

Q.3 Book exchange among campus students:

- **Users and Stakeholders:**

Stakeholders of the system: System Developers, Maintainers, Buyers, Sellers/Donors.

Actors: Actors are those who are directly involved in interacting with the system, who may or may not be humans. The actors involved here are: Buyers, Sellers/Donors

- **Features exercised by each user of the system:**

Buyer:

- i. **Search for a book**

- There will be a search bar from where the buyer can search the specific book and if the book is available then he can see the information of all the sellers selling that book.

- ii. **Wishlist a book**

- When the searched book is available then the buyer will be able to add that book to the wishlist from where he can purchase it later.

- iii. **Buy a book**

- When the searched book is available then the book will be displayed and the buyer will be able to contact the seller and buy that book.

- iv. **Buy a book from the wishlist**

- If the book is available and it is on the wishlist, then the buyer can contact the seller and buy it.

- v. **Request an unavailable book**

- If the book is not available then the buyer should get a request feature. When the book becomes available again, the buyer will get notified by email.

- vi. **View buy history**

- The buyer will be able to see all the buyer-related transactions will be shown in the buy history.

Seller:

i. Sell a book

- Sellers will be able to add details of the book (name, author, edition, ISBN) to the database.

ii. View his(her) books out for sale

- Sellers will be able to see all information about the data of books he/she has put for sale.

iii. Check requests on a particular book

- The seller will be able to see all the requests for buying the books which are available for selling.

iv. Deem a particular book sold

- When the seller gives confirmation about the books being sold, then the book will be deemed from his/her list of sales.

v. View sale history

- The seller will be able to see that book that they have sold.

vi. Remove the book from the sale

- If the seller changes his/her mind then they can change the status of the book(s) that are being sold.

● Non-Functional Requirements

- 1) Down time should be not more than 1 hour daily(from 23:59 hrs to 00:59).
- 2) Support all browsers like Chrome, Firefox, Safari etc.
- 3) Should be scalable enough to support most of the people of university.
- 4) Interface should be user friendly and lucid, hence not a complicated one.
- 5) The contact details of the buyer should not be shared or visible to other buyers.
- 6) Response time should not be more than 15-20 milliseconds.
- 7) The system should be available at 99.9% of the time. A backup should be built for abnormal situations and maintenance access.
- 8) The system should be able to perform the specified task without failure consistently.
- 9) The system should demonstrate that its design provides maintainability from user interfaces to all the functions.
- 10) The system must be easy to use with minimum training. It will be easy to navigate, search, sell and buy books.
- 11) Data integrity should be maintained during all the transactions.

- **User Interfaces:**

1. **Buy:** Some available books will be displayed on the screen. The buyer can search for a book on the basis of Title, Author, etc. If the book is not available then a popup will be shown which will ask for all the details of the book. If the book is available then all the books related to the search field will be displayed on the screen. The displayed books will consist of the price and the details of the seller. If a buyer wants to buy the book then he can click the buy button. If the book is available then a button to add to wishlist is also available for each book.

2. **Sell:** There is a button on top of the screen for selling a new book. The button will lead to a popup and ask for all the details of the book such as book name, ISBN, Author, price etc. Below the button all the books kept for sale by the user will be displayed. Each displayed book will be some sort of dropdown which contains all the users who have requested to buy this book. There is a button for every buyer who has requested the book. By clicking the button seller can deem the book sold.

3. **Profile:** It displays the information of the user such as Name, email, phone number etc. There is also a feature to update the profile.

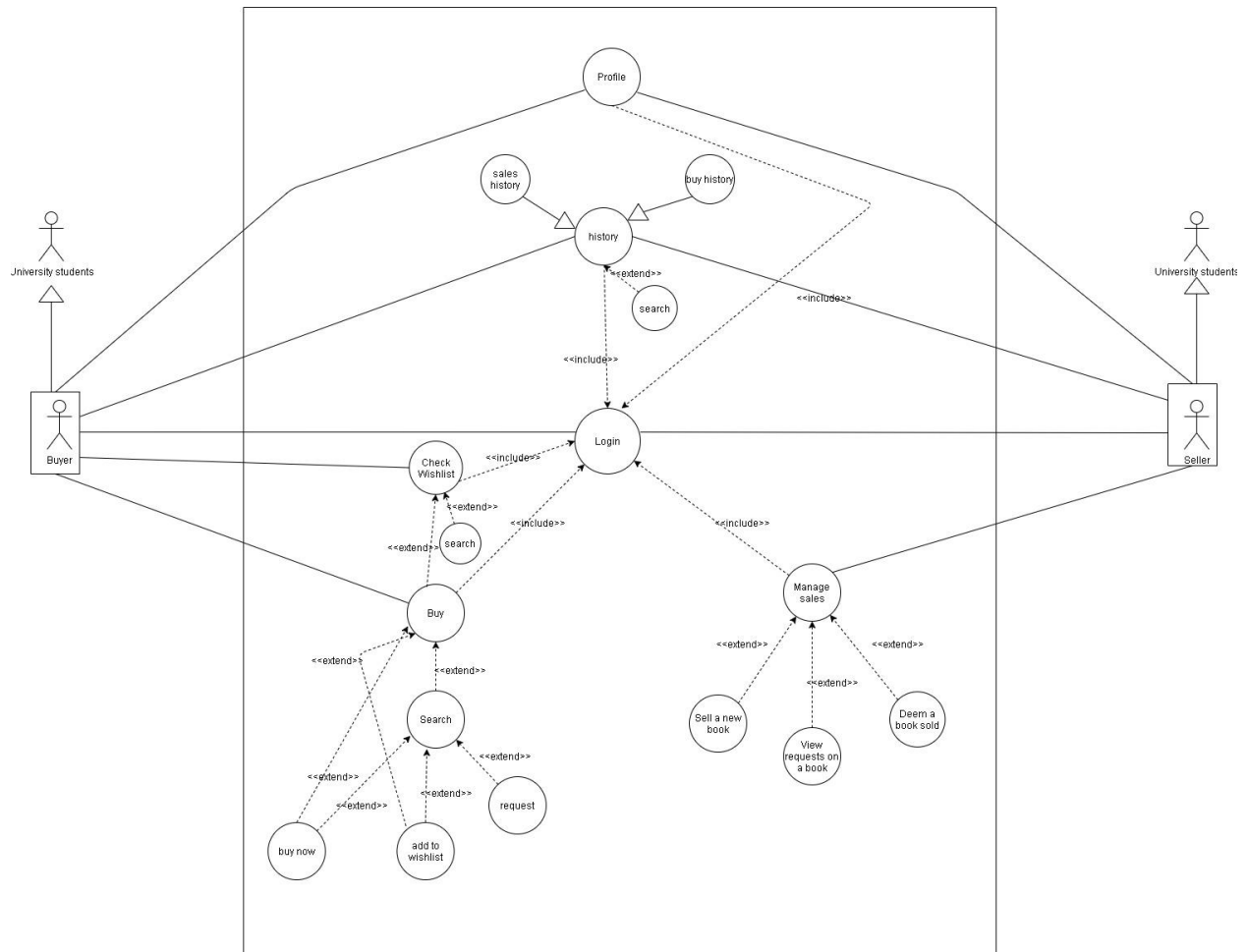
4. **History:** It displays the history transaction of the books which are bought or requested to buy and even the books which are sold by the user. There is a search option on top of the screen to search for the particular book.

5. **Wishlist:** There is a search option on top of the screen to search for the particular book which is wishlisted by the user. There is also a buy option available here. The buyer also has a choice to go to the buy section and buy that book.

- **Open Issues:**

- Email Verification: The verification method is not yet decided. We have to decide how to verify if the user is genuine.
- Book verification: We have not yet decided about how we would verify the details of a book entered by the seller or if there is a dummy entry.
- Lecture Notes and Question Papers: Not yet decided how we would sort notes on our site and how users would be able to buy/sell/exchange them.
- Dispute Policy: We have not yet decided how we would handle the disputes and disagreements should any arise between buyer and seller.
- Privacy Policy: We are unsure at this time about the privacy policy and how we would handle user data.
- Help Button: If the user faces any issue in operating our site will there be any step by step guide for him.

- Use- case Diagram:



- **Objectives:**

This project aims to facilitate books/material exchange among the campus students. The scope of the project is limited to the use of students of a particular university for easier books and other educational material exchange.

It is a common practice among the university students to exchange books, notes and other papers pertaining to the curriculum or otherwise and the objective of the system is to facilitate this process by creating an interface where one could easily find a buyer(one who wants the book/material) or seller/donor(one who wants to sell or donate a book/material). It also aims to connect them to the prospective buyer/seller by providing relevant contact information of the other party. Along with this, it will also maintain a log of books sold/bought by a particular student for his(her) reference along with the information of the buyer/seller from(to) they sold/bought the book/materials.

The sole objective of the system hence remains to impart a reliable, secure, quick and accurate destination to a student for exchange of educational material hence reducing the effort of finding a buyer/seller for a book/material manually and physically. It shall facilitate a smooth book exchange among the campus students.