

SOFTWARE REQUIREMENTS SPECIFICATION

Social Sale

Intra college e-market and mentoring

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1. INTRODUCTION

1.1 Overview and Scope

The purpose of the document is to collect and analyze all assorted ideas that have come up to define the system, its requirements with respect to consumers. This SRS document is to provide a detailed overview of our software product, its parameters and goals. Developing an online platform is a job that requires equal share of technological expertise and sound decision making. This document will give detailed specifications of all the features, functional and non-functional requirements for our project along with suitable UML diagrams.

1.2 Purpose

SocialSale is an e-commerce and mentoring web-application that provides a common platform to all students within a college to exchange products and information. Electronic commerce has expanded rapidly over the past few years and is predicted to continue at this rate, or even accelerate. It is currently one of the most important aspects of the Internet to emerge. Built using PHP and MySQL this website offers the facilities of buying, selling and renting products within college campus and also ask and answer questions with the mentoring feature in the application.

1.3 Outline of SRS

The following texts cover an in depth view of the software's functions, characteristics, constraints, assumptions, dependencies, requirements, et cetera. It is split into four categorical subsections.

The second section includes details on the functions, user characteristics, assumptions, dependencies and operating environment.

The third and fourth section includes descriptions on the requirements including those created by the user, communication, hardware and software interfaces. The functional requirements are also discussed.

The fifth section covers the non-functional requirements of the software application including performance, safety and design requirements.

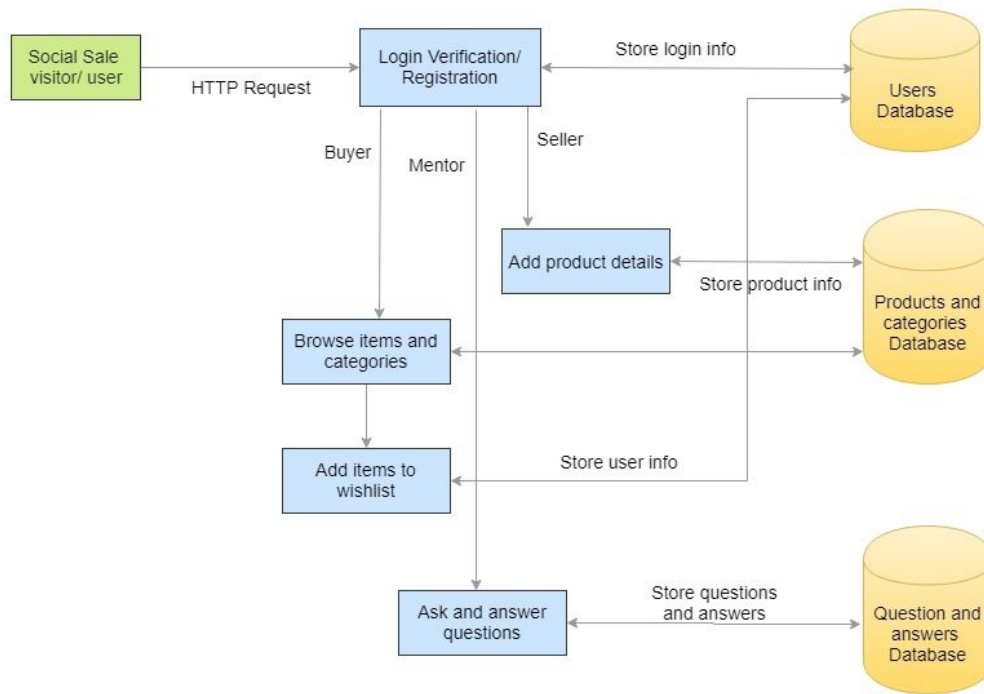
The document defines how our developers and audience see the product and its functionality and how different features work.

1.4 Definitions

1. **End user/Customer** - The end user will be the one who visits the website, searches for his desired item and buys products online from the ones added by the sellers.
2. **Seller** - Sellers will add their products to the database, which will be seen on the website to the customers who can buy products by selecting them.
3. **Product** - A product is the item offered for sale. The price that can be charged depends on the market, the quality, the marketing and the segment that is targeted. A product can be put for sale, rented or bought.
4. **Administrators** - Administrators are the ones who adds or administers the categories for the products, and administers the Vendors.
5. **User ID** - At the time of login or signup user is required to enter our complete details which gets saved at the particular company's database and our unique ID is generated which helps in all correspondence in future.
6. **Seller ID** - The seller must have a seller ID and password for this which is used to verify and find the unique profile of the seller. This allows him to list the products that seller have available to sell.
7. **Order ID** - Each purchased and sold item has a unique Identification no. called Order ID that is used to track and record the details of the purchase done on the platform. A unique Order ID is generated by the system itself .
8. **Discussion** - Discussion not only pertains between buyer and seller but also can occur between different peers and try resolve their issues(Mentoring).
9. **College ID**-This website can be deployed for different colleges, and each college as it is added to the database is assigned a unique ID.

2.Overall Description

2.1 Product Perspective



Dataflow Diagram

Social Sale provides easy and basic interchange of information and provides a common platform for all college students to buy or rent things. It should be able to remove communication gap between students and also let users compare all products before making a choice. The software will be a web application.

Whenever a user opens the web application, he/she will login with their username and password, or register for a new account.

After a user has successfully logged in, the user can select his/her college from the given list of colleges and then continue to use the software.

In the main page of the website, user will be able to buy or rent items by looking at all the different products that have been put on sale or rent by members of the same college. The user will be able to browse for items category wise and compare different items. Once the user chooses something to buy, he/she can directly contact the seller through the listed phone number. After an item is sold-out, the respective owner can

delete the entry from the website. Users can also add products to their wishlist to save them for viewing later.

For users who are willing to sell or give items on rent, can use the sell feature of the application. For selling, users will be asked to enter all details of the item along with the price, category and photos. Once all details are filled, the item will be added to the database and will be displayed to all interested buyers in that particular category.

The last feature of the application is the mentoring portal that is also accessible from the home page. After entering the mentoring portal, users can ask questions and post them on the portal and also answer questions that have already been asked. Users can also view all previously asked and answered questions and this feature will help students get any kind of help within college or get mentored by seniors.

2.2 Product Functions



Given below are the basic Functions of the Social Sale web application-

- Ask the Customer to login or signup using his/her username and password.
- After login, users will have to select their college they want to view.

- Once college selection is complete, all users interested in buying or renting can look at all products from the buy/rent menu.
- To save items for later, users will have the option of adding items to their wishlist.
- All interested sellers can put up their items on rent or sale by going to the Sell menu in the main application
- Users interested in asking or answering questions can do so by going to the mentoring menu in the website.

2.3 User Classes and Characteristics



2.3.1 Buyer

He or she is a verified user of website who intends to buy a product from the seller via the Social Sale platform. The customer must have a username and password and must be associated with a college.

2.3.2 Seller

He or she is a verified person who is allowed to sell items over the platform. Seller's details are stored on database and all the products are listed under him that he/she is ready to sell or are available. Seller is responsible to set products details, price, and quantity.



2.3.3 Mentor

Mentors are all verified users of the application and are allowed to ask and answer questions on the mentoring platform.

2.3.4 Admin

He or she is responsible for monitoring functions and procedures on platform. Administrator has access to the main database, can add and delete items from database and is responsible for monitoring all activity in the application.

2.4 Design and Implementation Constraints

The user interface shall be implemented using any tool or software package on following languages.

JavaScript	JavaScript is a lightweight, object-oriented, cross-platform scripting language, mainly used within web pages.
HTML5	HTML5 is the fifth revision of the HTML standard.
CSS	Cascading Style Sheets define style rules in a separate CSS file.

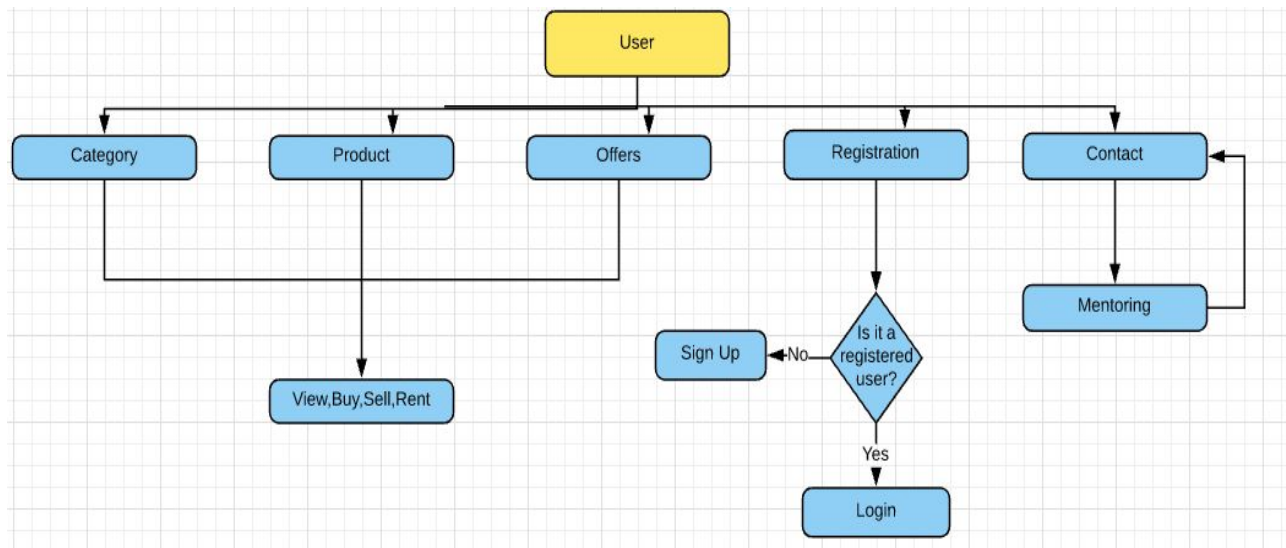
2.5 Assumptions and Dependencies

1. Each User must have a User ID and password.
2. Each Seller must have Seller ID and password.
3. There must be an Administrator.
4. Internet connection is a must.
5. Proper browsers should be installed in the user's system.

3. External Interface Requirements

3.1 User Interfaces

1. Login or Signup Page
2. Homepage containing products according to customer's interest.
3. If the customers selects any product then it will open direct him to the product information, which has the details of the seller.
4. There is a questionnaire page, where the students can ask questions, and any registered user can choose to answer it, this is implemented as a part of mentoring strategy.



3.2 Hardware Interfaces

Since the application must run over the internet, all the hardware requires is to connect to the internet. As for e.g. Modem, WAN – LAN, Ethernet Cross- Cable. The system requires Database, like MySQL to store any transaction. System also requires DNS (domain name space) for naming on the internet. The user needs web browser to interact with the system.

3.3 Communication Interfaces

The e-store system shall use the HTTPS protocol for communication over the internet and for the intranet communication will be through TCP/IP protocol suite. The user must have SSL certificate licensing registered web browser.

4. Functional Requirements

4.1 FR1 : Login/Signup Page

- Enable new users to enter all their details and register in the application.
- Enable users to login using their valid username and password.
- Display home page on successful login.
- Notify the user when username or password is incorrect.

4.2 FR2 : Search Facility

- User to enter the search text on the search bar and matching products will be displayed based on the search.
- Enable user to select multiple options on the screen to search.
- Display only 10 matching result on the current screen.
- Enable user to navigate between the search results.
- Notify the user when no matching product is found on the search.

4.3 FR3 : Display items category wise

- Display all products according to the category associated to them.
- Enable users to view the list of available categories.
- On clicking any category, only items belonging to that category to be displayed.
- Enable user to navigate between the items.

4.4 FR4 : Create sellable/rentable items on website

- Allow users to put items for sale or rent by creating sellable items.
- Provide an interface to all the sellers to add product description, photo and price through their account.
- Notify sellers when any user is interested in their products.

4.5 FR5 : View seller information

- Allow users to view contact details of sellers.
- Provides a way for users to directly contact sellers for buying items.

4.6 FR6 : Wishlist Facility

- The system shall provide a wishlist facility to all users.
- Allow user to add/remove products in the wishlist.
- Items added to wishlist can later be viewed and deleted by the user.

4.7 FR7 : Ask questions on mentoring page

- Allow user to ask and post questions in the mentoring portal of the application.
- Users can decide whether to post the questions anonymously or not.

4.8 FR8 : Answer questions on mentoring page

- Allow user to answer questions in the mentoring portal of the application.
- Users can decide whether to post the questions anonymously or not.

4.9 FR9 : Display related items

- Display related items at the bottom of the screen when a user is viewing a product.
- Related items will belong to the same category as the item being viewed.

5. Non-Functional Requirements

5.1 Performance Requirements

- The product will be based on web and has to be run from a web server.
- The product will take initial load time depending on internet connection strength which also depends on the media from which the product is running.
- The performance will depend upon hardware components of the client/customer.

5.2 Security Requirements & Data-Storage Requirements

- The customer's web browser will never display a customer's password. It shall always be echoed with special characters representing typed characters.
- The system's back-end servers shall never display a customer's password. The customer's password may be reset but never shown.
- Password of the user is never misused by the administrator.

- The system's back-end servers will only be accessible to authenticated administrators.(A password existence to access the database)

5.3 Software Quality Attributes

- It should be equipped with current and active database.
- All records can easily be updated.
- It should have its personal firewall.

5.4 Availability

The system has to be available 24 h/day.A user can view, buy, sell, rent, mentor at any point of time.

5.5 Reliability

- The reliability of the overall program depends on the reliability of the separate components.
- The main pillar of reliability of the system is the backup of the database which is continuously maintained and updated to reflect the most recent changes.

5.6 Maintainability

- The software can be portable from one system to another and is continuously maintained and monitored by the administrator.
- A commercial database is used for maintaining the database and the application server takes care of the site.
- In case of a failure, a re-initialization of the program will be done.
- Also the software design is being done with modularity in mind so that maintainability can be done efficiently

6. Other Requirements

6.1 Database Requirements

There is a limit on the number of students from a college who can register(limit varies according to database).

6.2 Environmental Requirements

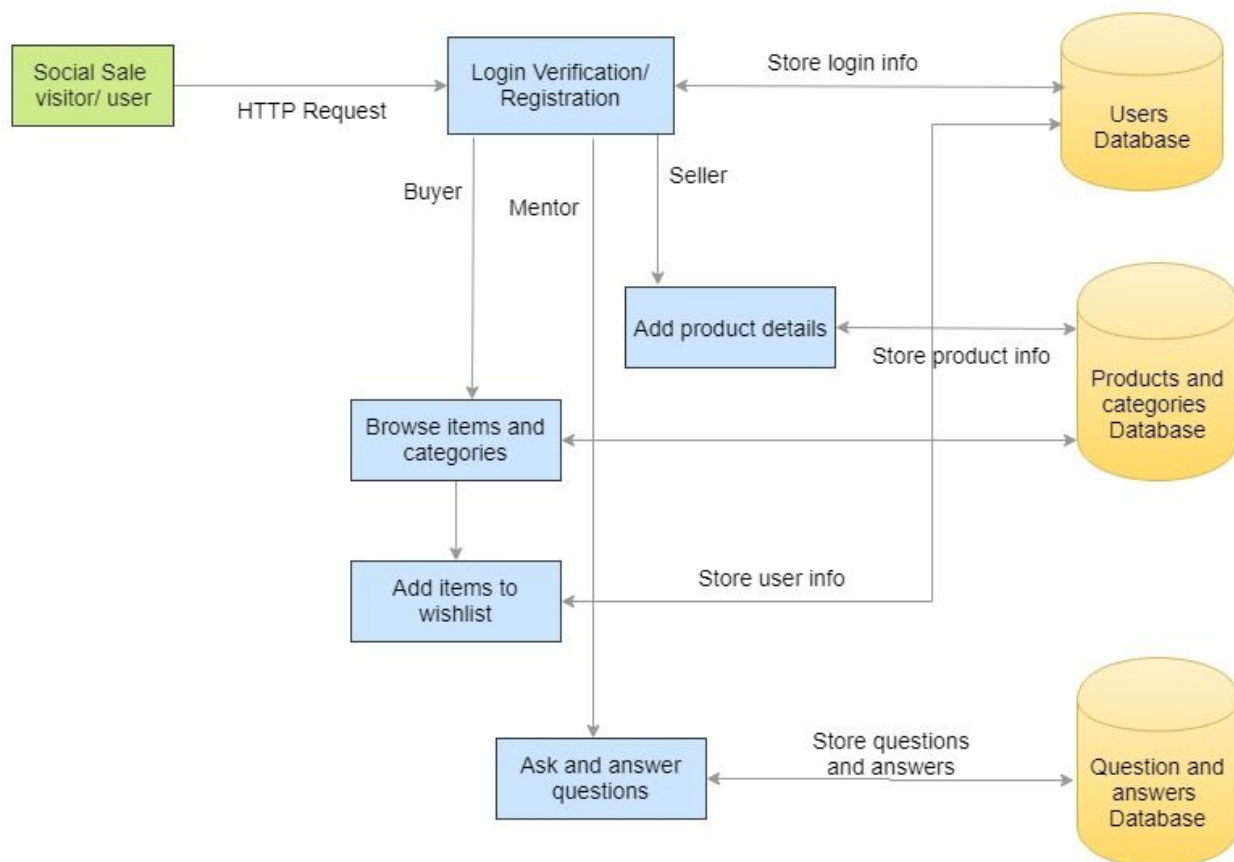
The system shall not cause physical or mental harm to users and non-users. The system shall not cause interference to external systems.

6.3 Legal Requirements

Students who register must be above 18, and must be a student of a registered college.

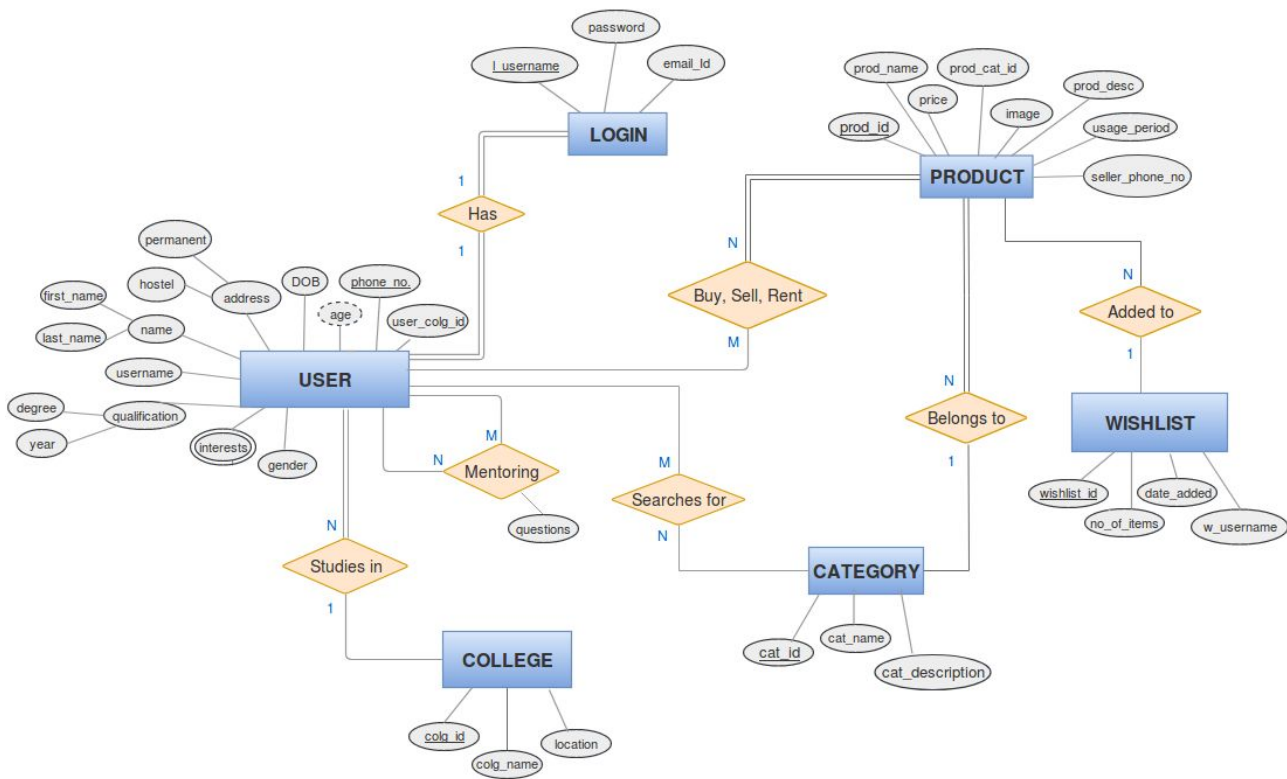
6. UML and other Diagrams

6.1 Data flow Diagram



Dataflow Diagram

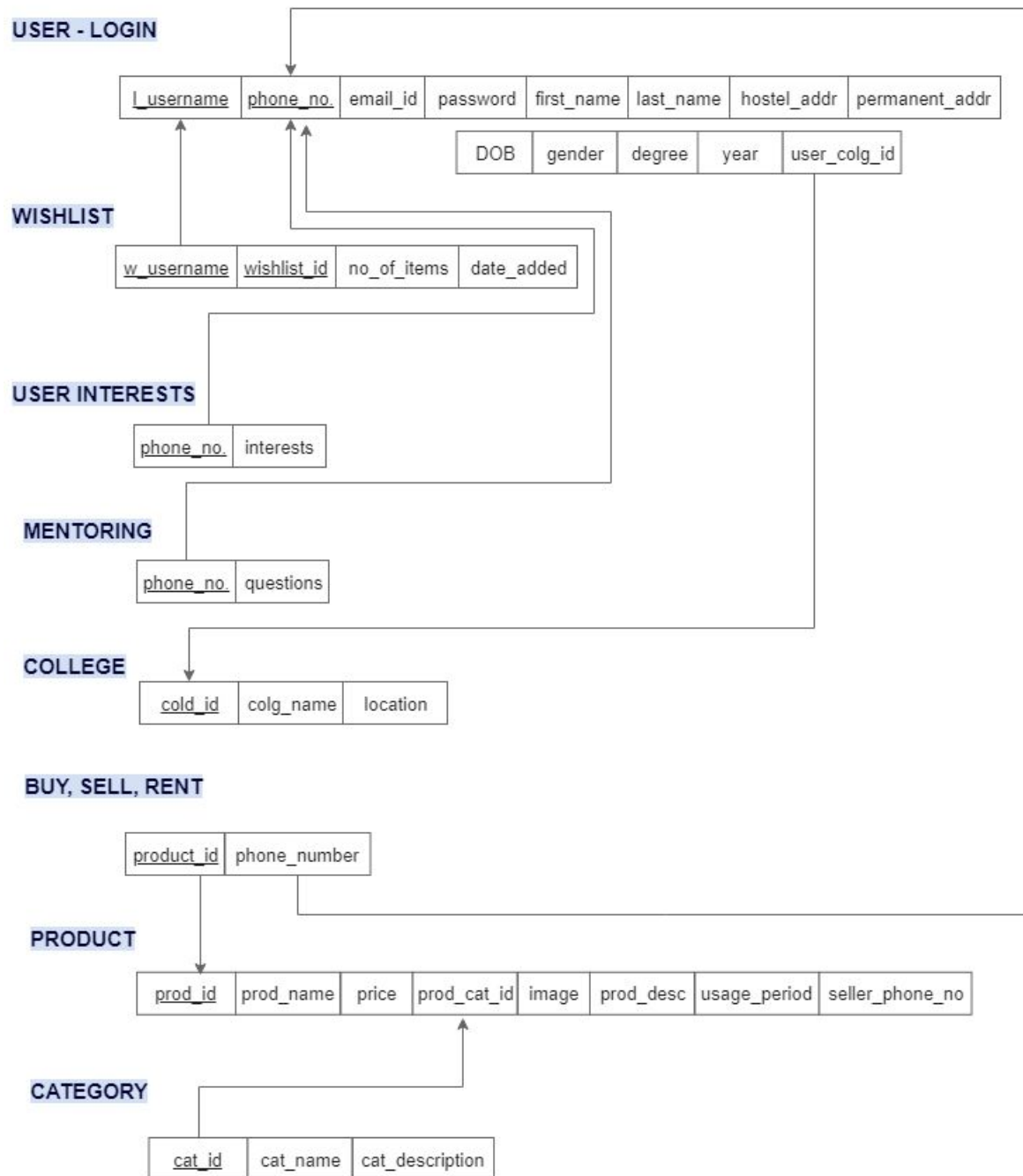
6.2 Entity-Relationship (ER) Diagram



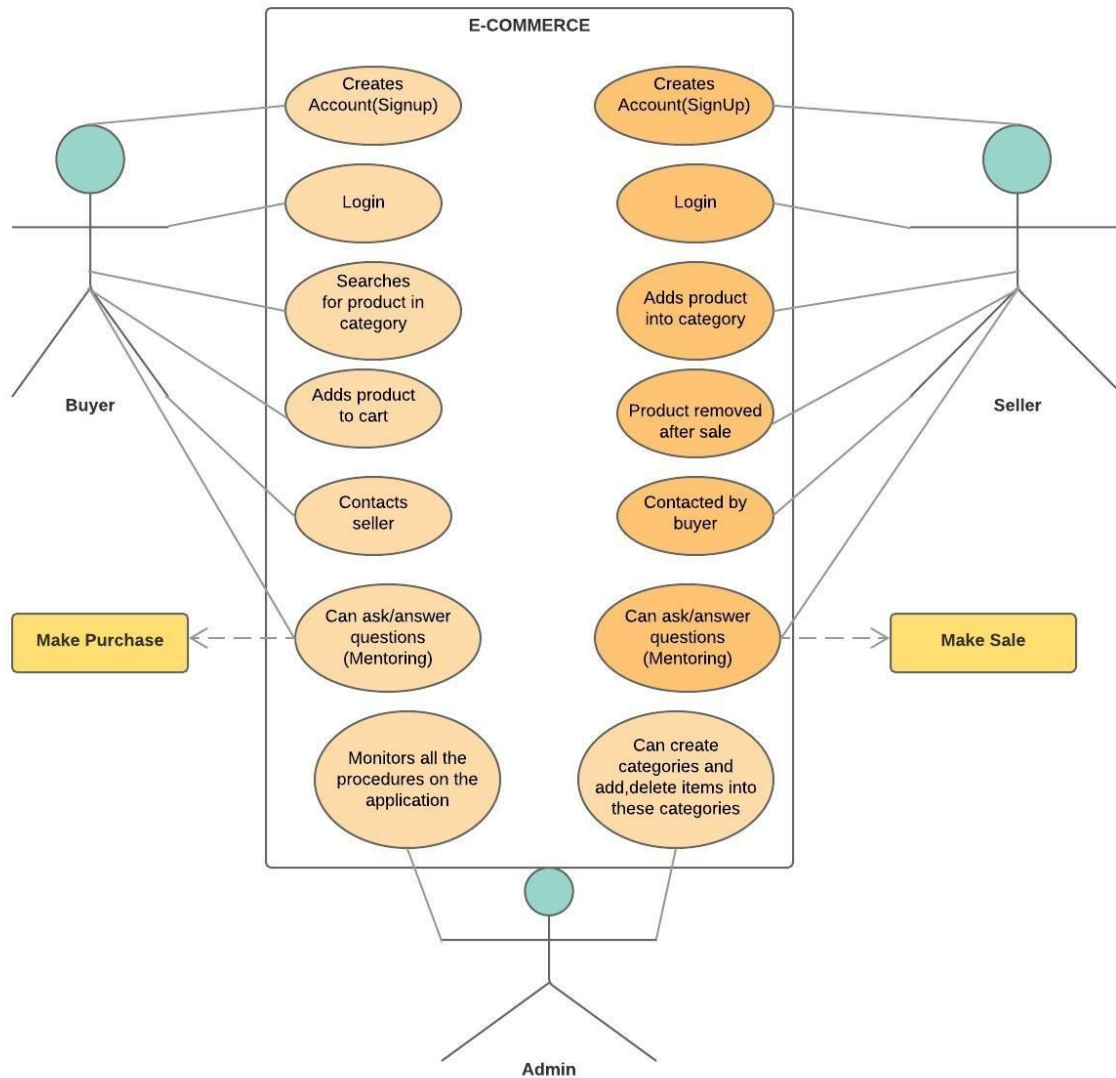
6.3 Context Diagram



6.4 Class Diagram



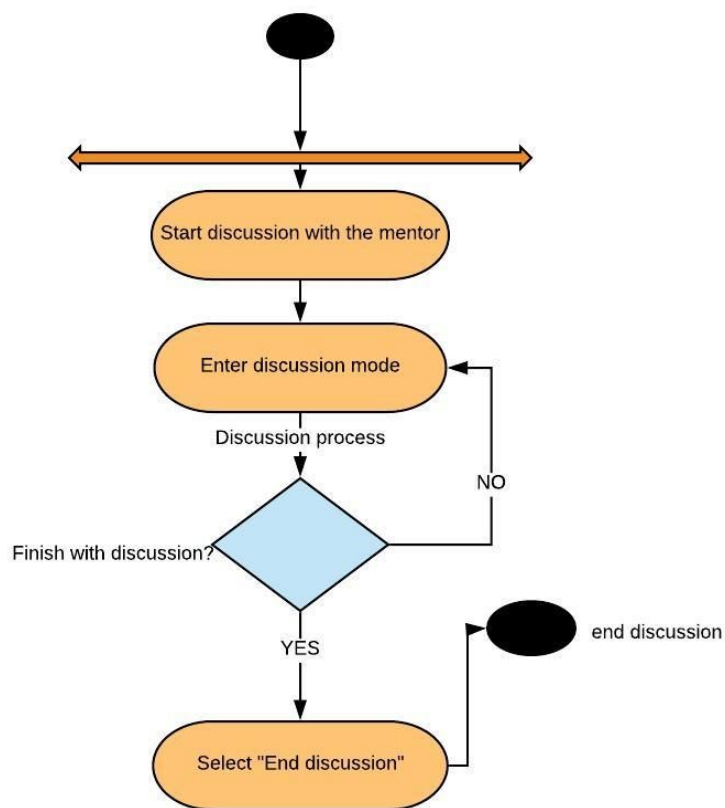
6.5 Use-case Diagram for E-Commerce



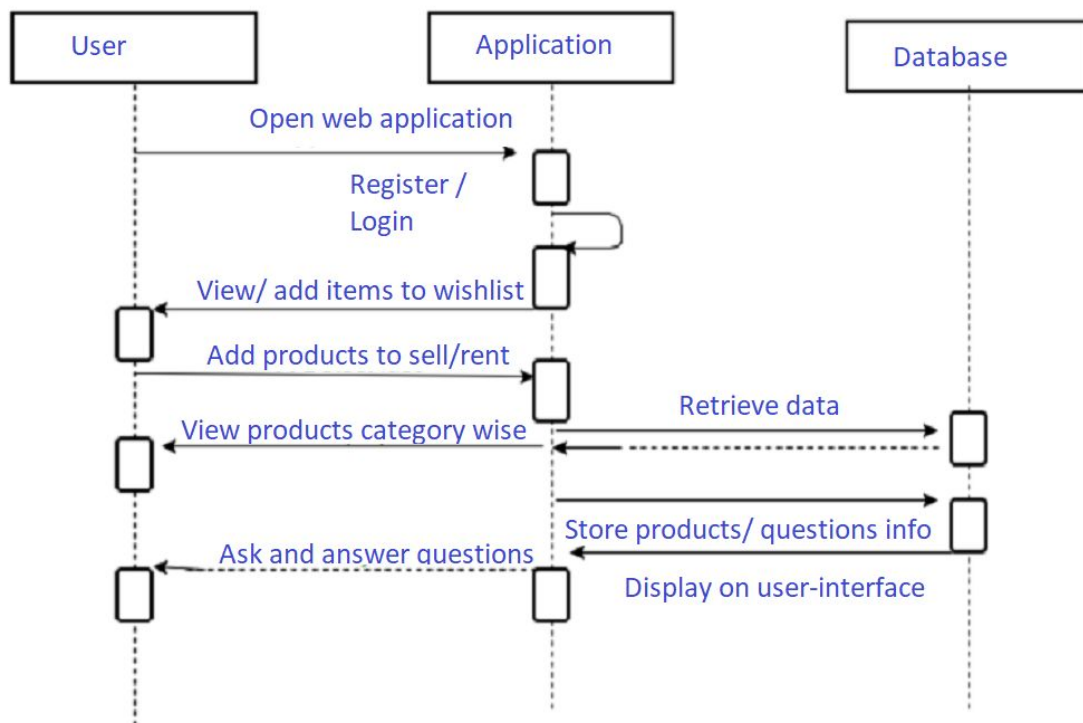
Use Case Diagram for Mentoring



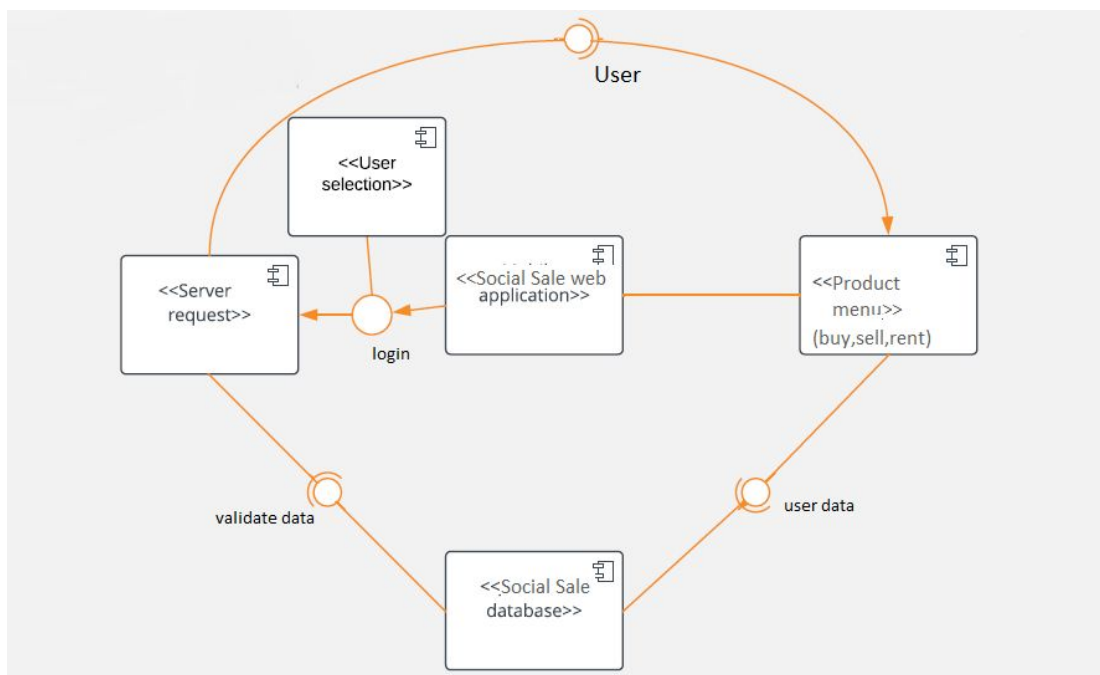
Activity Diagram for Mentoring



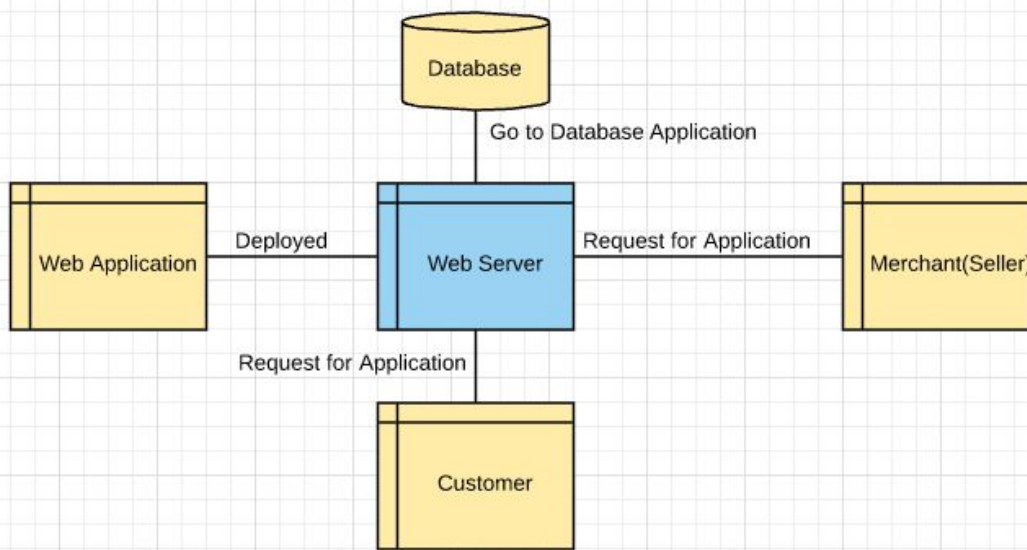
6.7 Sequence Diagram



6.8 Component Diagram



6.9 Deployment Diagram



6.10 State Diagram

