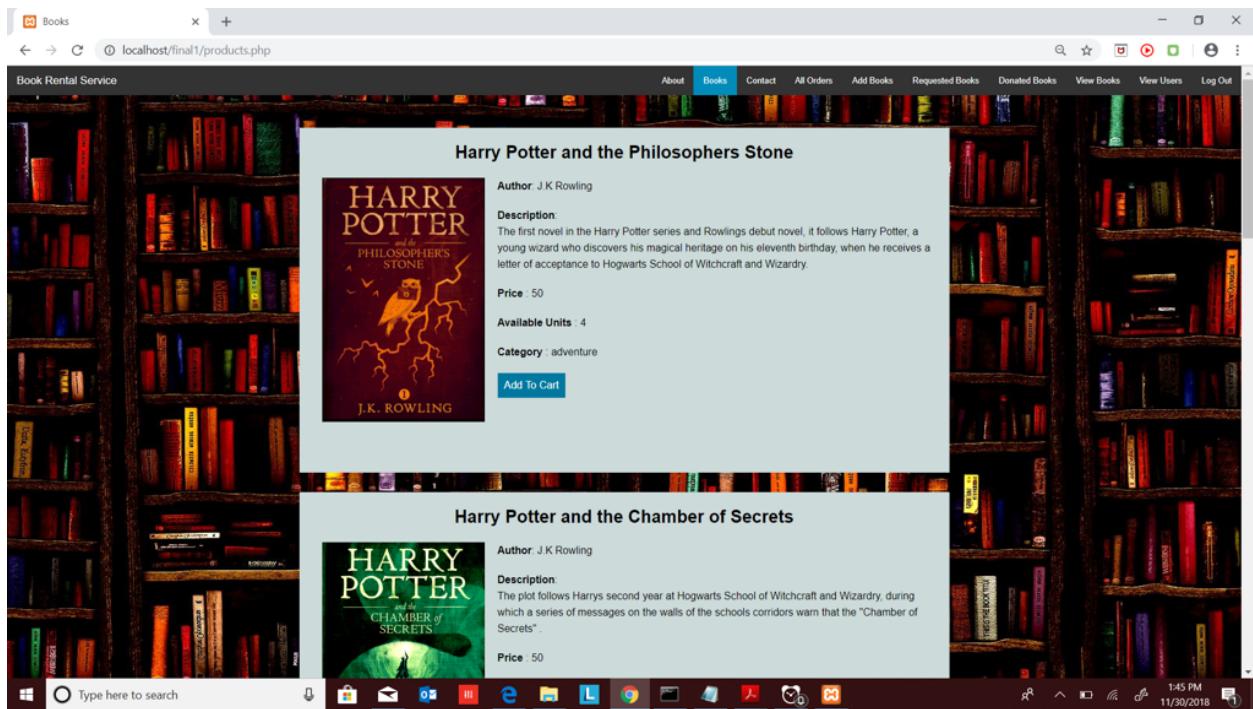
User Stories Involved:

- As an admin, I want to maintain the user details

Validation: Admin must login using login option only.

Navigation: (Login Button → Admin access Home page)

Products Screen:



User Stories Involved:

- As a guest, I want to explore all the books that are available in your website.

Validation: For every product you add the website will redirect you to cart page, if you want to add extra books you can come back to this page and add again other books to cart.

Navigation: (Add to cart → Cart page)

Cart screen:

The screenshot shows a web browser window titled "Shopping Cart || Book Rental Ser". The address bar displays "localhost/final1/cart.php". The page header "Book Rental Service" has a dropdown menu with links: About, Books, Contact, All Orders, Add Books, Requested Books, Donated Books, View Books, View Users, and Log Out. Below the header is a table titled "Your Shopping Cart". The table has columns: id, title, Price per week, Time duration (in weeks), and Total cost. One item is listed: "Harry Potter and the Philosophers Stone" at \$50 for 1 week, totaling \$50. At the bottom of the table, it says "Total Amount" and shows \$50. Below the table are three buttons: "Empty Cart" (red), "Continue Shopping" (green), and "COD" (blue).

id	title	Price per week	Time duration (in weeks)	Total cost
1	Harry Potter and the Philosophers Stone	50	1 + 1 - 1	50

Total Amount: 50

[Empty Cart](#) [Continue Shopping](#) [COD](#)

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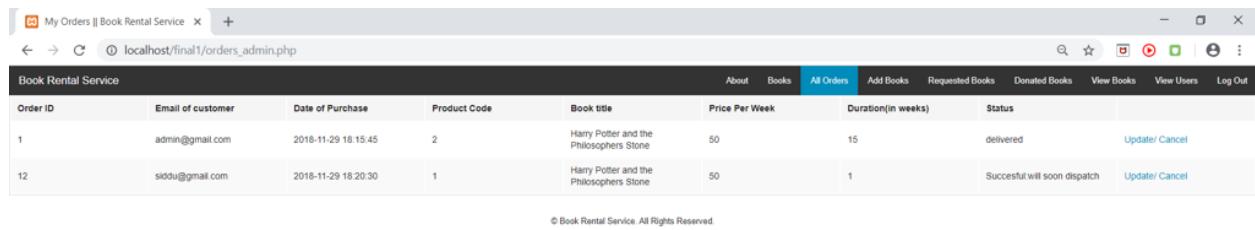
User Stories Involved:

- As a user, I want to place the order

Validation: You can increase the quantity only upto a certain limit.

Navigation: (COD → Order will be placed)

Admin Orders:



Order ID	Email of customer	Date of Purchase	Product Code	Book title	Price Per Week	Duration(in weeks)	Status	Action
1	admin@gmail.com	2018-11-29 18:15:45	2	Harry Potter and the Philosophers Stone	50	15	delivered	Update/ Cancel
12	siddu@gmail.com	2018-11-29 18:20:30	1	Harry Potter and the Philosophers Stone	50	1	Successful will soon dispatch	Update/ Cancel

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User Stories Involved:

- As an admin, I want to keep track of transaction details.

Validation: The details will be in a listed sequence with the latest ordered first.

Navigation: There is no navigation here.

Add Books screen:

The screenshot shows a web browser window with the title 'Register || Book Rental Service'. The address bar displays 'localhost/final1/add.php'. The page header 'Book Rentals Service' includes links for About, Books, All Orders, Add Books (which is highlighted in blue), Requested Books, Donated Books, View Books, View Users, and Log Out. The main content area contains fields for Book Title, Author, Edition, Category, Price, and Quantity, each with a corresponding input field. Below these is a 'Product Photo' section with a file input field labeled 'Choose File' and a note 'No file chosen'. A large text area labeled 'Description' is present. At the bottom are two buttons: 'Add Books' (highlighted in blue) and 'Reset'.



User Stories Involved:

- As an admin, I want to add books to the website.

Validation: User must add a pic of the book ,It is essential but not compulsory.

Navigation: (Add Books → Home screen)

View books screen:

Book Rentals Service							About	Books	All Orders	Add Books	Requested Books	Donated Books	View Books	View Users	Log Out
Book Title	Author	Edition	Category	Price	Available Units	Description									
Harry Potter and the Philosophers Stone	J.K Rowling	1	adventure	50	4	The first novel in the Harry Potter series and Rowlings debut novel, it follows Harry Potter, a young wizard, as he begins his magical heritage on his eleventh birthday, when he receives a letter of acceptance to Hogwarts School of Witchcraft and Wizardry.	Edit	Remove							
Harry Potter and the Chamber of Secrets	J.K Rowling	1	adventure	50	7	The plot follows Harrys second year at Hogwarts School of Witchcraft and Wizardry, during which a series of messages on the walls of the schools corridors warn that the "Chamber of Secrets".	Edit	Remove							
Harry Potter and the Prisoner of Azkaban	J.K Rowling	1	adventure	50	6	The book follows Harry Potter, a young wizard, in his third year at Hogwarts School of Witchcraft and Wizardy. Along with friends Ronald Weasley and Hermione Grange, Harry investigates Sirius Black, an escaped prisoner from Azkaban who they believe is one of Lord Voldemort's old allies.	Edit	Remove							
Harry Potter and the Goblet of Fire	J.K Rowling	1	adventure	50	9	It follows Harry Potter, a wizard in his fourth year at Hogwarts School of Witchcraft and Wizardry and the mystery surrounding the entry.	Edit	Remove							
Harry Potter and the Order of the Phoenix	J.K Rowling	1	adventure	3	50	The fifth novel in the Harry Potter series. It follows Harry Potters struggles through his fifth year at Hogwarts School of Witchcraft and Wizardy, including the return of the antagonist Lord Voldemort, O.W.L exams, and an obstructive Ministry of Magic. The novel was published on 21 June 2003 by Bloomsbury in the United Kingdom.	Edit	Remove							
						The sixth and penultimate novel in the Harry Potter series. Set during the summer before Harry's sixth year at Hogwarts, it follows Harry as he prepares for the Triwizard Tournament.									

User Stories Involved:

- As an admin, I want to manage books.

Validation: All the books with same details except edition will be displayed as different rows.

Navigation: (Add Books → Home screen)

Edit Books:

The screenshot shows a web browser window titled "Register || Book Rental Service" with the URL "localhost/final1/edit.php?edit=1". The page has a dark header bar with links for "About", "Books", "All Orders", "Add Books", "Requested Books", "Donated Books", "View Books" (which is highlighted in blue), "View Users", and "Log Out". Below the header is a form for editing book details. The fields are as follows:

ISBN	1
Book Title	Harry Potter and the Philosopher's Stone
Author	J.K.
Edition	1
Category	adventure
Price	50
Available Units	4

Below the form is a "Product Photo" section with a "Choose File" button and a message "No file chosen". Underneath is a "Description" section containing the text: "The first novel in the Harry Potter series and Rowling's debut novel. It follows Harry Potter, a young wizard who discovers his magical heritage on his eleventh birthday, when he receives a letter of acceptance to Hogwarts School of Witchcraft and Wizardry."

A blue "Update" button is located at the bottom left of the form area. At the very bottom of the page, a small note reads "© Book Rental Service. All Rights Reserved."



User Stories Involved:

- As an admin, I want to manage the prices of the books.
- As an admin, I want to remove books from the website.

Validation: All the books with same details except edition will be displayed as different rows.

Navigation: (Update → Books)

Contact details screen:

The screenshot shows a web browser window titled "Contact || Book Rental Service". The URL in the address bar is "localhost/final1/contact.php". The page content includes the website's header "Book Rental Service" and a navigation menu with links for About, Books, Contact (which is highlighted in blue), Cart, My Orders, Donate Book, Request Book, My Account, and Log Out. Below the menu, the text "Software Engineering Project" and "International Institute of Information Technology, Bangalore" is displayed. A note says "Contact the authors through GitHub". Below this, four names are listed: Rohith Yogi, Siddarth Reddy, Srujan Swaroop, and Puneeth. At the bottom of the page is a copyright notice: "© Book Rental Service. All Rights Reserved."



User Stories Involved:

- As an admin, I want to manage the prices of the books.
- As an admin, I want to remove books from the website.

Validation: Clicking on the contact person's details will redirect to their GitHub accounts.

Navigation: No Navigation.

Donate Books screen:

The screenshot shows a web browser window with the title 'Register || Book Rental Service'. The address bar displays 'localhost/final1/donate.php'. The page header 'Book Rentals Service' includes links for About, Books, Contact, Cart, My Orders, Donate Book (which is highlighted in blue), Request Book, My Account, and Log Out. Below the header are five input fields for Book Title, Author, Edition, Category, and Quantity. A large text area labeled 'Description' follows. At the bottom are two buttons: 'Donate' and 'Reset'.



User Stories Involved:

- As a user, I want to donate my books.

Validation: Books can be donated by users who are logged in only and must be accepted by admin to be found in website.

Navigation: (Donate → Books accepted message) (Reset → set all values empty to rewrite)

Request screen:

The screenshot shows a web browser window titled "Register || Book Rental Service" with the URL "localhost/final1/request.php". The page has a dark header bar with links for About, Books, Contact, Cart, My Orders, Donate Book, Request Book (which is highlighted in blue), My Account, and Log Out. Below the header is a form for requesting a book. The form includes fields for Book Title (Operating systems), Author (Thomas), Edition (6), Category (9), and a large Description text area. At the bottom are two buttons: "Request" (in blue) and "Reset". A small copyright notice at the bottom right reads "© Book Rental Service. All Rights Reserved."



User Stories Involved:

- As a user, I want to request for a book if not found.

Validation: Books can be requested by users who are logged in only and must be accepted by admin to be found in website.

Navigation: (request → Books request message sent response) (Reset → set all values empty to rewrite)

Update Account:

The screenshot shows a web browser window titled "My Account || Book Rental Service". The URL is "localhost/final1/account.php". The page header includes links for About, Books, Contact, Cart, My Orders, Donate Book, Request Book, My Account (which is highlighted in blue), and Log Out. The main content area starts with a greeting "Hi siddu". Below it is a section titled "Account Details" with a note: "Below are your details in the database. If you wish to change anything, then just enter new data in text box and click on update." There are six input fields for First Name (siddu), Last Name (vivek), Address (earth), City (blr), Pin Code (3423), and Email (siddu@gmail.com). A password field is also present. At the bottom are "Update" and "Reset" buttons, and a footer note: "© Book Rental Service. All Rights Reserved."



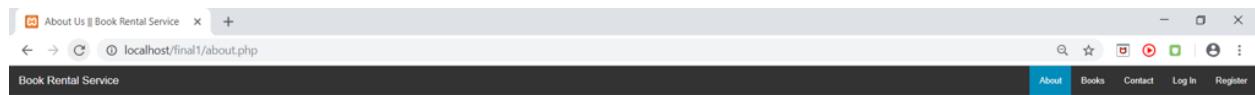
User Stories Involved:

- As a user, I want to update my details if incorrect.
- As an admin, I want to maintain the user details.

Validation: email can't be changed.

Navigation: (Update → Home page) (Reset → set all values empty to rewrite)

About screen:



Online Book Rental Service is developed by our group in the software engineering course under **Prof B.Thangaraju sir** .

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User Stories Involved:

- As a user, I want to know about the website.

Accept request screen:

The screenshot shows a web browser window titled "Register || Book Rental Service" with the URL "localhost/final1/accept_req.php?req=8". The page is titled "Accept request screen:" and displays a form for updating a book record. The form fields are as follows:

- ISBN: 8
- Book Title: Operating
- Author: Thomas
- Edition: 6
- Category: 9
- Price: (empty input field)
- Available Units: 1

Below the form, there is a "Product Photo" section with a "Choose File" button and a note "No file chosen". There is also a large empty "Description" text area.

At the bottom of the form is a blue "Update" button, and below it is a small copyright notice: "© Book Rental Service. All Rights Reserved."



User Stories Involved:

- As an admin, I want to accept requested books

Validation: Requested books will be added only if they are good.

Navigation: (Update → Books page)

Update order:

The screenshot shows a web application titled "Book Rentals Service". The URL in the address bar is "localhost/final1/update_order.php?edit=1". The page has a navigation menu with links: About, Books, All Orders (which is highlighted in blue), Add Books, Requested Books, Donated Books, View Books, View Users, and Log Out. Below the menu is a table with the following data:

Order ID	Date of Purchase	Product Code	Book title	Price Per Week	Duration(in weeks)	Status
1	2018-11-29 18:15:45	2	Harry Potter and the Philosophers Stone	50	15	delivered

At the bottom left is a blue "Update" button. At the bottom right, there is a copyright notice: "© Book Rental Service. All Rights Reserved." The system tray at the bottom of the screen shows various icons and the date/time as 11/30/2018 1:54 PM.

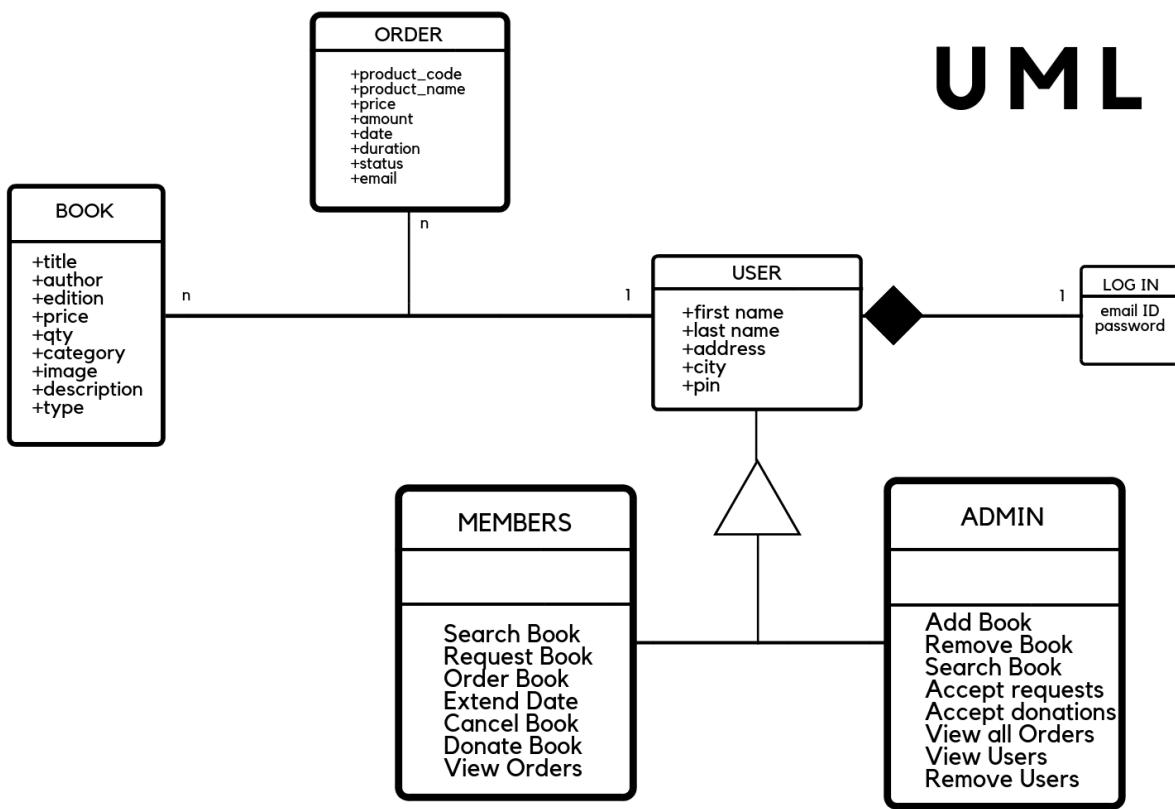
User Stories Involved:

- As an admin, I want to update the tracking details.
- As an admin, I want to cancel or extend the delivery

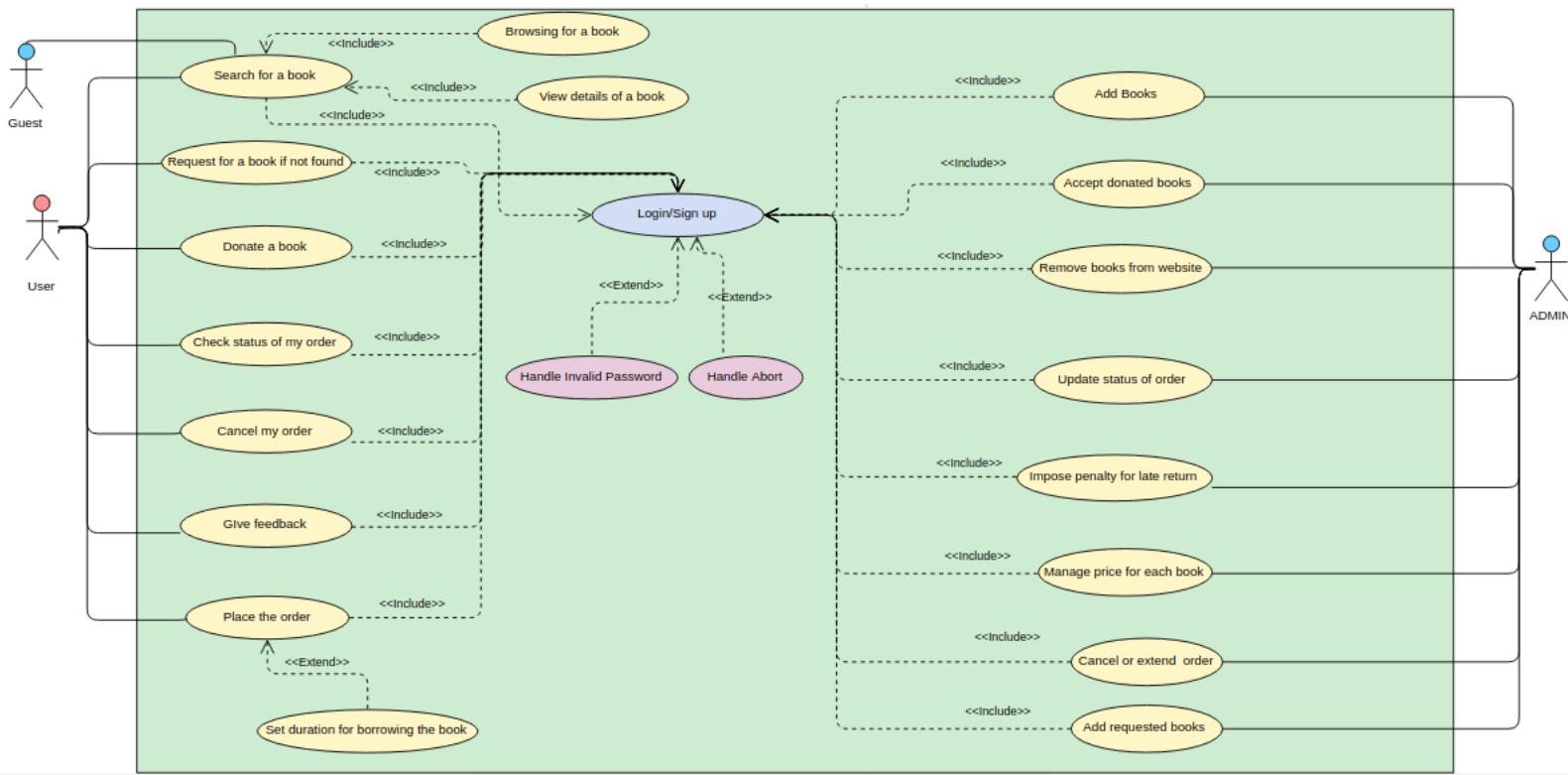
Validation: Updates will be notified to user via their account.

Navigation: (Update → Home page)

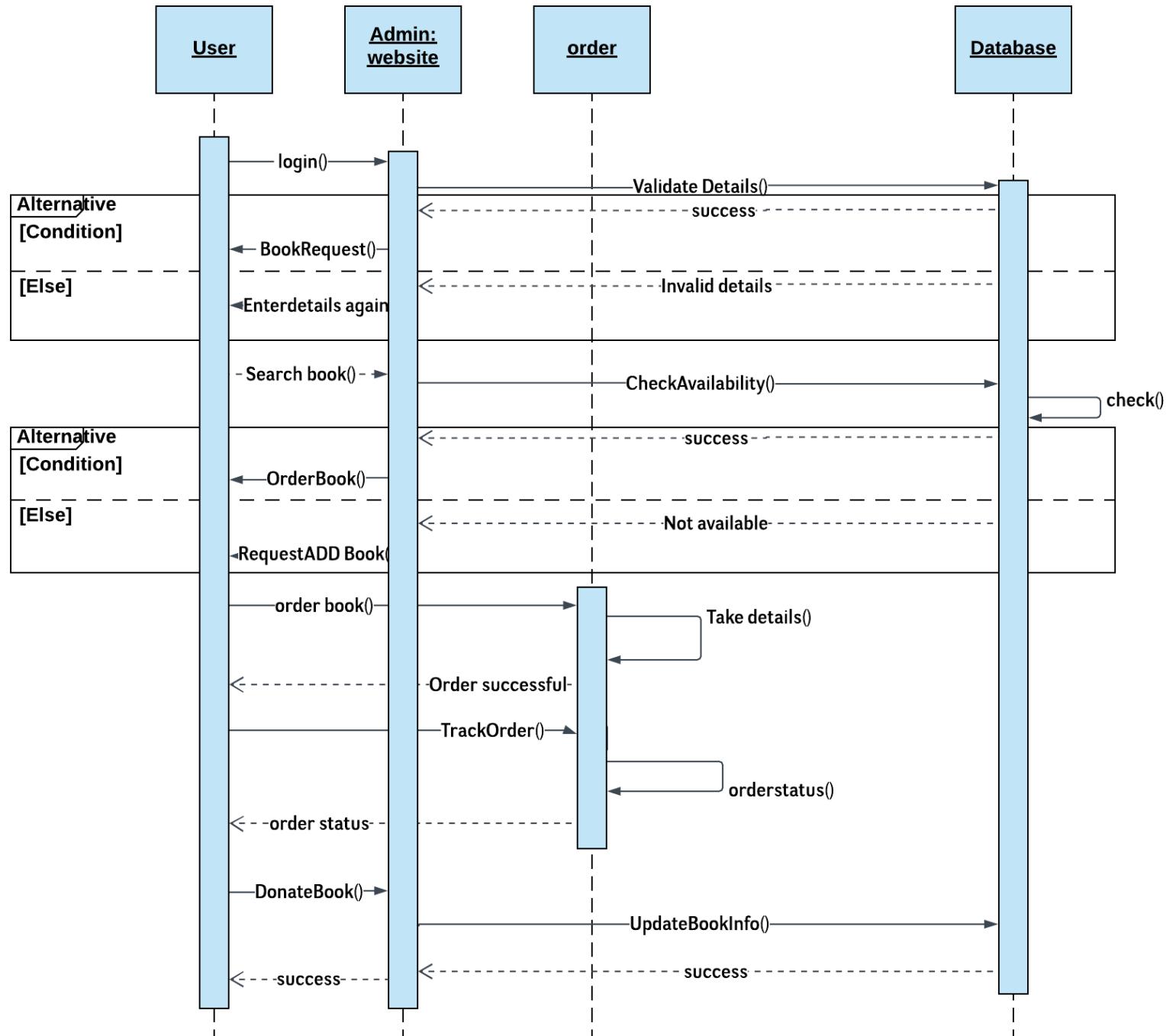
UML

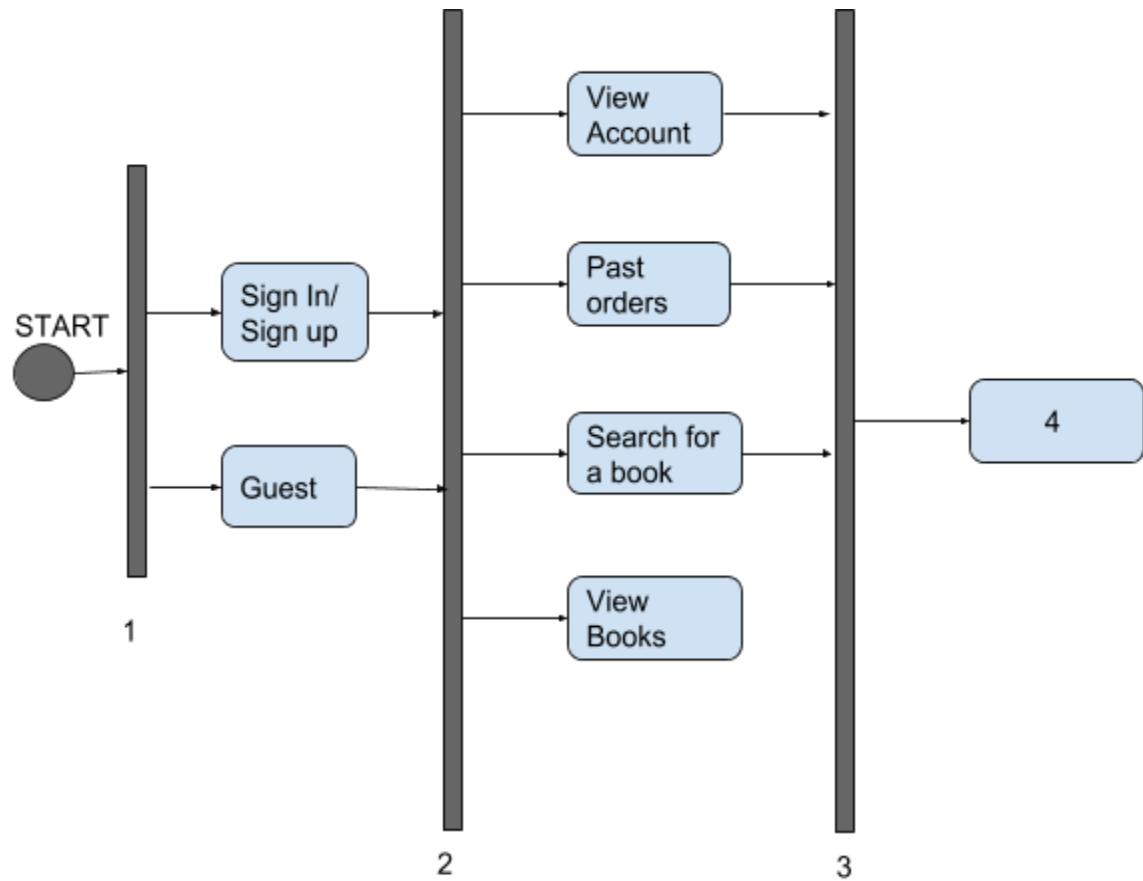


Use Case Diagram



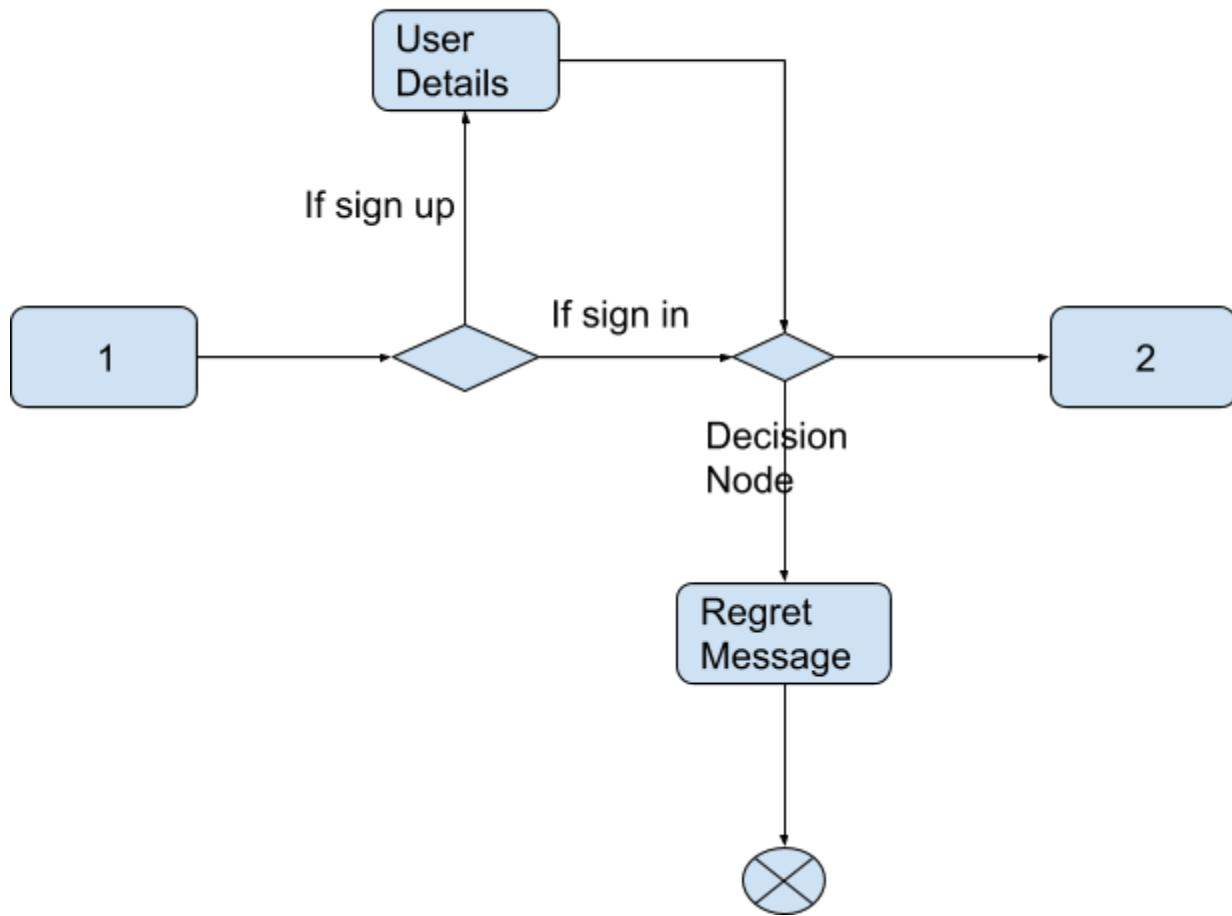
Sequence Diagram



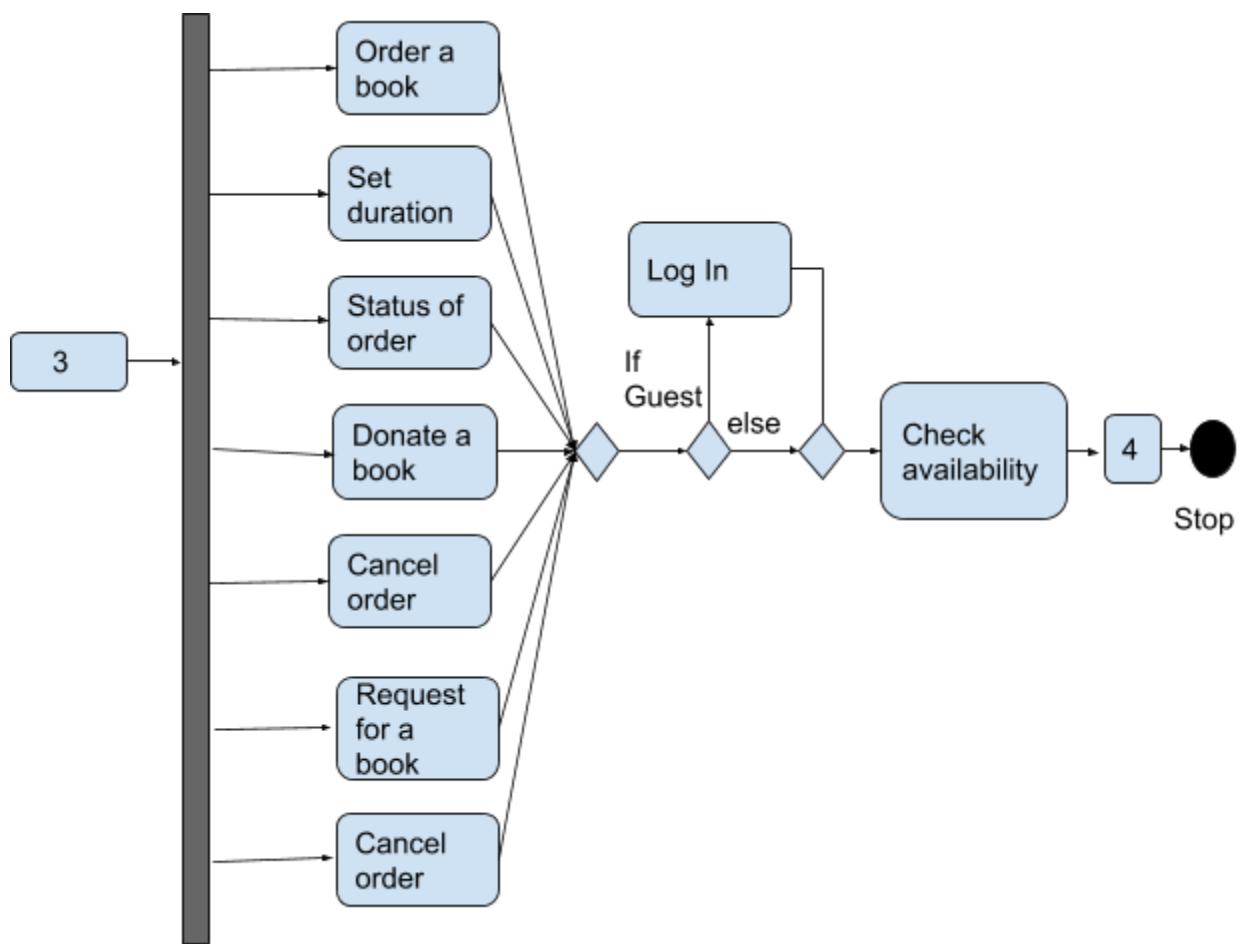


Activity Diagram 1

ACTIVITY DIAGRAM 2 :



Activity Diagram 2



Activity Diagram 3

We create two new projects in jenkins which contains build and deploy our code.

The screenshot shows the Jenkins interface for the 'Book Rental Build' project. The left sidebar has a 'Workspace' icon selected. The main content area displays the 'Project Book Rental Build' page with sections for 'Recent Changes' (empty), 'Downstream Projects' (empty), and 'Build History'. The 'Build History' section lists the following builds:

#	Build Number	Date
13	#13	Nov 30, 2018 6:21 PM
12	#12	Nov 30, 2018 6:19 PM
11	#11	Nov 30, 2018 6:19 PM
10	#10	Nov 30, 2018 6:19 PM
9	#9	Nov 30, 2018 6:18 PM
8	#8	Nov 30, 2018 6:18 PM
7	#7	Nov 30, 2018 6:16 PM

The URL in the address bar is localhost:8080/job/Book%20Rental%20Build/.

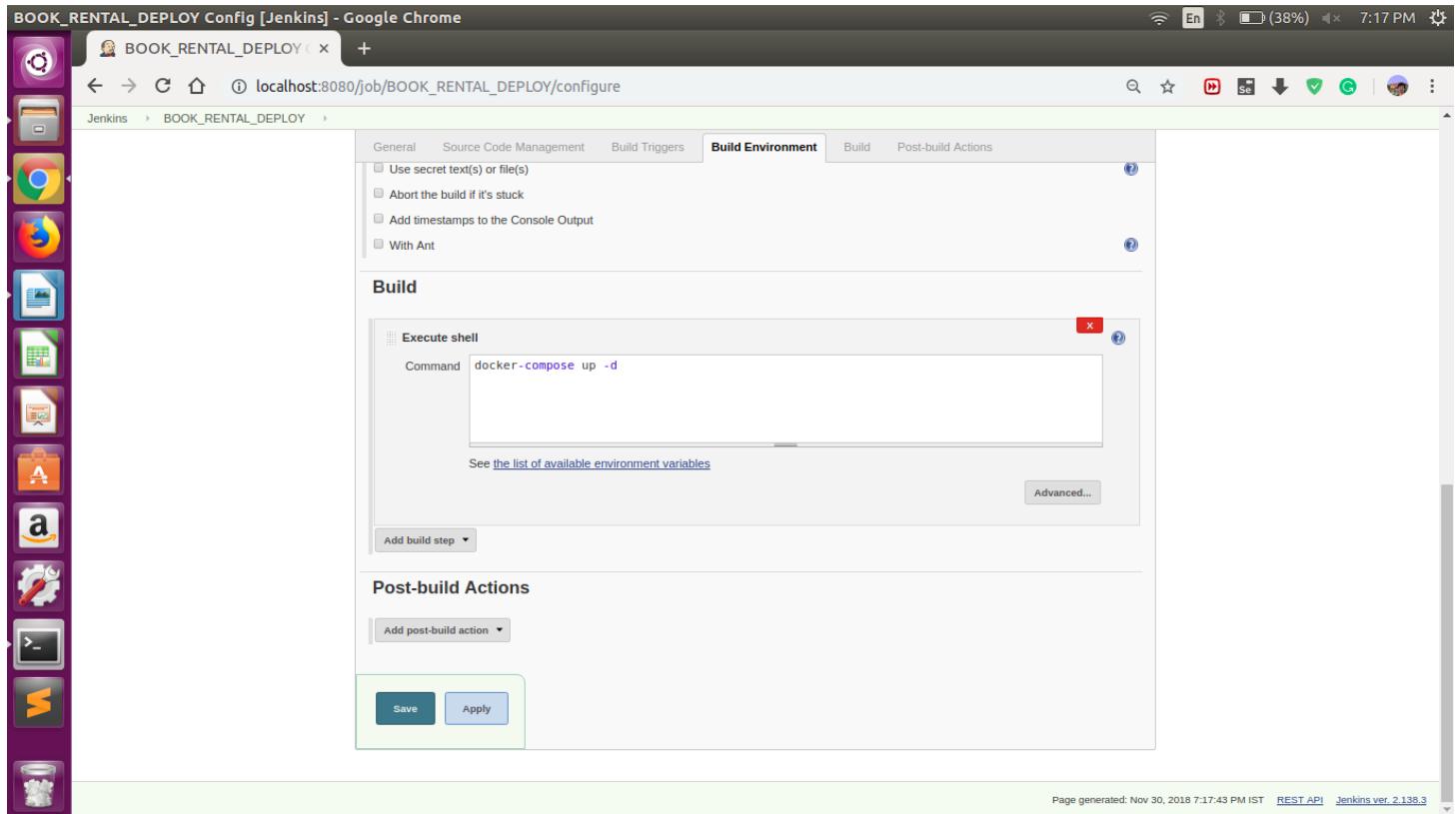
In “BOOK_RENTAL_BUILD” ,we integrate our project with github by giving our github credentials to jenkins and repository which contains our files.

The screenshot shows the Jenkins configuration interface for a job named "Book Rental Build". The "Source Code Management" tab is selected, showing the "Git" repository configuration. The "Repository URL" is set to https://github.com/Srujan-Swaroop/Software_project.git and the "Credentials" are set to "Srujan-Swaroop*****". The "Branches to build" section specifies "Branch Specifier (blank for 'any') /master". The "Build Triggers" section includes options like "Trigger builds remotely" and "Build periodically". At the bottom, there are "Save" and "Apply" buttons.

In post build actions we select “build another projects” and add “BOOK_RENTAL_DEPLOY”,this means after collecting our code from github we ask jenkins to run this post build action.

The screenshot shows the Jenkins configuration interface for the same job. The "Build Environment" tab is selected, and the "Post-build Actions" section is active. It shows a "Build other projects" action configured to build the project "BOOK_RENTAL_DEPLOY" and trigger it only if the build is stable. There are "Save" and "Apply" buttons at the bottom.

In “BOOK_RENTAL_DEPLOY” ,we ask to execute docker files using the command we given in execute shell.



So these are the outputs of both the projects.

For BUILD :

Book Rental Build #13 Console [Jenkins] - Google Chrome

Book Rental Build #13 Co Book Rental Store +

localhost:8080/job/Book%20Rental%20Build/13/console

Jenkins | admin | log out

Back to Project Status Changes Console Output View as plain text Edit Build Information Delete Build Git Build Data No Tags Previous Build

Console Output

```
Started by user admin
Building in workspace /home/srujan/Jenkins/workspace/Book Rental Build
> git rev-parse --is-inside-work-tree # timeout=10
Fetching changes from the remote Git repository
> git config remote.origin.url https://github.com/Srujan-Swaroop/Software_project.git # timeout=10
Fetching upstream changes from https://github.com/Srujan-Swaroop/Software_project.git
> git --version # timeout=10
using GIT_ASKPASS to set credentials
> git fetch --tags --progress https://github.com/Srujan-Swaroop/Software_project.git
+refs/heads/*:refs/remotes/origin/*
> git rev-parse refs/remotes/origin/master^{commit} # timeout=10
> git rev-parse refs/remotes/origin/origin/master^{commit} # timeout=10
Checking out Revision 2f59993c736993224ed42a8f520a8def636a1cle (refs/remotes/origin/master)
git config core.sparsecheckout # timeout=10
> git checkout -f 2f59993c736993224ed42a8f520a8def636a1cle
Commit message: "Update Book_Rental.sql"
> git rev-list --no-walk 2f59993c736993224ed42a8f520a8def636a1cle # timeout=10
Triggering a new build of BOOK_RENTAL_DEPLOY
Finished: SUCCESS
```

Page generated: Nov 30, 2018 6:21:53 PM IST REST API Jenkins ver. 2.138.3

For DEPLOY :

BOOK_RENTAL_DEPLOY #14 Console [Jenkins] - Google Chrome

BOOK_RENTAL_DEPLOY Book Rental Store +

localhost:8080/job/BOOK_RENTAL_DEPLOY/14/console

Jenkins | admin | log out

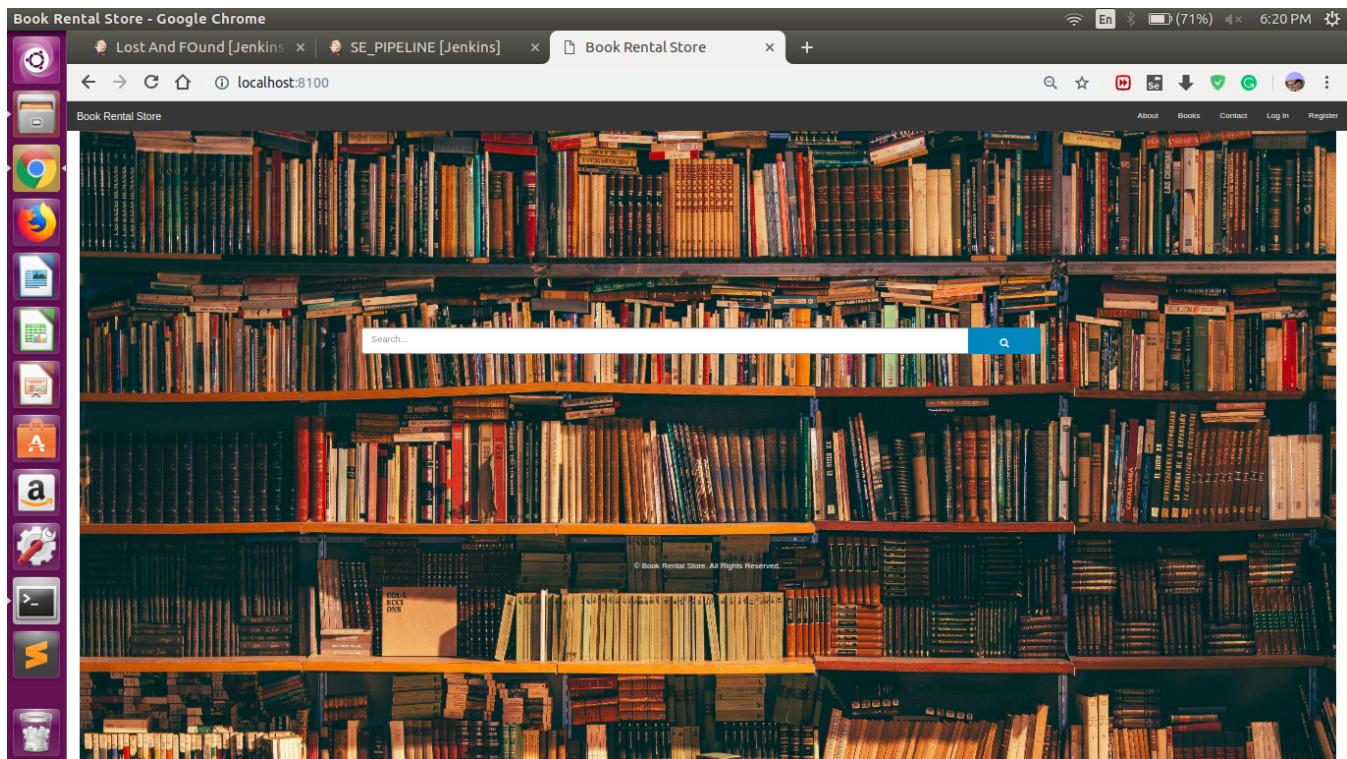
Back to Project Status Changes Console Output View as plain text Edit Build Information Delete Build Previous Build

Console Output

```
Started by upstream project "Book_Rental_Build" build number 13
originally caused by:
Started by user admin
Building in workspace /home/srujan/Jenkins/workspace/Book Rental Build
[Book Rental Build] $ ./bin/sh -xe /tmp/jenkins1600818089693799271.sh
+ docker-compose up -d
bookrentalbuild_db_1 is up-to-date
php_web is up-to-date
Finished: SUCCESS
```

Page generated: Nov 30, 2018 6:22:14 PM IST REST API Jenkins ver. 2.138.3

So, after deploying we can access website using
<http://localhost:8100/>



pipelining our project is :

