

System Requirement:

1. Registration:

1.1 Sign-Up:

- A user should be allowed to register.
- A user should be allowed to add his/her E-mail.
- A user should be allowed to choose a password.
- A user should be allowed to enter his/her name.
- A user should be allowed to enter his/her shipping address.
- A user should be allowed to choose his/her payment method.
- A user should be allowed to insert his/her profile picture.

1.2 Sign-In:

- A user should be allowed to enter his/her email.
- A user should be allowed to enter his/her password.
- A user should be allowed to ask the website to save his/her email & password.
- A user should be allowed to reset the password.

1.3 Sign-Out:

- A user should be allowed Sign-out.

2. Editing Information:

- A user should be allowed edit his/her name.
- A user should be allowed edit his/her address.
- A user should be allowed edit his/her payment method.
- A user should be allowed change his/her password.
- A user should be allowed change his/her birthdate.

3. Shopping:

3.1 Buying:

- A user should be allowed to add items to the watch list.
- A user should be allowed to remove items from watch list.
- A user should be able to make a bid to an auction.
- A user should be able to return and refund the item if it's damaged or doesn't match the description.
- A user should receive a message about his/her winning bids.

- A user should be able to pay for his/her winning bid.
- A user should be able to choose the shipping method.
- A user should be able to rate the seller.
- A user should be able to rate the product.

3.2 Selling:

- A user Should be able to list an item.
- A user should be able to add the item features and details.
- A user should be able set the initial bidding price.
- A user should be able to see the bidders and the bid amount

4. Search:

- A user should be able to search for an item.
- A user should be able to search for a seller.
- A user should be able to search by category.
- A user should be able to search by price.

5. Surfing the Site: (Registered & Unregistered users)

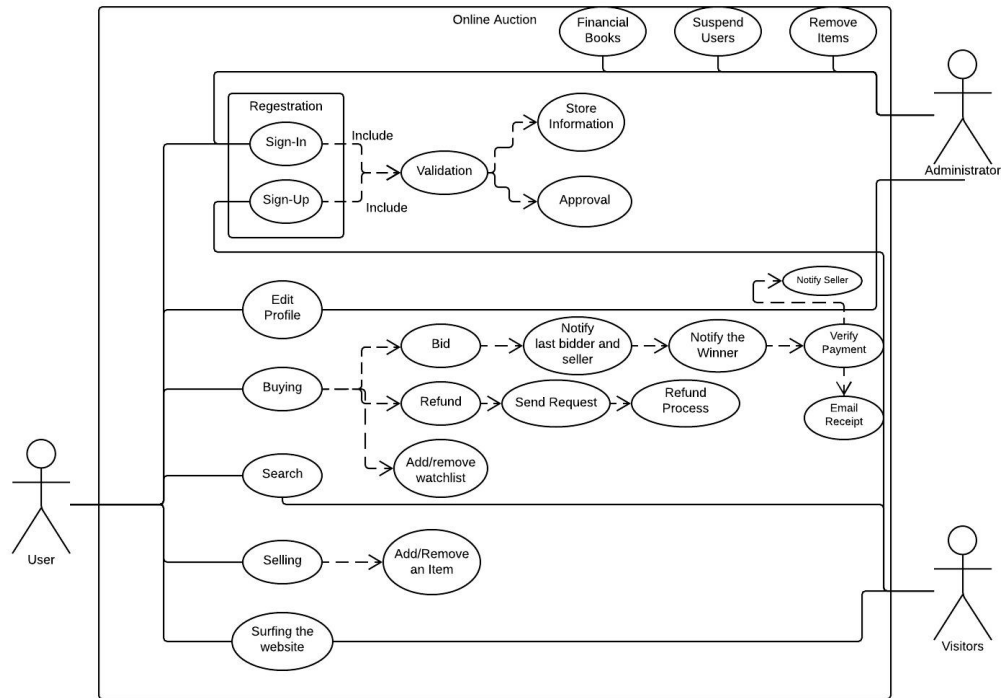
- A user should be able to view items.
- A user should be able to see products details.
- A user should be able to see the current bid.
- A user should be able to see a seller profile.
- A user should be able to see how much time left to the auction.
- A user should be able to see the item price.
- A user should be able to filter items by (name, price, seller rate, and time left).
- A user should be allowed to contact the customer service.
- A user should get some items recommended by the site.

6. Administrator:

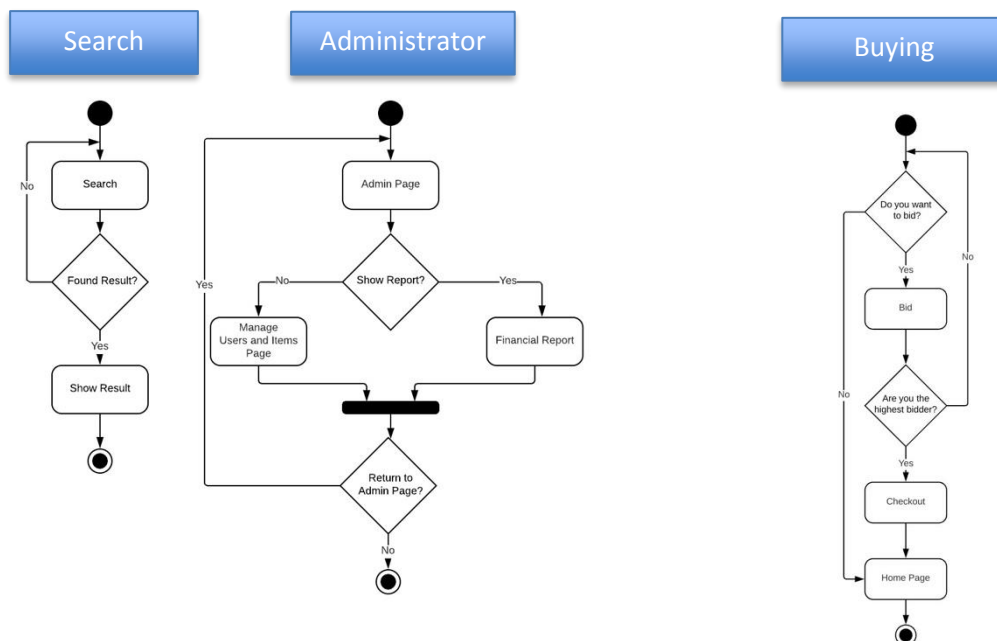
- An administrator should be able to remove an item if it validates the website policy.
- An administrator should be able to suspend an account.
- An administrator should be able to view financial books.

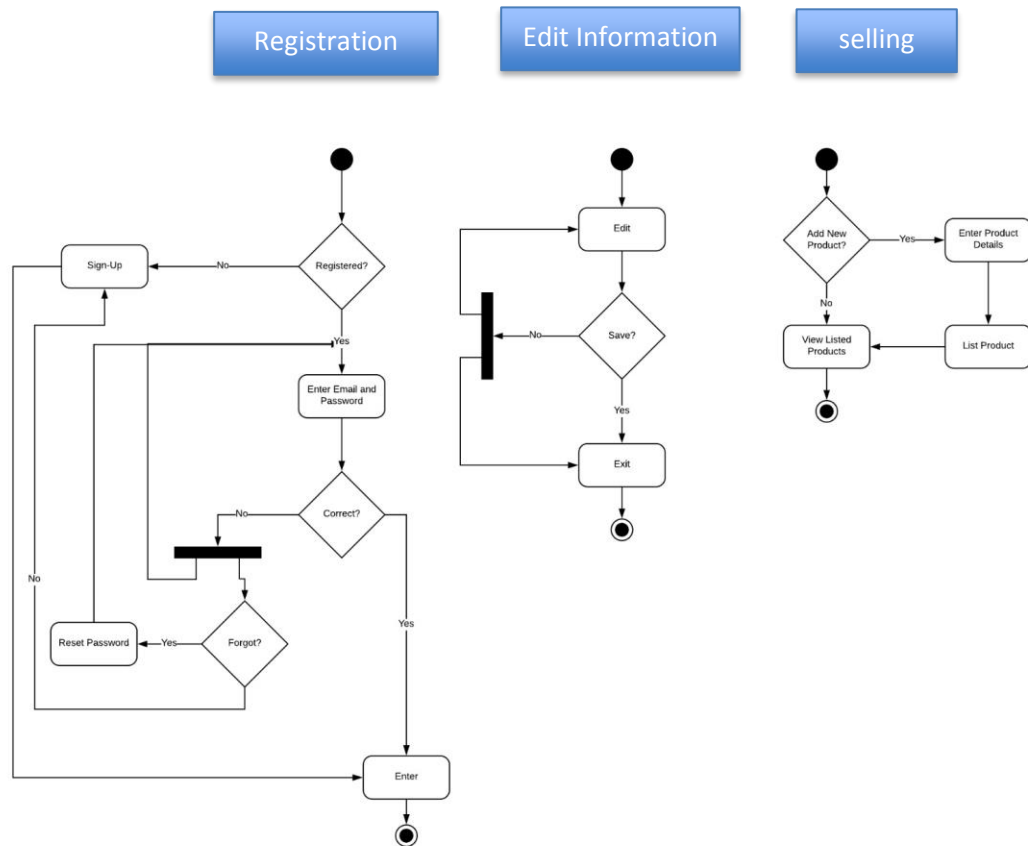
Business process and functional modeling

Use case diagram:



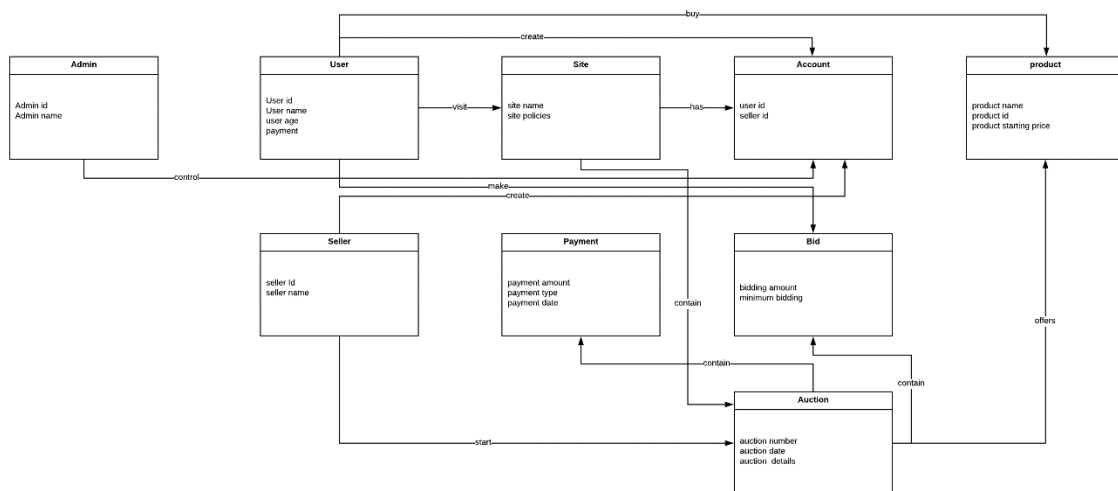
Activity diagram:





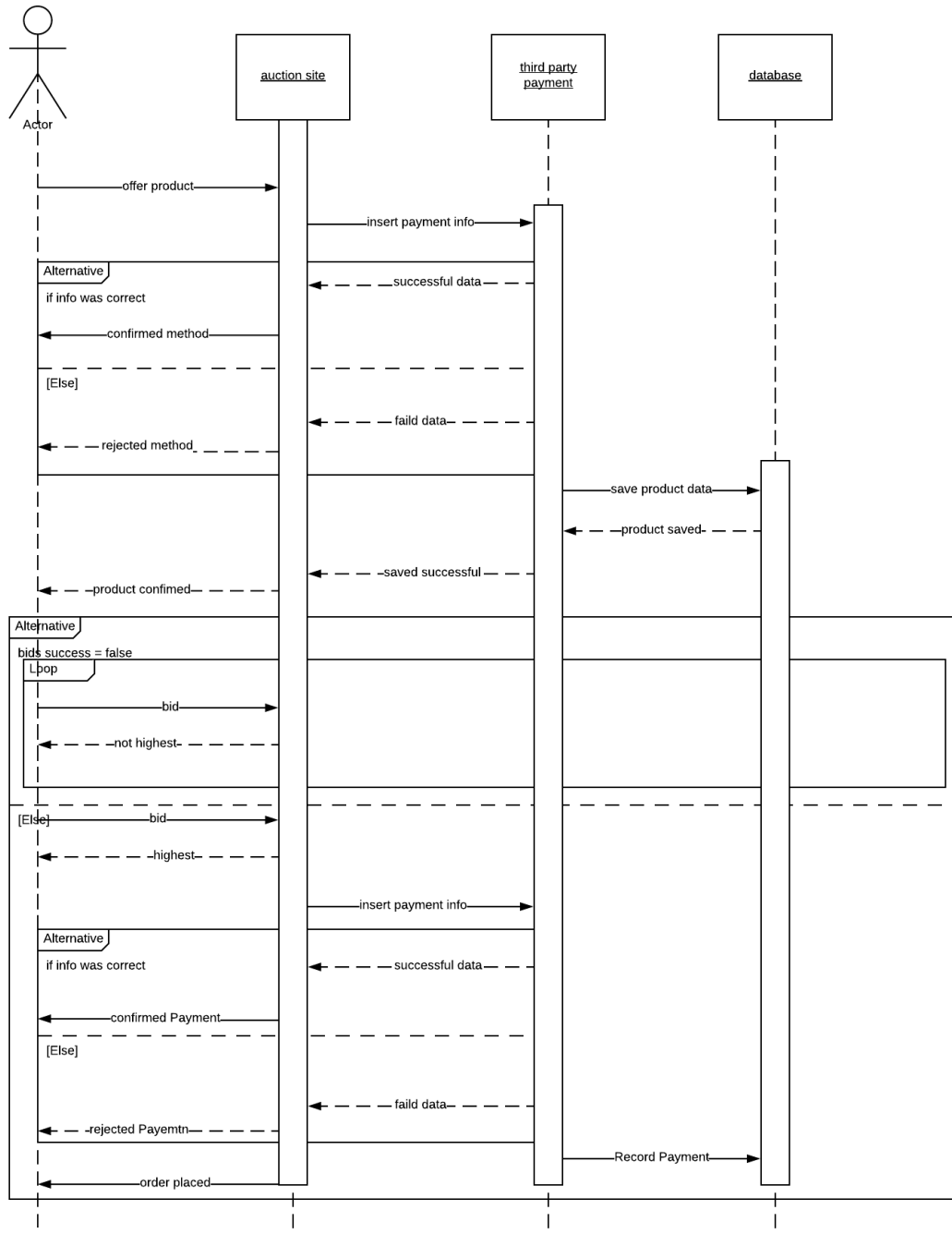
Structural modeling:

Class diagram



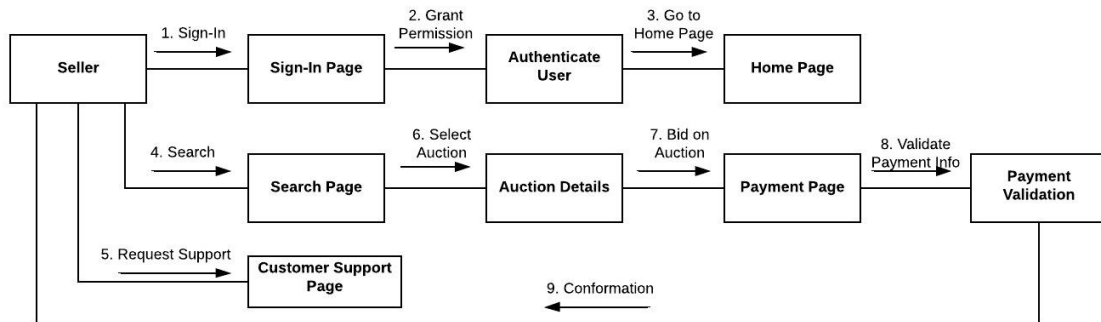
Behavioral modeling:

Sequence diagram:

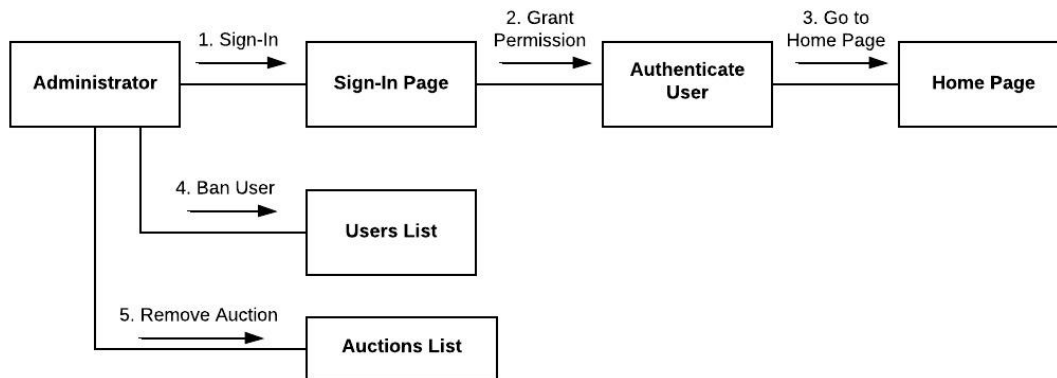


Communication diagram:

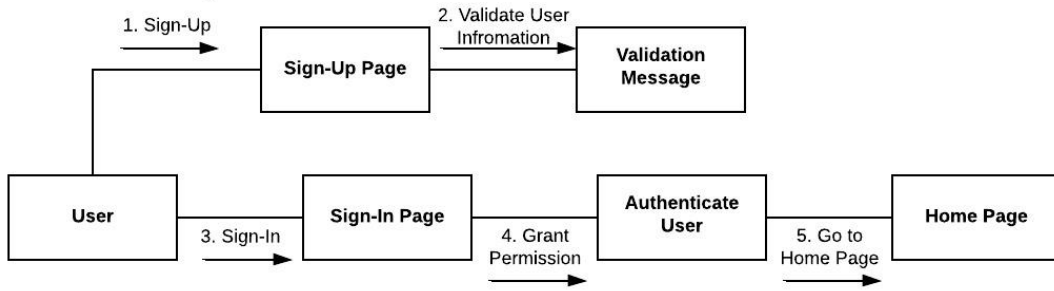
Buyer Communication Diagram



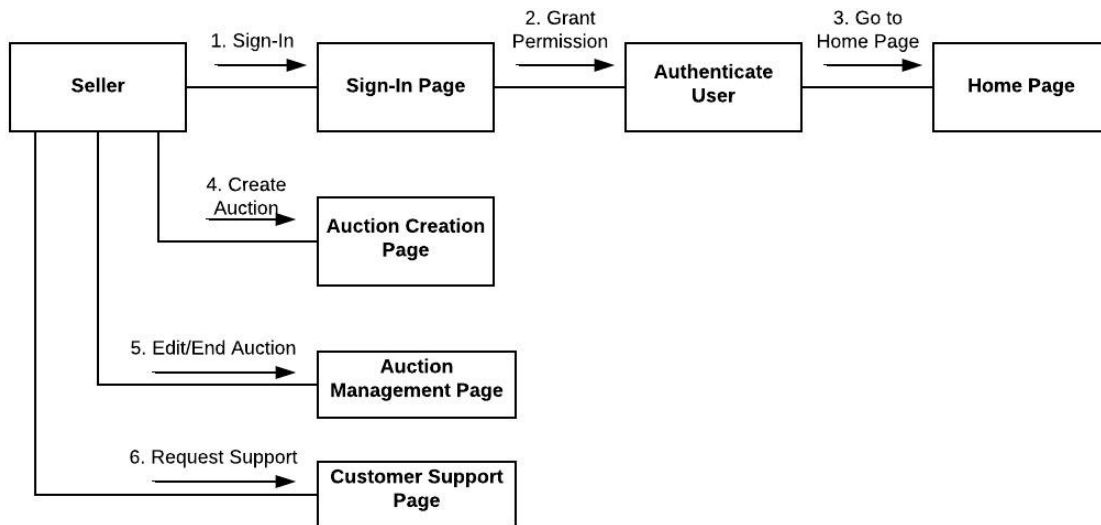
Administrator Communication Diagram



**Sign-Up/Sign-In
Communication Diagram**



**Seller Communication
Diagram**



State machine diagram:

