

Online Book Sales With Mobile SMS	Version 1.0
Software Requirements Specification	31-01-2013
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# Online Book Sales With Mobile SMS

Software Requirements Specification

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**College Name:** Veermata Jijabai Technological Institute

**Department:** Information technology

**State:** Maharashtra

## **Revision History**

<b>Date</b>	<b>Version</b>	<b>Description</b>	<b>Author</b>
31-01-2013	1.0	SRS-1	Crazy Four

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# **Software Requirements Specification**

## **Chapter 1 - Introduction:**

IDEAL BOOK SALES is an online book selling e-commerce company which sells book to a large no of people .They can also notify people via sms regarding the different things.

### **1.1 Purpose:**

The purpose of this project is to implement a computer based Online Book Sales System with the help of Mobile SMS. This system will help the users to know automatically when certain book requested by them has arrived once they have registered with the website. It will also help the users to know the latest books of their interests being introduced into the marketlike fiction, science, technology, romance etc. The system will help in making the process simpler

### **1.2 Scope:** The Scope of Online includes:

There are four basic users-> **non Member, Corporate user, Retail user,and administrator.**

- The system will allow the non-member to browse,search for books and option for registering.
- The retail and corporate users through the process of account Creation will have the option to become a member of the site.
- All users have their own profiles in the system.
- The system will allow registered users to browse, search, select, and order for books.
- Corporate users would be given special offers.
- Users and admin can rate the books according to its features.
- Users would be notified via SMS of any new event or regarding order and payment.
- Users are provided information about the products in categories.

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- Admin has the authority to add/delete users, grant permission to members and users to purchase book and in return is also responsible for generating mobile message for customer regarding book purchase , transaction and delivery.
- Customers are provided with up to date information on the products available.

### 1.3 Definitions, Acronyms, and Abbreviations:

- Administrator: He is the main controller who keeps track of all the users and moderators and maintains all the articles in the database.
- Corporate User: He is a librarian at schools and colleges who buys large quantity of books.
- Retail user: He is a common person who is interested in buying books from the website.
- Non-member: He is a person who has not signed up & is only allowed to view books.
- HTML (Hyper Text Markup Language): It is used to create static web pages.
- JSP (Java Server Pages): It is used to create dynamic web content.
- J2EE (Java 2 Enterprise Edition): It is a programming platform, belonging to the Java platform, which is used for developing and running distributed java applications.
- Apache Tomcat : It is an open source software implementation of the java servlet and Javasever pages technologies.
- Eclipse : It is an IDE for Java EE developers.

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- DB2 (IBM Database 2): It is a database management system that provides a flexible and efficient database platform to raise a strong "on demand" business applications.
- HTTP (Hyper Text Transfer Protocol): It is a transaction oriented client/server protocol between a web browser and a web server.
- XML (Extensible Markup Language): It is a markup language that was designed to transport and store data.
- Ajax (Asynchronous Java Script and XML): It is a technique used in java script to create dynamic web pages.
- Web 2.0: It is commonly associated with web applications which facilitate interactive information sharing, interoperability, user-centered design and collaboration on the World Wide Web.



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## 1.4 References

- IEEE SRS format
- Project specification requirement (provided by IBM)
- Sample SRS (provided by IBM)
- SRS of previous year's winners (provided by IBM)

## 1.5 Technologies used

- **HTML** – Hyper Text Markup Language
- **Java Script** – Script Language
- **XML** – Extensive Mark Up Language
- **JAVA** – Application architecture
- **J2EE** – Application architecture
- **AJAX** – Asynchronous Java script And XML

## 1.6 Tools used

- **RSA** – Rational Software Architect 7.0
- **DB2 9** – Database
- **Tomcat** – Apache tomcat Server 7.0
- **TSM** – Tivoli Storage Manager
- **Eclipse** – Eclipse J2EE Enterprise Edition

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## 1.7 Overview

- SRS includes two sections overall description and specific requirements
- Overall description will describe major role of the system components and interconnections.
- Specific requirements will describe roles & functions of the actors.

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## Chapter 2 - Overall Description

### 2.1 Product Perspective:

- The web pages (JSP) are present to provide the user interface on client side. Communication between client and server is provided through HTTP/HTTPS protocols.
- The Client Software is to provide the user interface on system user client side and for this TCP/IP protocols are used.
- On the server side web server is Apache tomcat which displays jsp content and database server(DB2) is for storing the information.

### 2.2 Software Interface:

- **Front End Client:** Web Browser, Operating System (any)
- **Web Server:** Apache Tomcat, Operating System (any)
- **Data Base Server:** DB2, Operating System (any)
- **Back End:** Eclipse (J2EE, Java, Servlets, Jsp), DB2, Windows, Web Server.

### 2.3 Hardware Interface:

- **Client Side:** IE 7 or higher, Mozilla firefox, Google Chrome, Opera  
: Processor Pentium III or higher, 128 mb RAM
- **Server Side:**

Eclipse for Apache Tomcat		DB2
Processor	Pentium III 800 MHz or higher	Pentium III 800 MHz or higher
RAM	1 Gb minimum	512 Mb minimum
Disk Space	1 Gb + additional resources+ Workspace	1 Gb + Data

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## 2.4 Product Functions:

1. It focused on the acquisition, distribution and management of book.
2. It mainly emphasized creation and implementation of a book sales management information system.
3. It automated the system with the help of SMS that informs the user about the availability, price and method of purchasing the book.
4. It will ease and speed up the planning decision making process process, secure confidential and reliable reports .
5. It help for addressing problems of security secrecy and confidentiality of customer records.
6. Used to check the delays errors inconsistencies in records and access to historical records.
7. It has eased the control and distribution of books in various parts of the country basing on regional demands
8. Users can only register as members (through unique IDs).
9. Books can be searched through various categories.
10. Registered users and Admins will have their own profile, where they can edit info and purchase books.
11. Forums have associated categories, according to which to-be-validated-posts will be posted by the users. On rejection, admin provides a reason for the same, which will be forwarded to the concerned user.

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12.SMS notifications are sent to the users

13. Admin can add/delete users. He will have all the sales records.

## 2.5 User Characteristics :

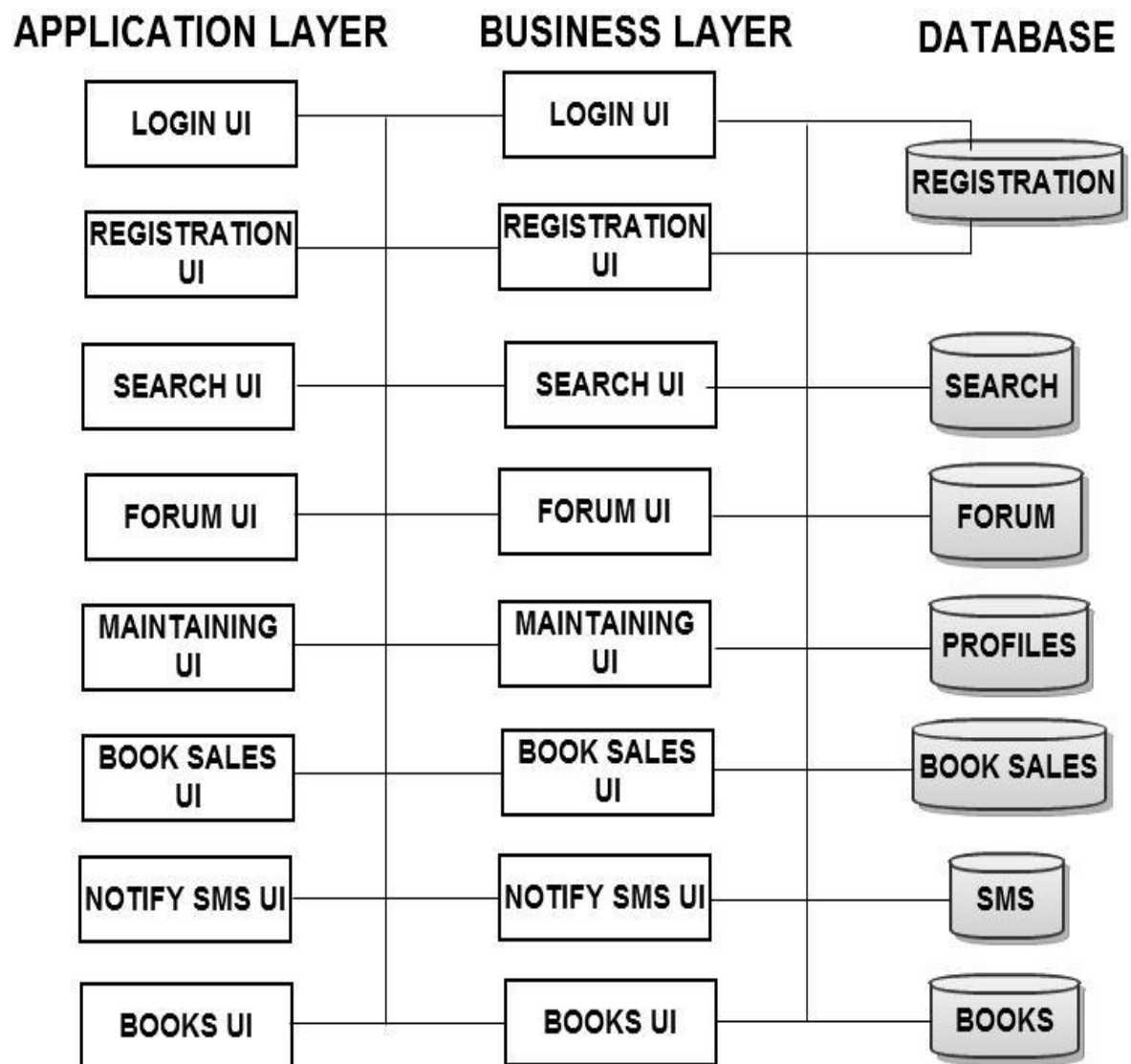
Every user should be comfortable of working with computer and net browsing. He must have basic knowledge of English too.

## 2.6 Constraints:

- GUI is only in English.
- Limited to http/https.
- Login and password is used for the identification of users.
- Only registered users will be authorized to use the services.
- The information of all the users must be stored in a database that is accessible by the Administrator.

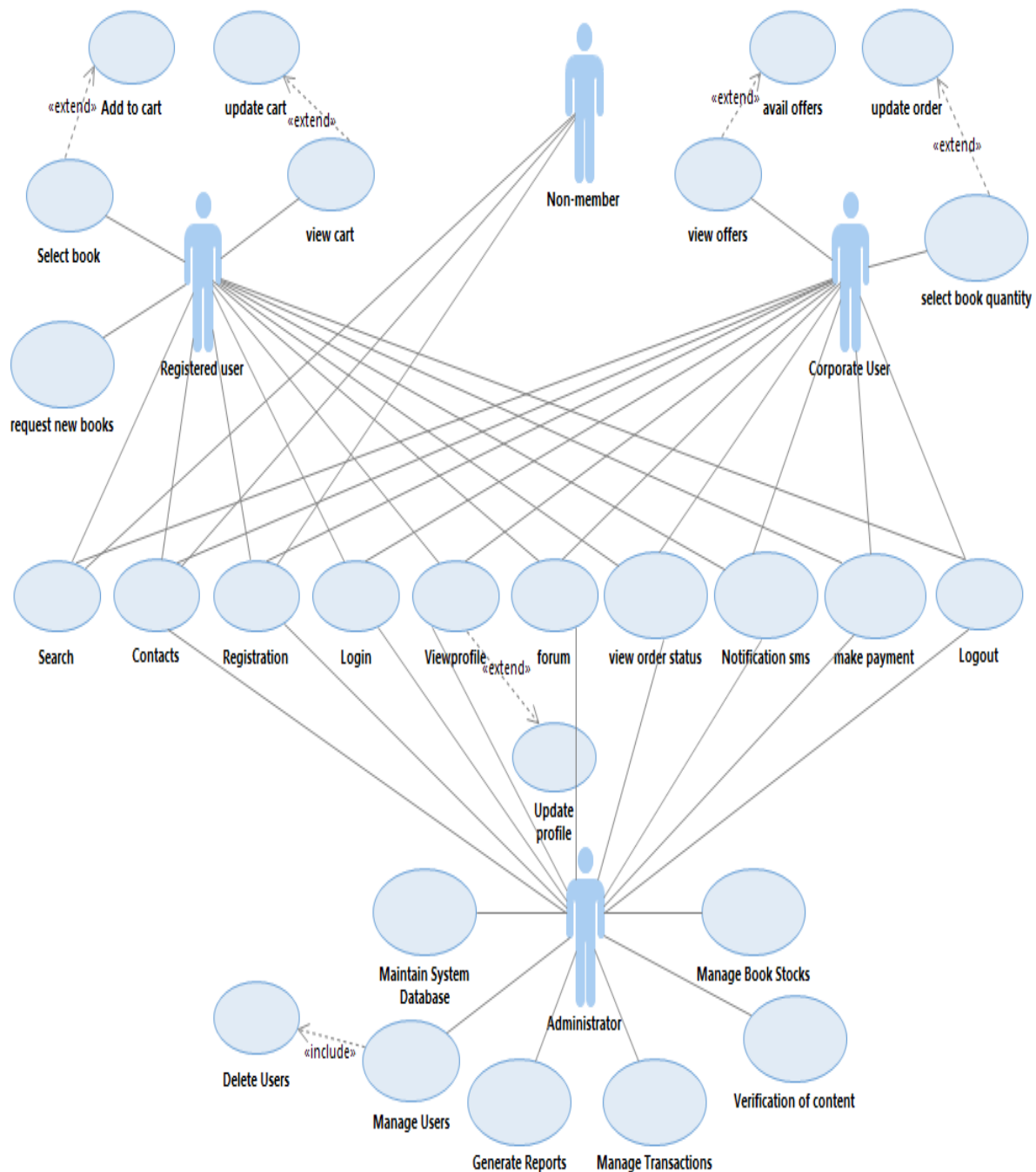
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## 2.7 Architecture Design:



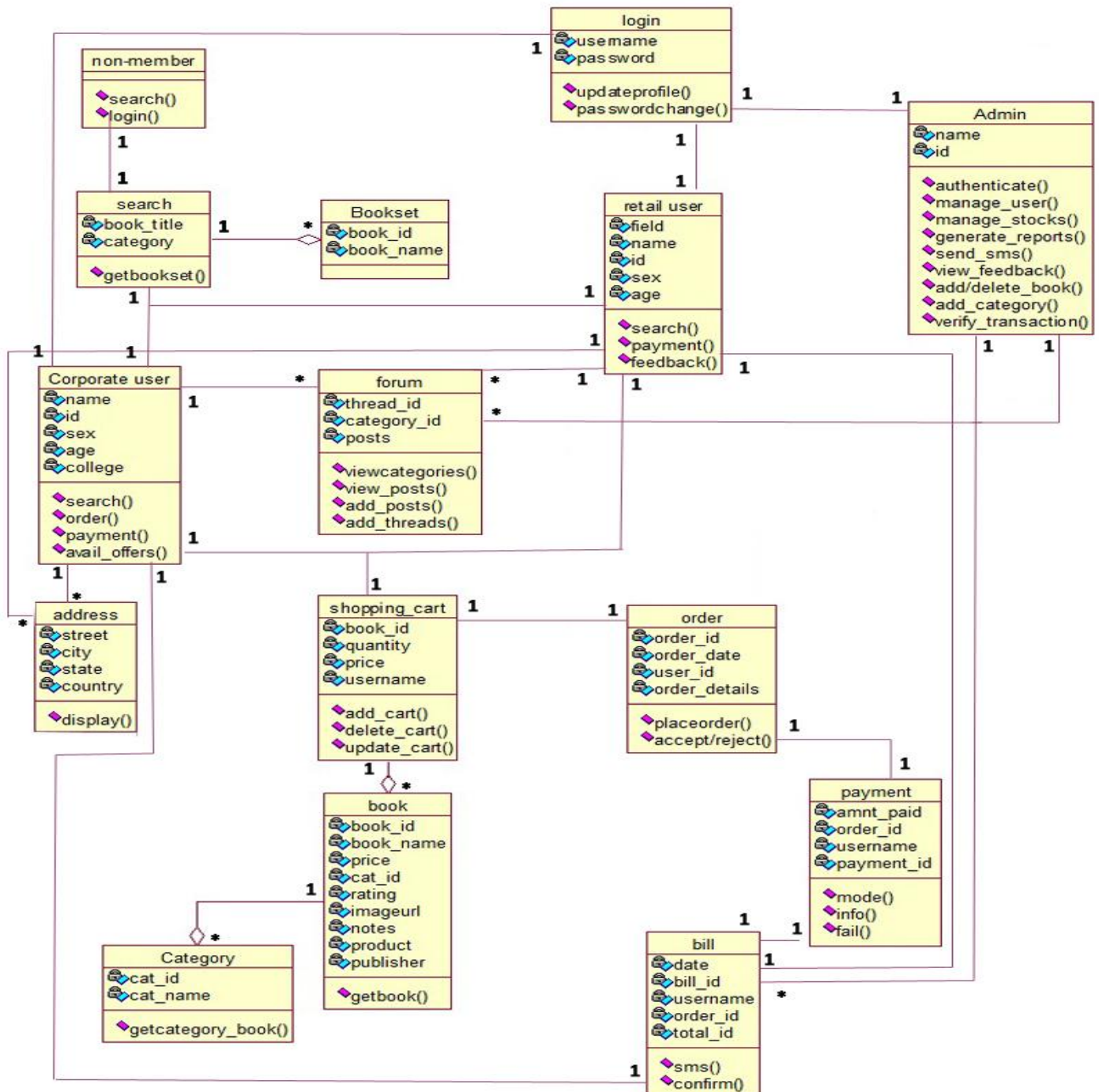
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## 2.8 Use Case Diagram :



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## 2.9 Class Diagram:

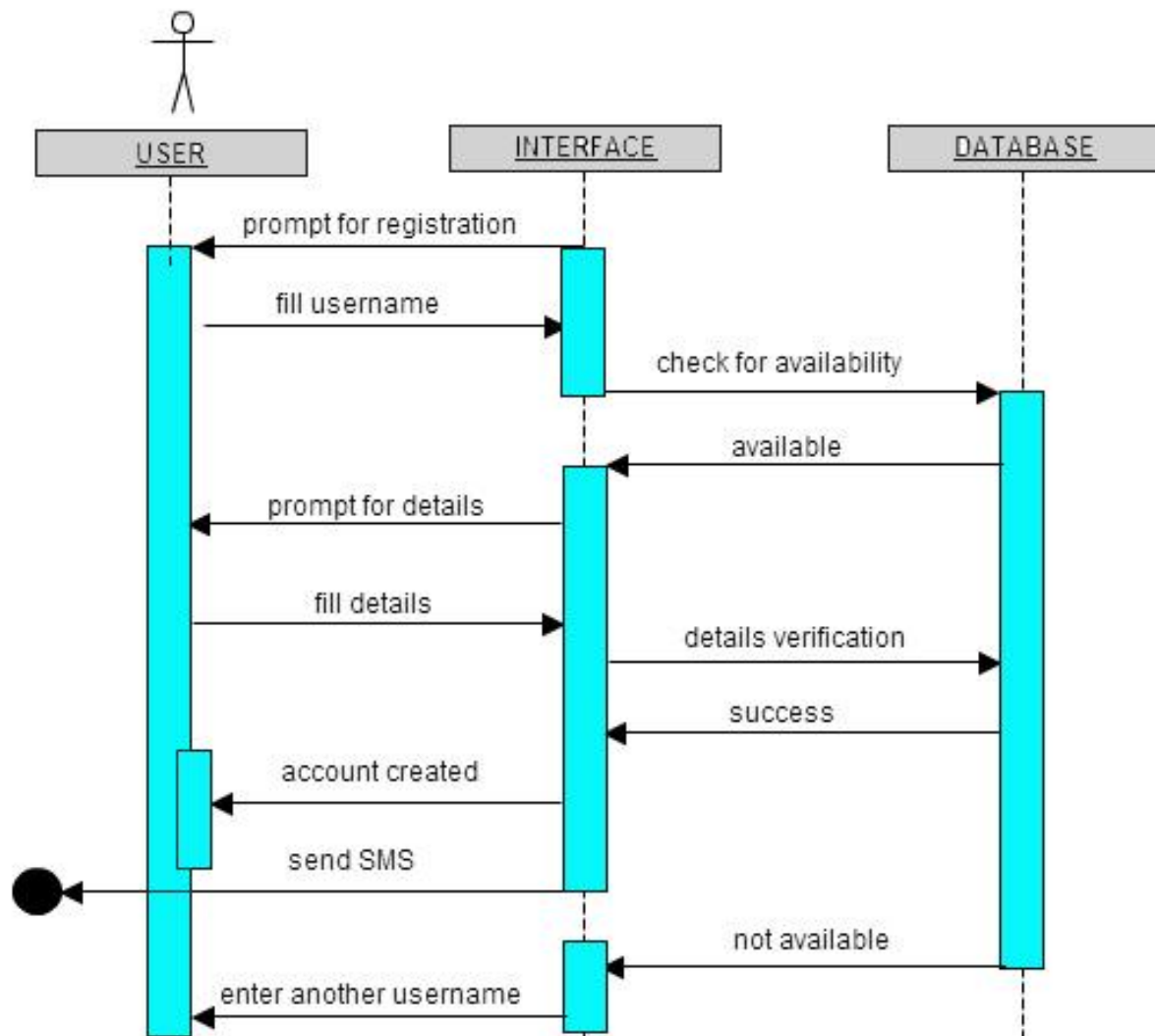




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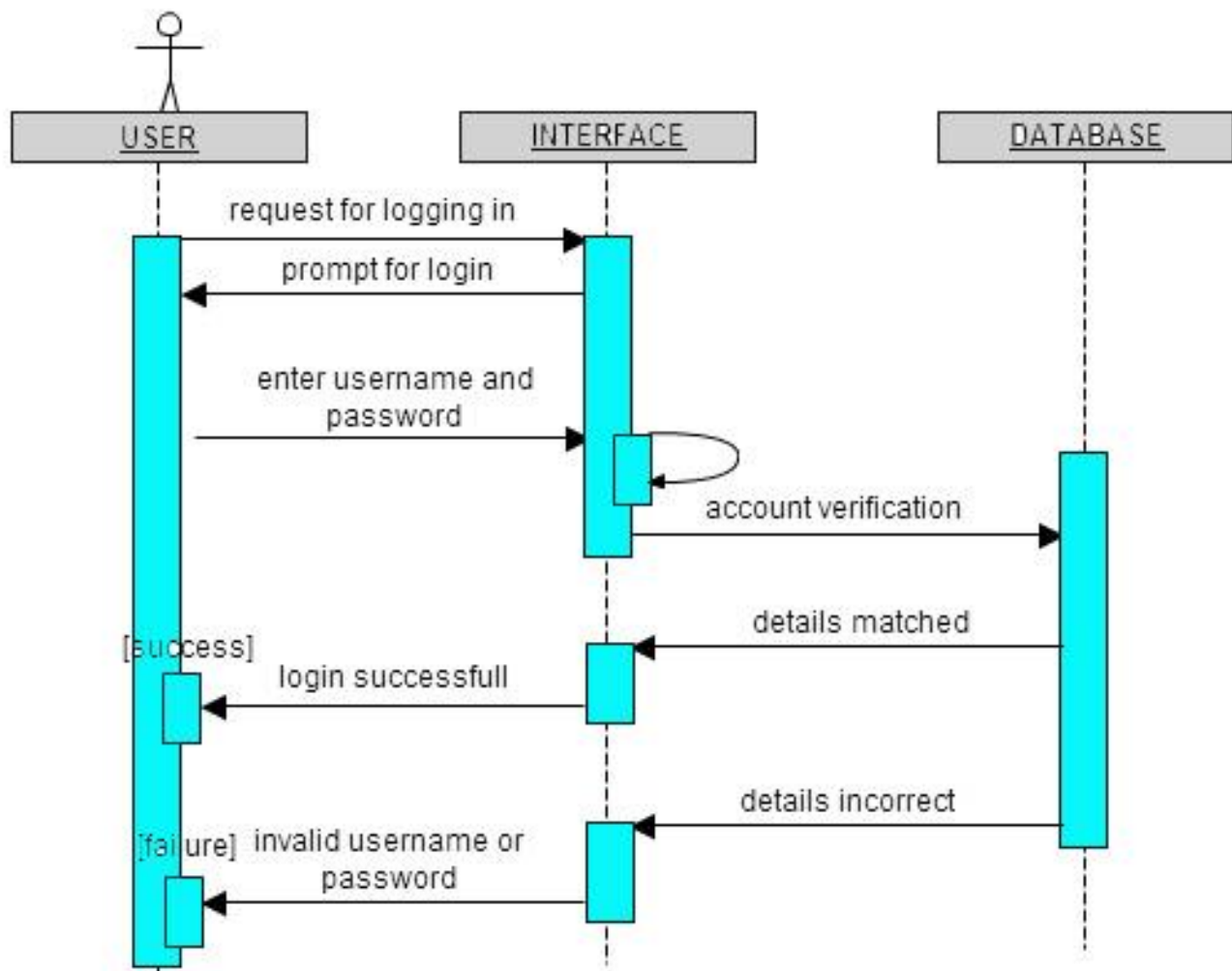
## 2.10 Sequence Diagrams:

### 1. Sequence diagram for Registration:



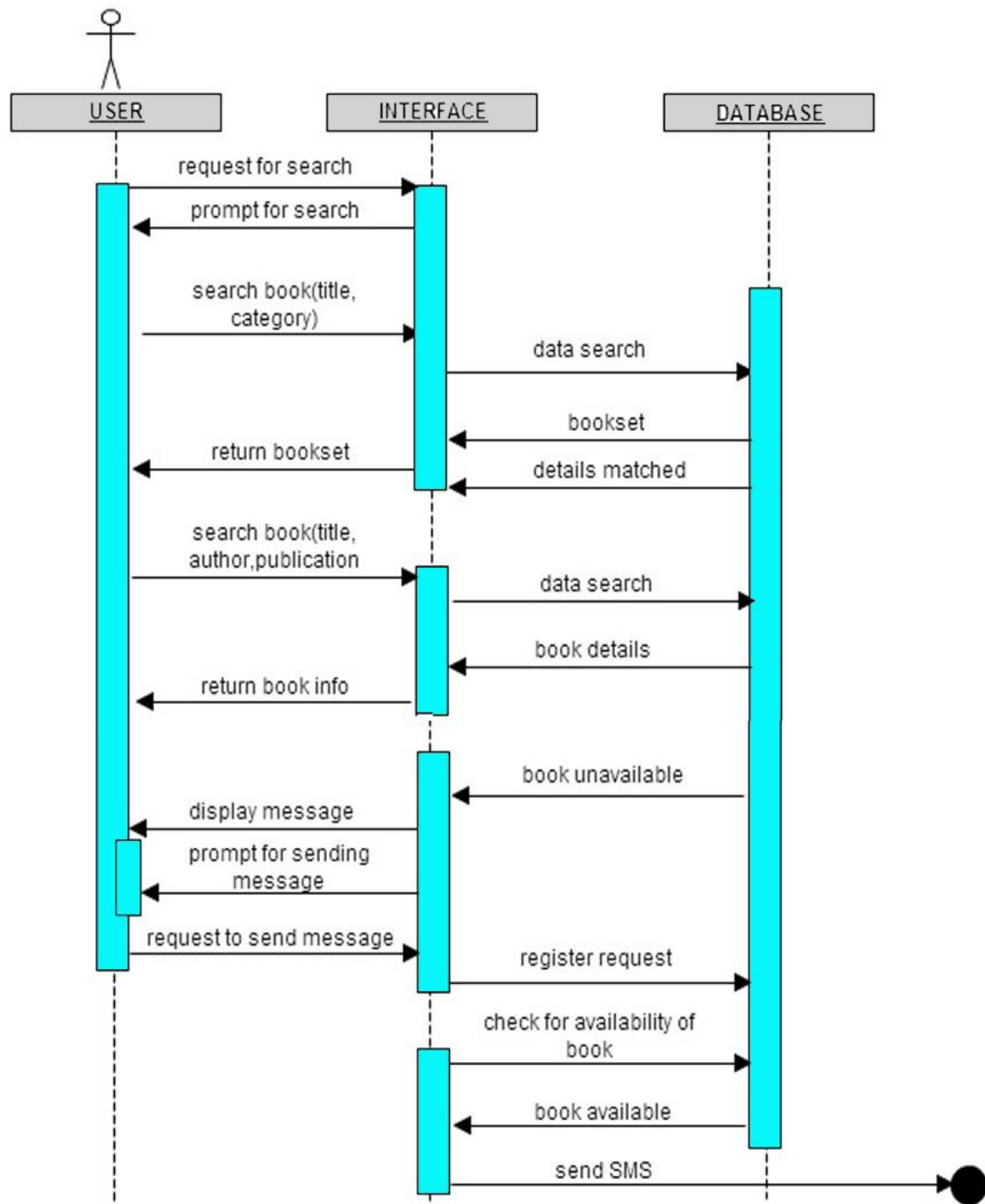
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## 2. Sequence diagram for Login:



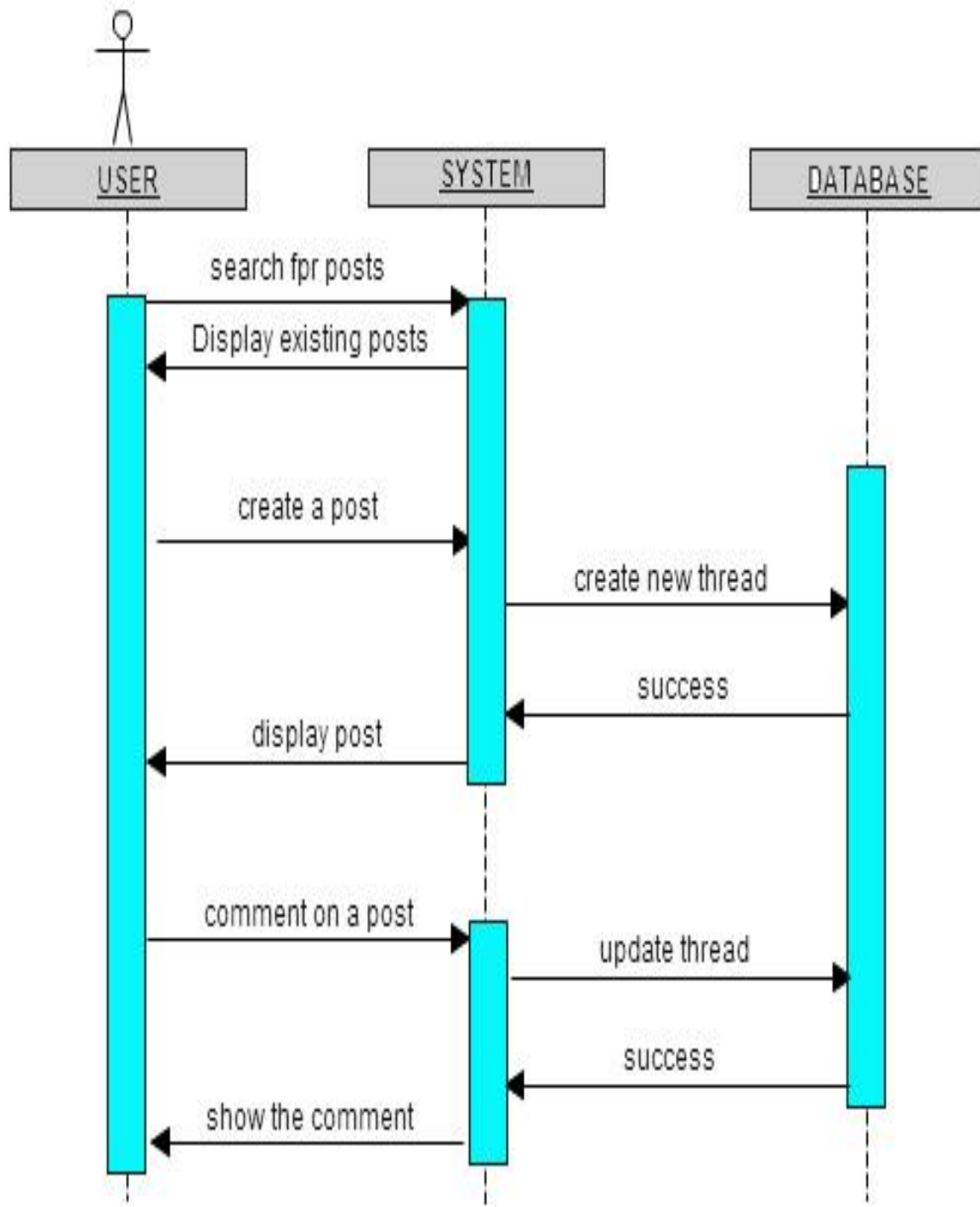
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### 3. Sequence diagram for Search:



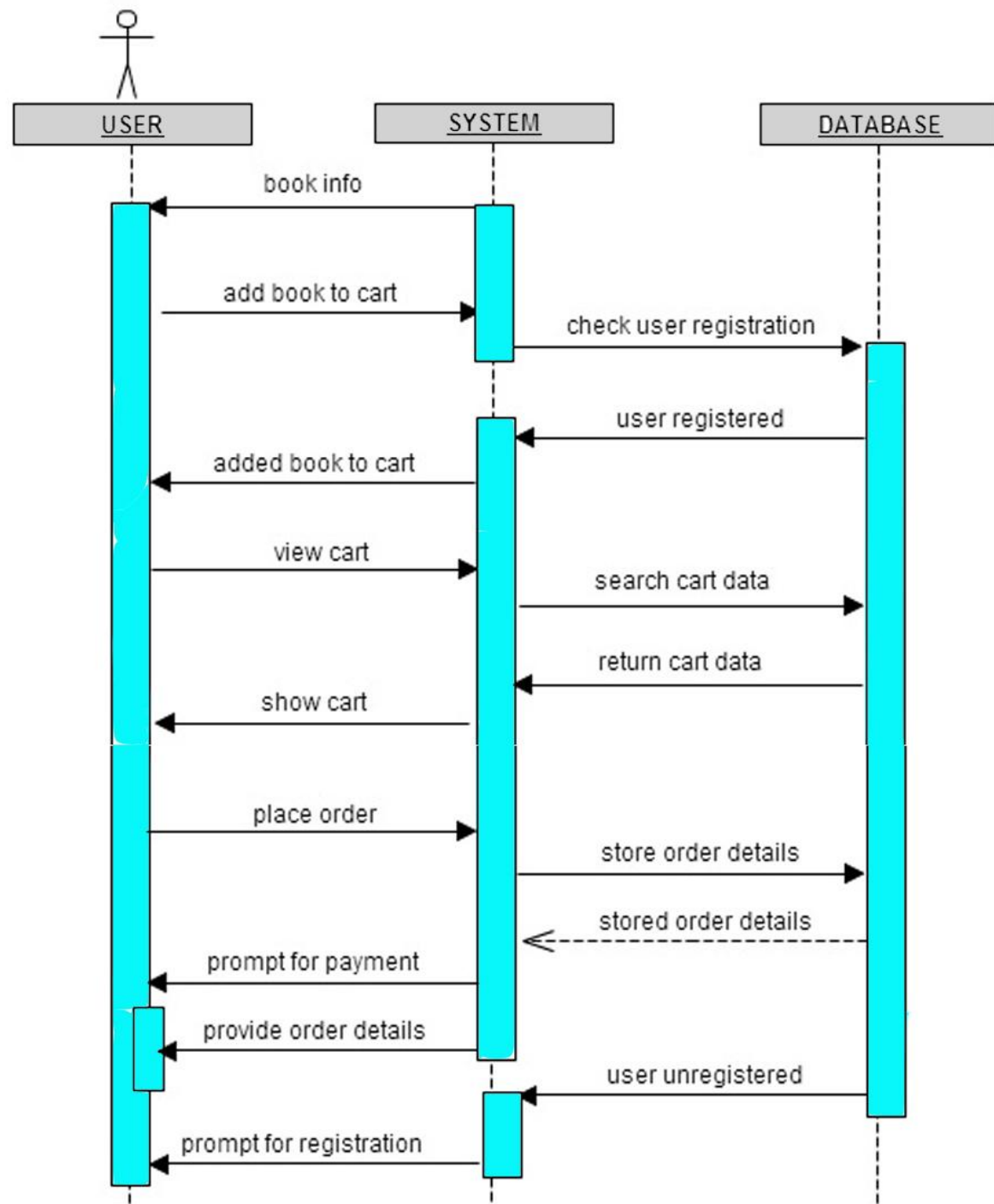
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4. Sequence diagram for Discussion forum:



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### 5. Sequence diagram for Buying:



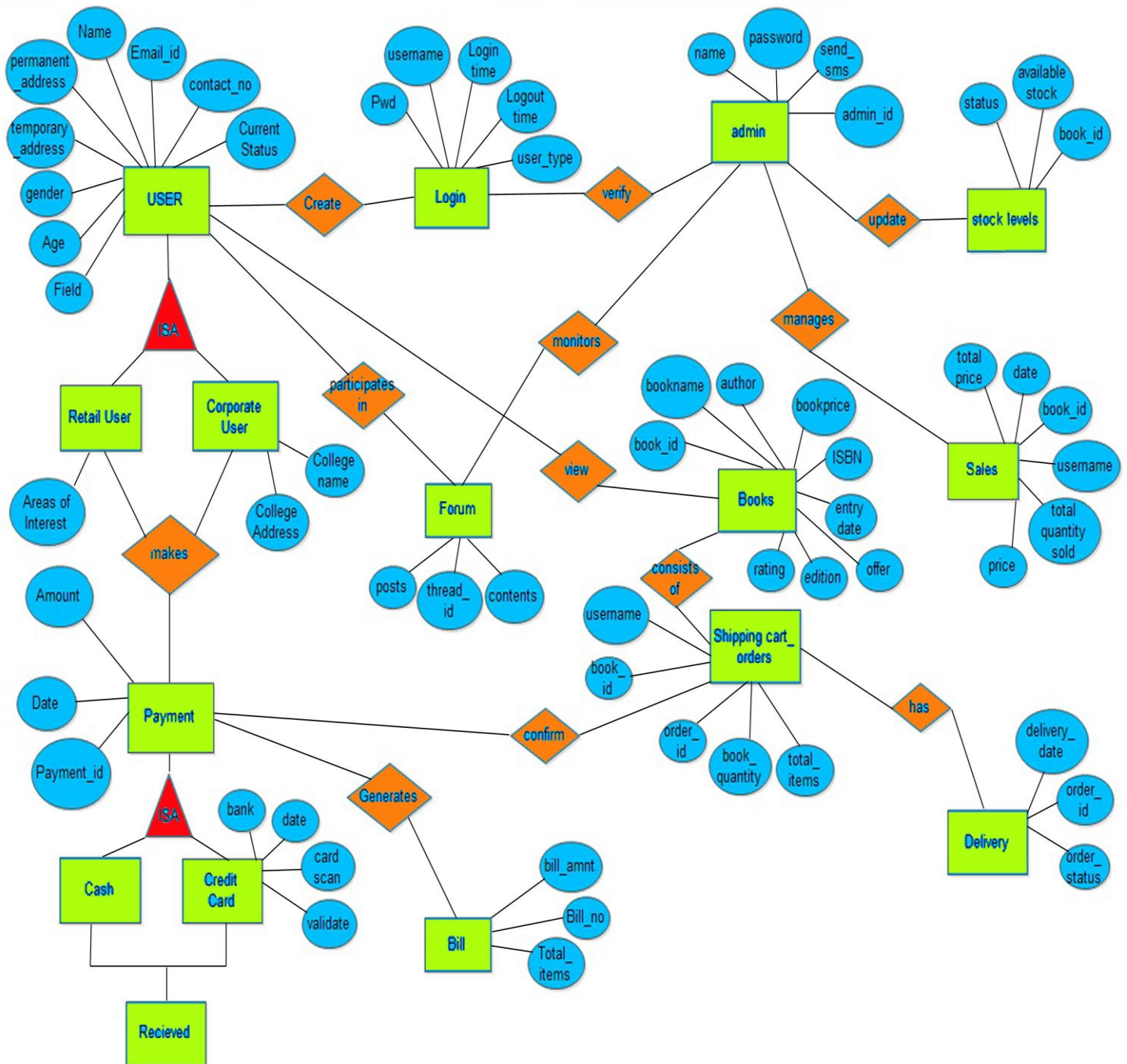
6. Sequence diagram for Payment:



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## 2.11 Database Design:

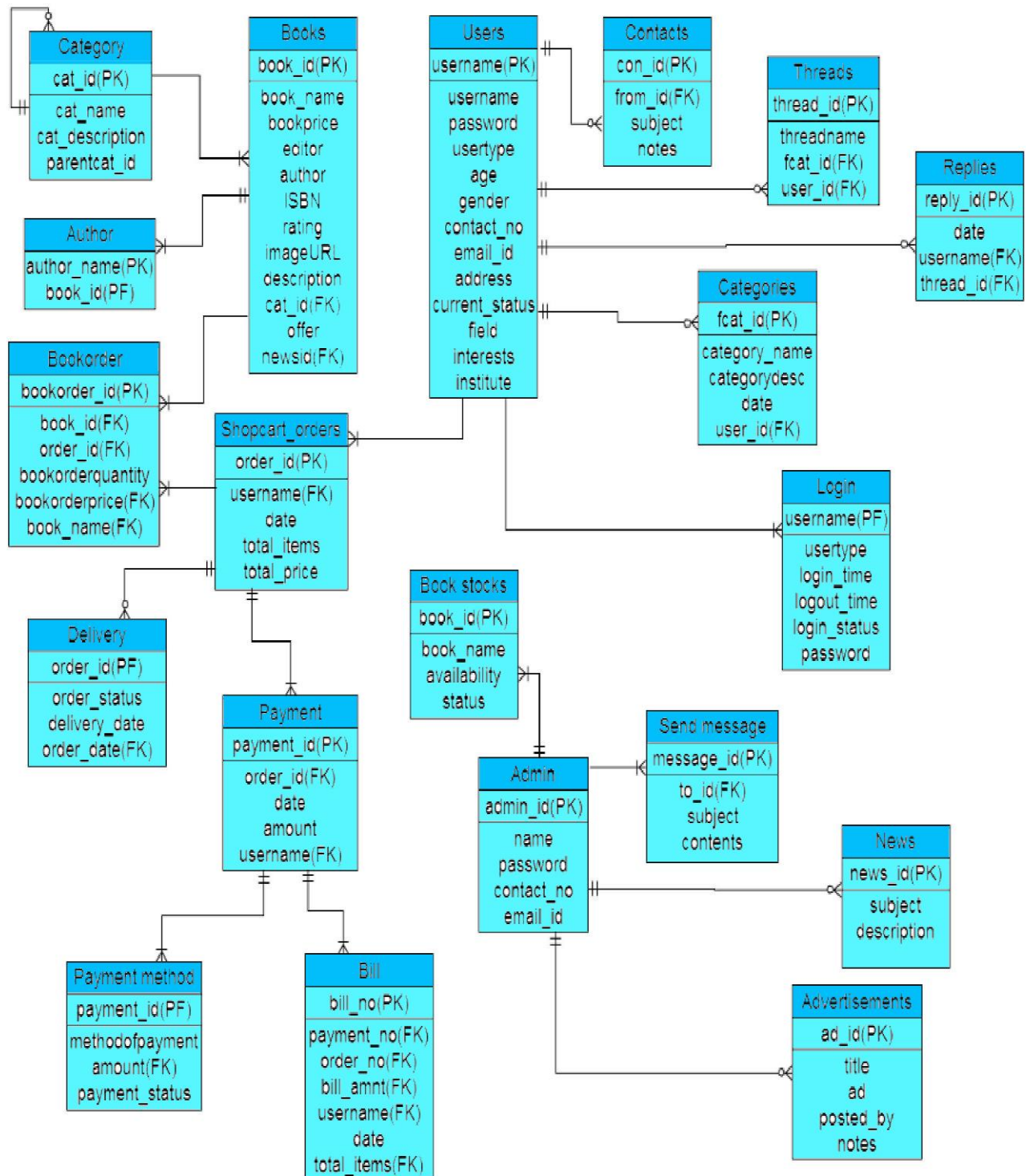
### 2.11.1 ER Diagram:





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### 2.11.2 Schema:





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## 2.11 Assumptions and Dependencies

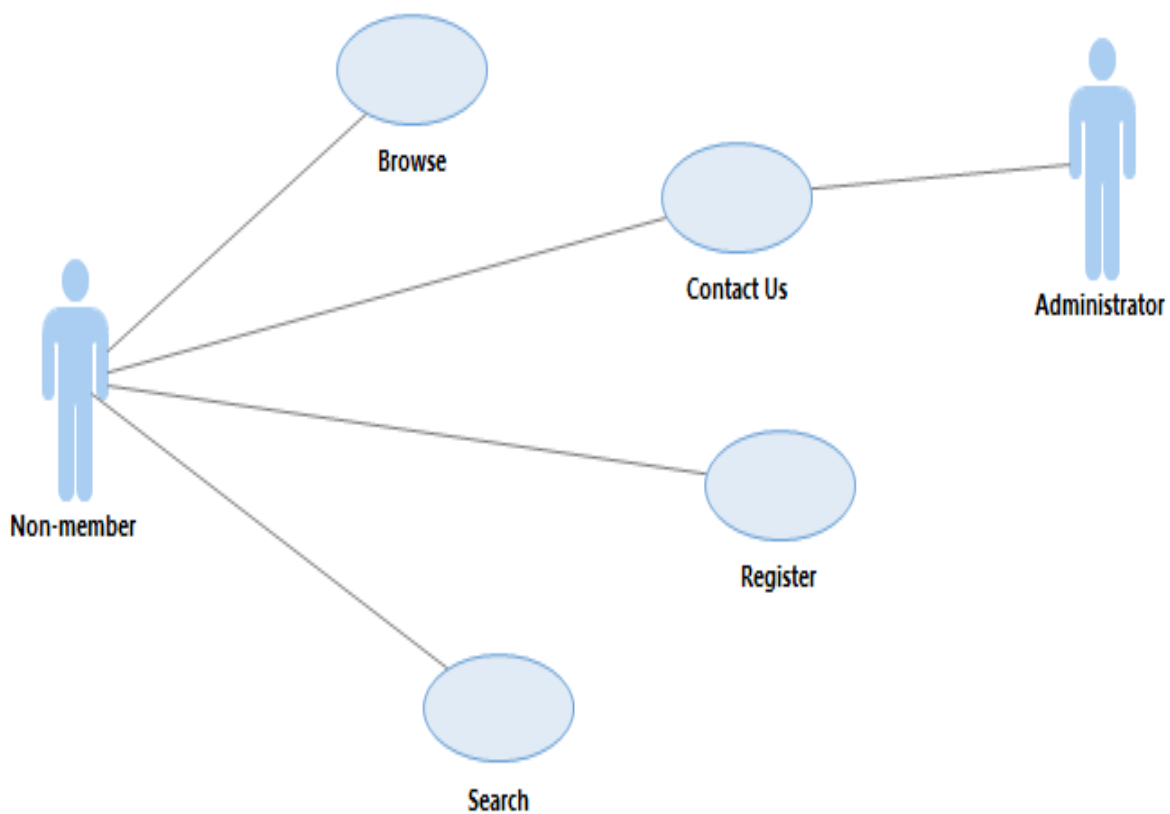
- The end user should have a basic knowledge of English and computer usage.
- Administrator is created in the system already.
- Roles and tasks are predefined.

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## Chapter 3 - Specific Requirements

### 3.1 Use-case reports

#### Non Members



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## Non Members

- Register

In order to purchase books, a user must signup by filling the registration form.

- Search Books

Users can search articles using suitable tags.

- Browse

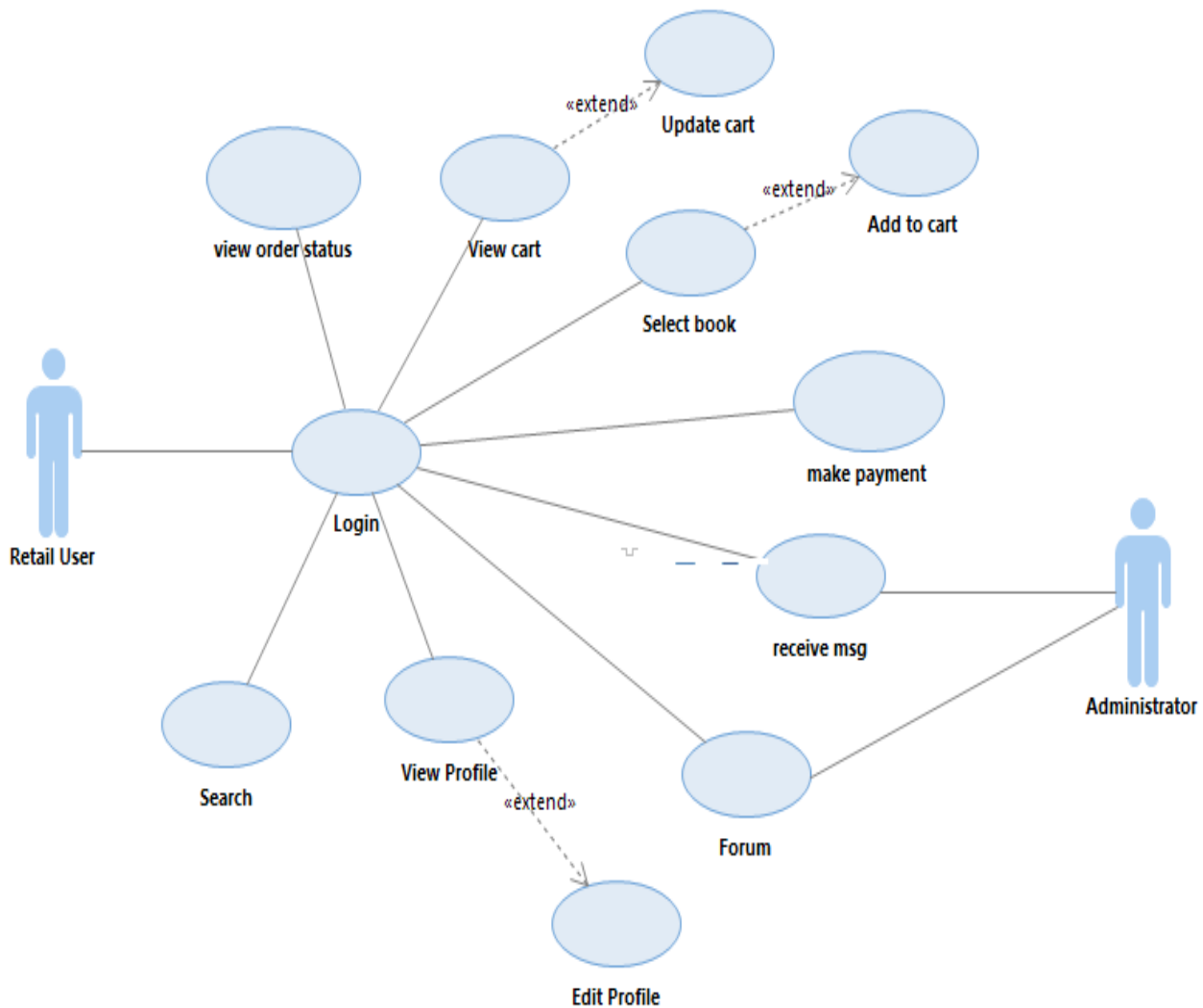
Browse the website for contacting and explore other details.

- Contact Us

He can contact the admin regarding any query.

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## Retail User



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**Retail User:**

- Login

After getting the username and password, end users can log on to their account and can access the website.

- View Profile

End user can view their profile which contains the personal details which he/she provided during signup, along with the articles he/she has uploaded.

- Edit Profile

End user can update their profile which contains the personal details which he/she provided during sign up if any update required.

- Participate in forum

Users can posts threads and replies on various categories on the forum.

- Use shopping cart

Users can select their books and add them to his own cart .

- View cart

Users can view and update the cart items .

- View order status

Users can view their order status after confirming the order.

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- **Make payment**

Users make payment out of the given modes(offline or online).

- **Search Engine**

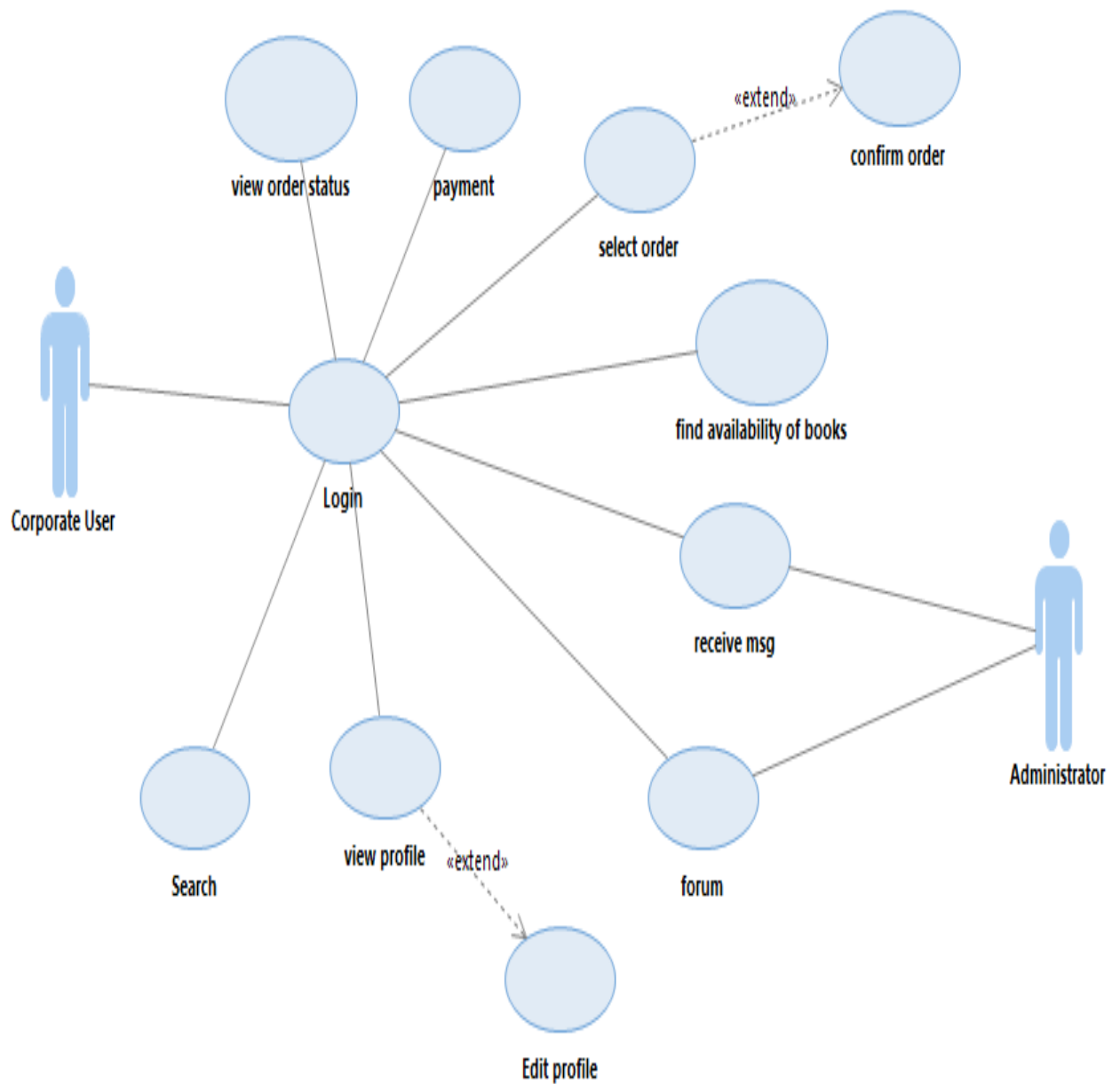
Users can search articles using suitable tags.

- **Receive notification**

Users receive sms notifications regarding the ongoing events and transactions.

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## Corporate User



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## Corporate User

- Login

After getting the username and password, end users can log on to their account and can access the website.

- View Profile

End user can view their profile which contains the personal details which he/she provided during signup, along with the articles he/she has uploaded.

- Edit Profile

End user can update their profile which contains the personal details which he/she provided during sign up if any update required.

- Participate in forum

Users can posts threads and replies on various categories on the forum.

- Select order

Users select the type and the quantity of books after viewing the list of books and quantity.

- Confirm order

Confirm the order after selection.

- View order status

Users can view their order status after confirming the order.

- Make payment

Users make payment out of the given modes(offline or online).



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- Search Engine

Users can search articles using suitable tags.

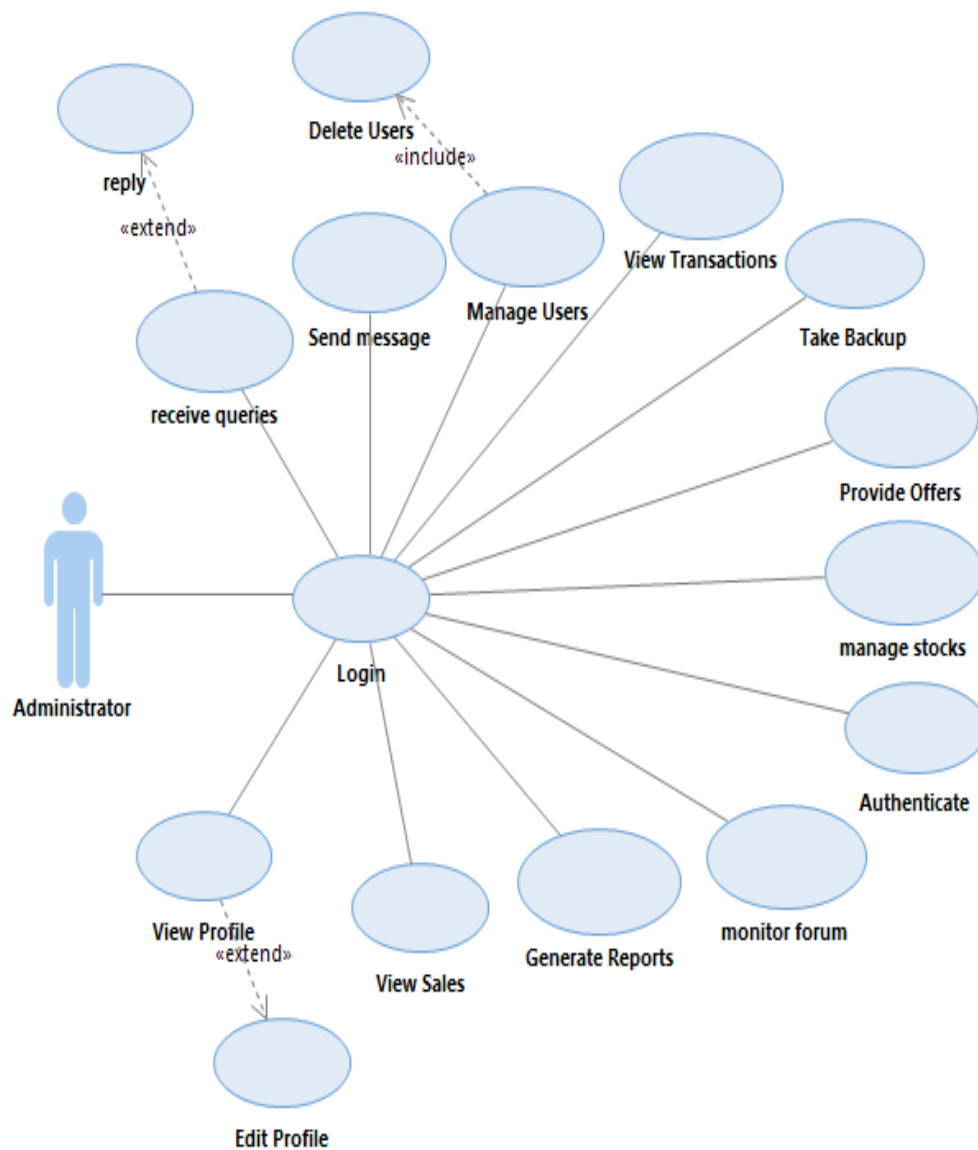
- Receive notification

Users receive sms notifications regarding the ongoing events and transactions.

- Find Availability

Check availability of quantity of books required.

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## **Administrator**

### **Login**

The admin has to Sign In in order to start begin his work.

### **View sales**

The admin can view the no. of books sold.

### **Generate reports**

The admin can generate reports.

### **Authenticate**

The admin will authenticate the users and their activities

### **View transactions**

The admin views and monitors the transactions in purchasing the book

### **Provide offers**

The admin can provide various offers on books .

### **Take backup**

The admin can take backup of the system.

### **Delete users**

The admin is given the option to delete the users .

### **Send messages**

The admin can send notification sms.

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## Receive contact messages

The admin can messages from members and non-members regarding any query.

## Monitor forum

The admin can delete any thread or posts if its inappropriate.

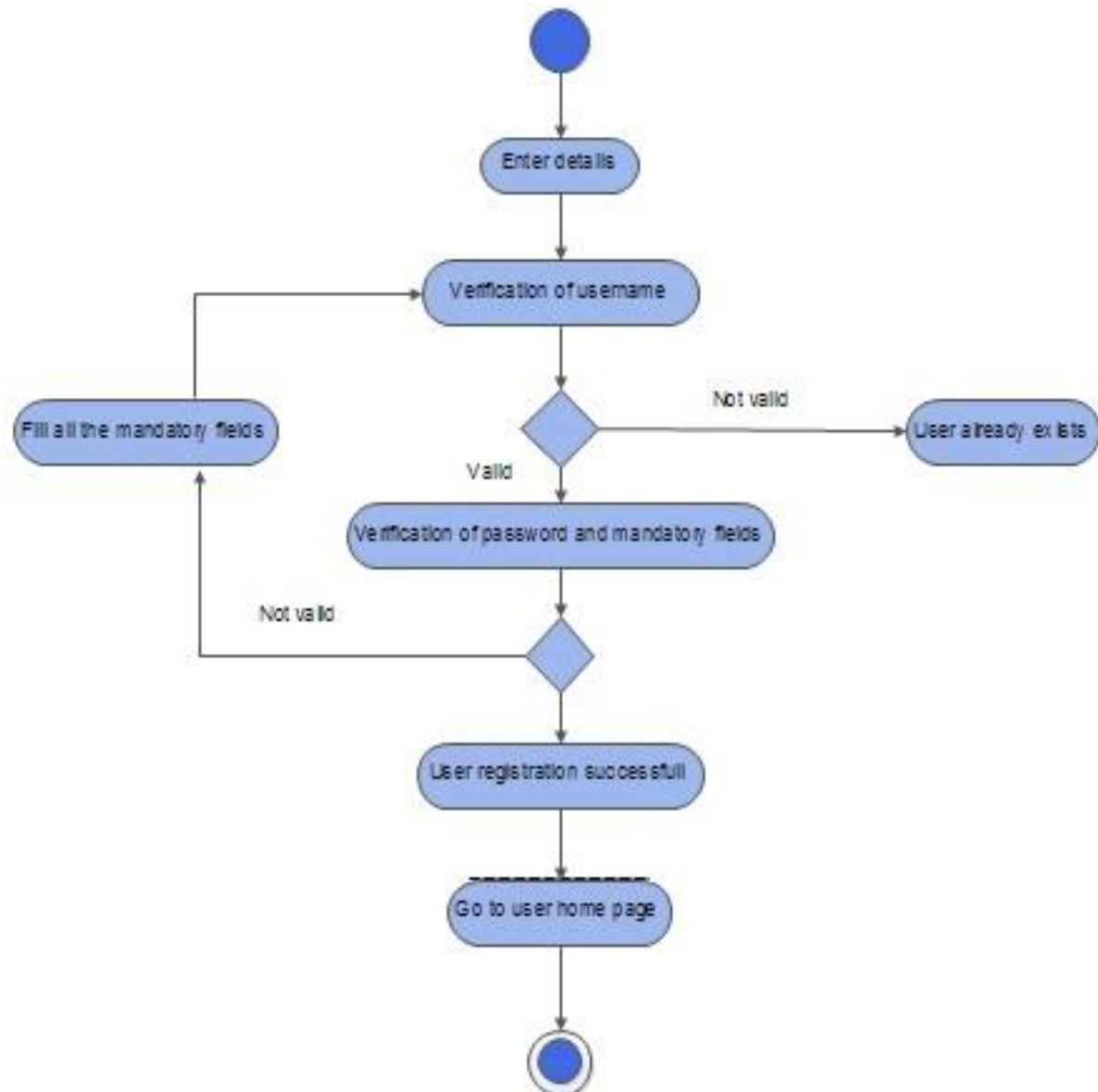
## Manage books stocks

The admin can add new books if no. of books are less available

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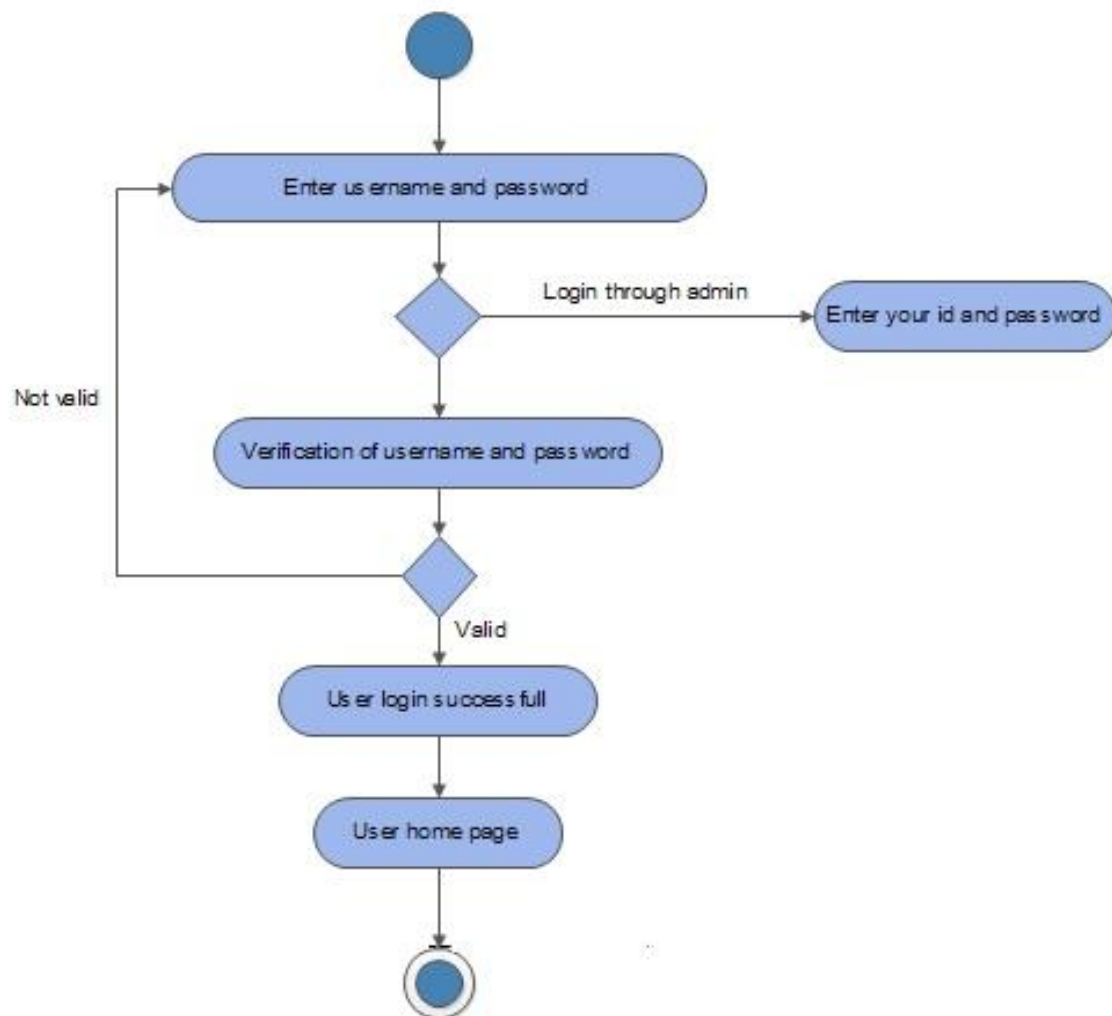
### 3.2 Activity Diagram:

#### 1. Registration activity diagram:



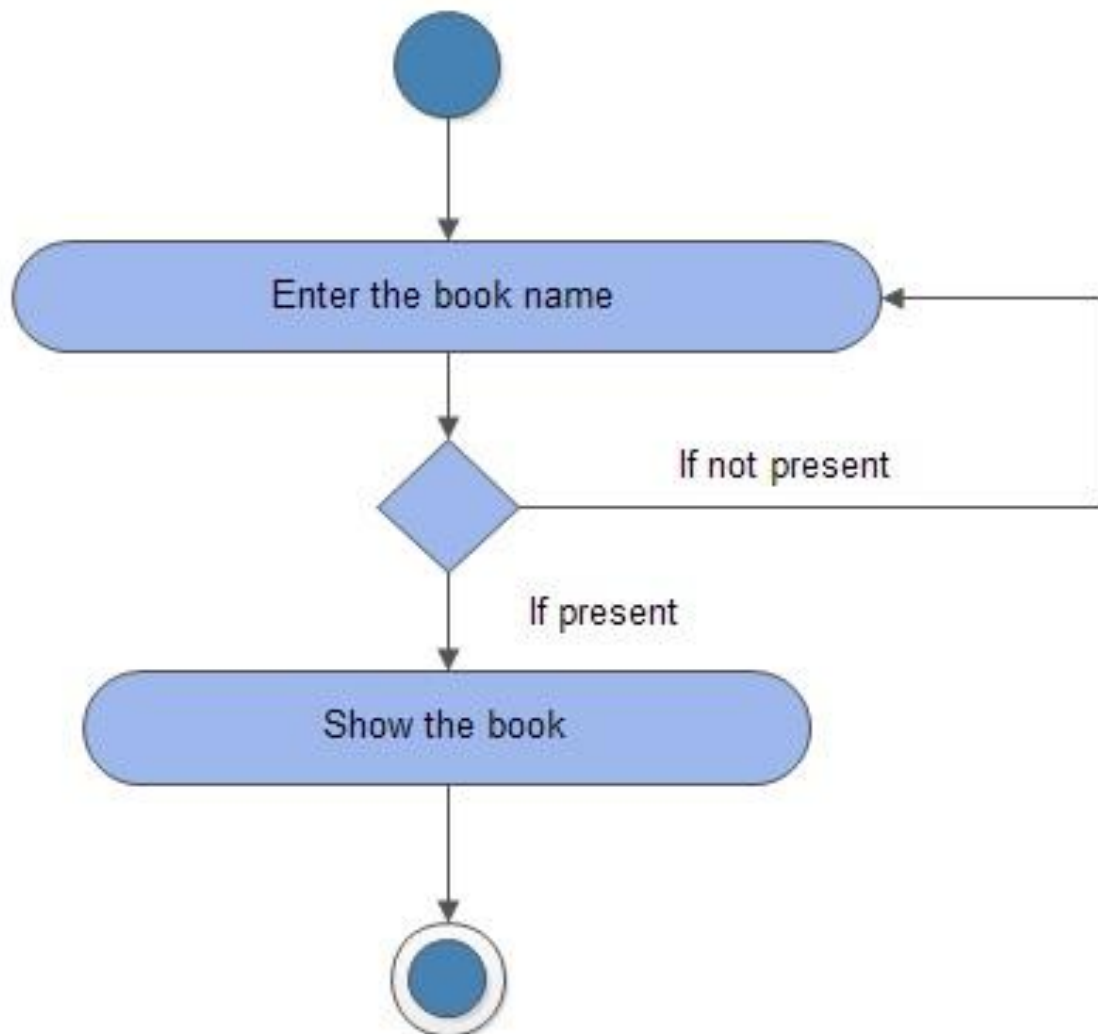
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## 2. Login activity diagram:



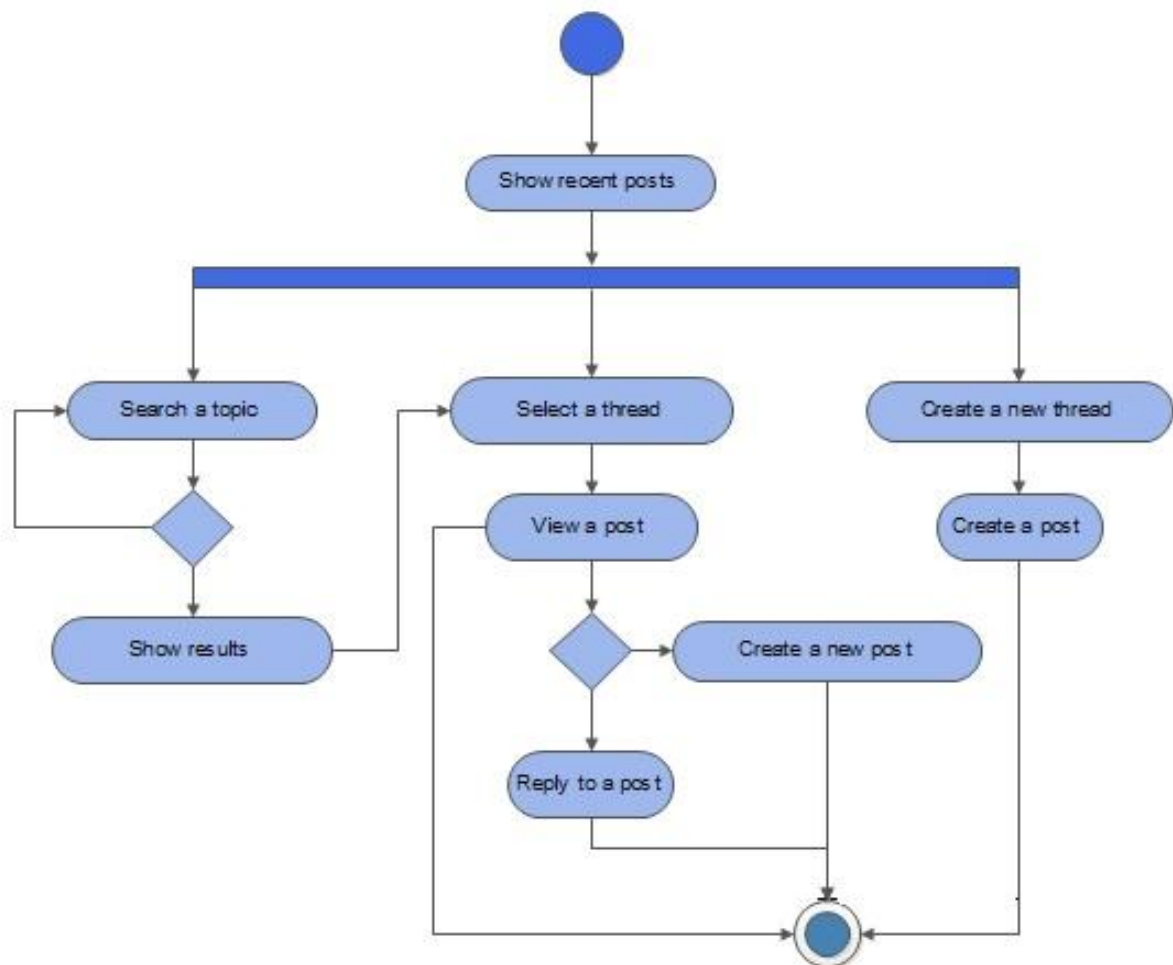
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### 3. Search activity diagram;



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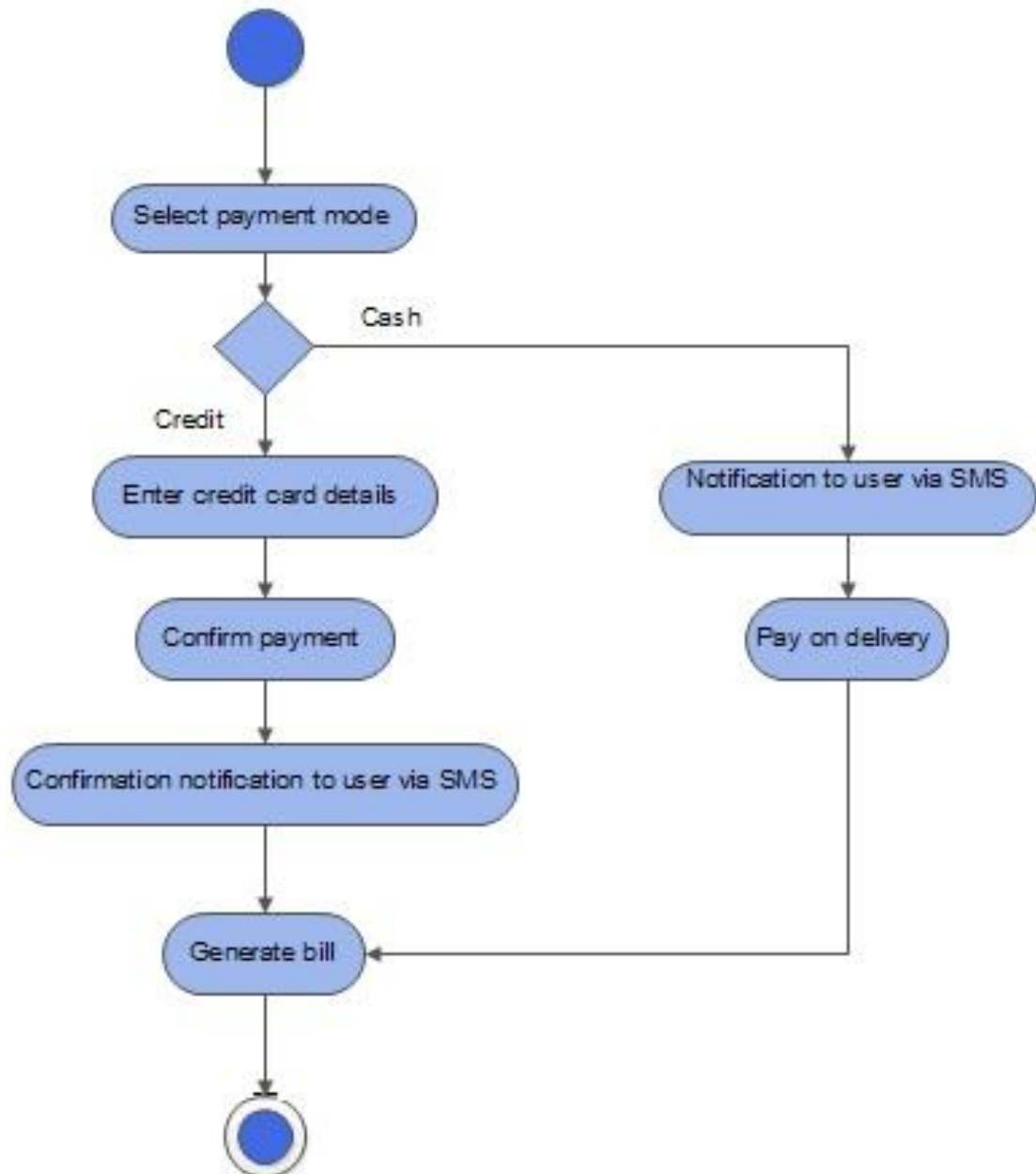
4. Discussion forum activity diagram;





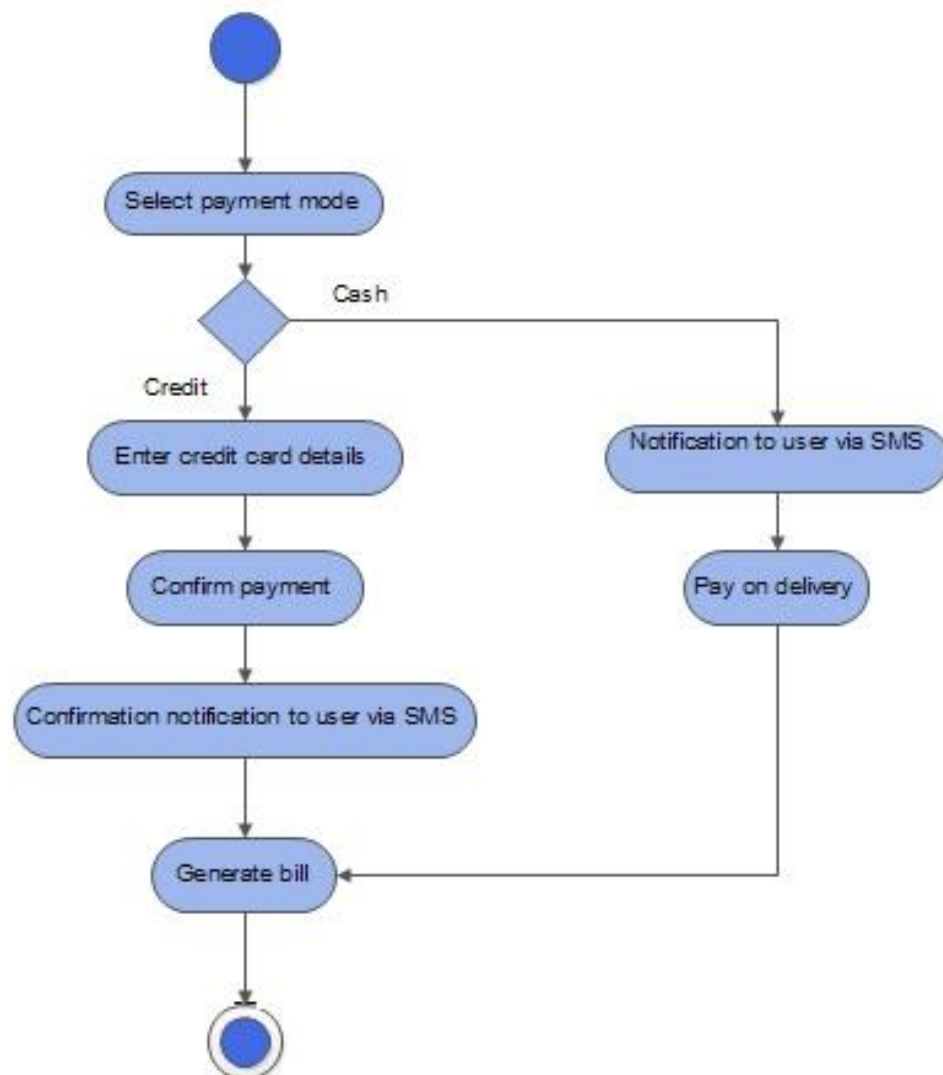
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5. Buying activity diagram:



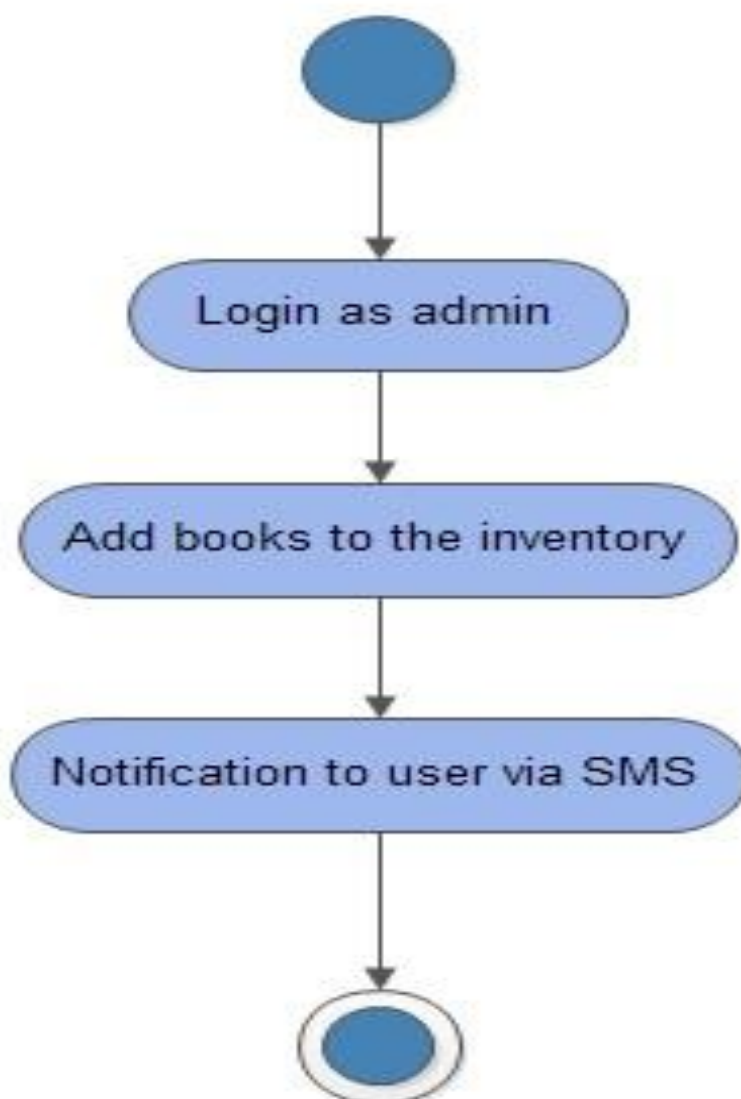
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6. Payment activity diagram:



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7. New books activity diagram:



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### 3.3 Supplementary Requirements

- **24 x 7 Availability** - If the base is now the entire world, staying open 24 hours a day becomes critical. Because system can be an automated Process, so it can stay open for 24 hours a day. So UPS support must be on server site for at least 8 hours in case of power failure. System will remain inaccessible to users at 2:00 to 4:00 am for backup and maintenance purpose.
- **Dynamic Website** - Many early Web implementations consisted of static HTML pages. This becomes very difficult to manage if the number of pages gets too large. An effective system should be largely dynamic taking advantage of technology that automates this process rather than relying on manual processes. Application should serve dynamic user based customized web pages to its clients from server.
- **Integration with existing enterprise systems** – Any existing Web site that relies on the manual duplication of data from another system is one that can be improved. Most of the business data in the world today exists in enterprise servers that can be connected to the Web servers to make this process far more effective.
- **Provide good performance and the ability to scale the server** – The Web application Server should provide good performance and the ability to manage performance with techniques, such as support for caching, clustering, and load balancing.
- **Providing session management capability** - Web application developers should not spend valuable time worrying about how to maintain sessions within the application. The Web Application Server should provide these services.