

SOFTWARE REQUIREMENTS

SHARK Second-hand Trading Platform

Group 4

舒梓轩 姜浩然 徐源松

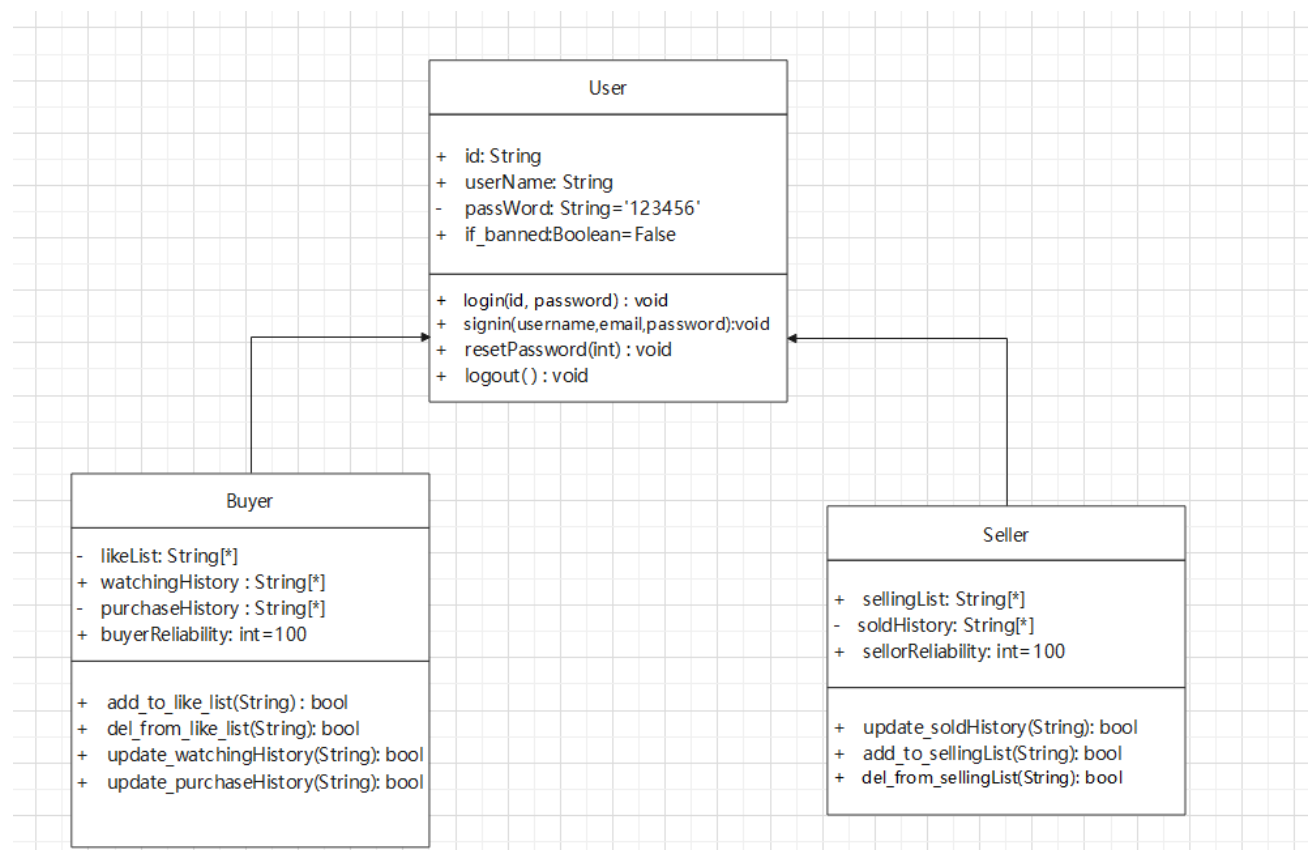
Requirement

System Objective In this project, we are developing a software that simulates the online second-hand goods trading platform. The software will take care of the user interface, make sure that the users can provide or find their products on this platform.

Domain Analysis:

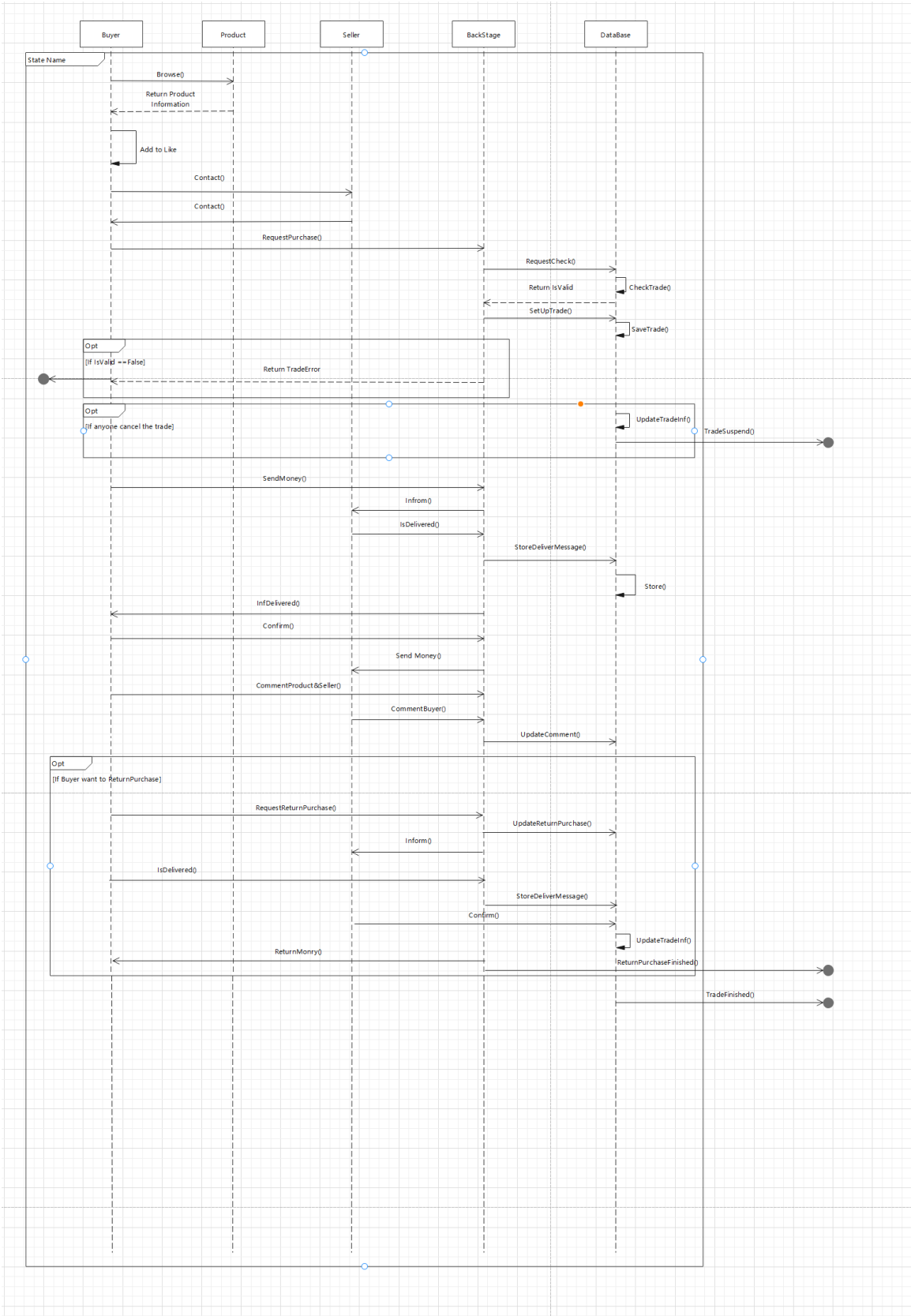
The participants of the system can be the users and administrator. The user can be the seller or buyer in this platform, which means as a user, one can browse the products and decide purchase them, at the same time, the user can also release some products on the platform. The responsibility and role of the administrator is to manage the platform, he can edit and remove the products to make sure the products and the related information is legal, the administrator can also view the selling history of all transactions.

The class diagram of user can be expressed below, notice that the user can both be a seller and a buyer.



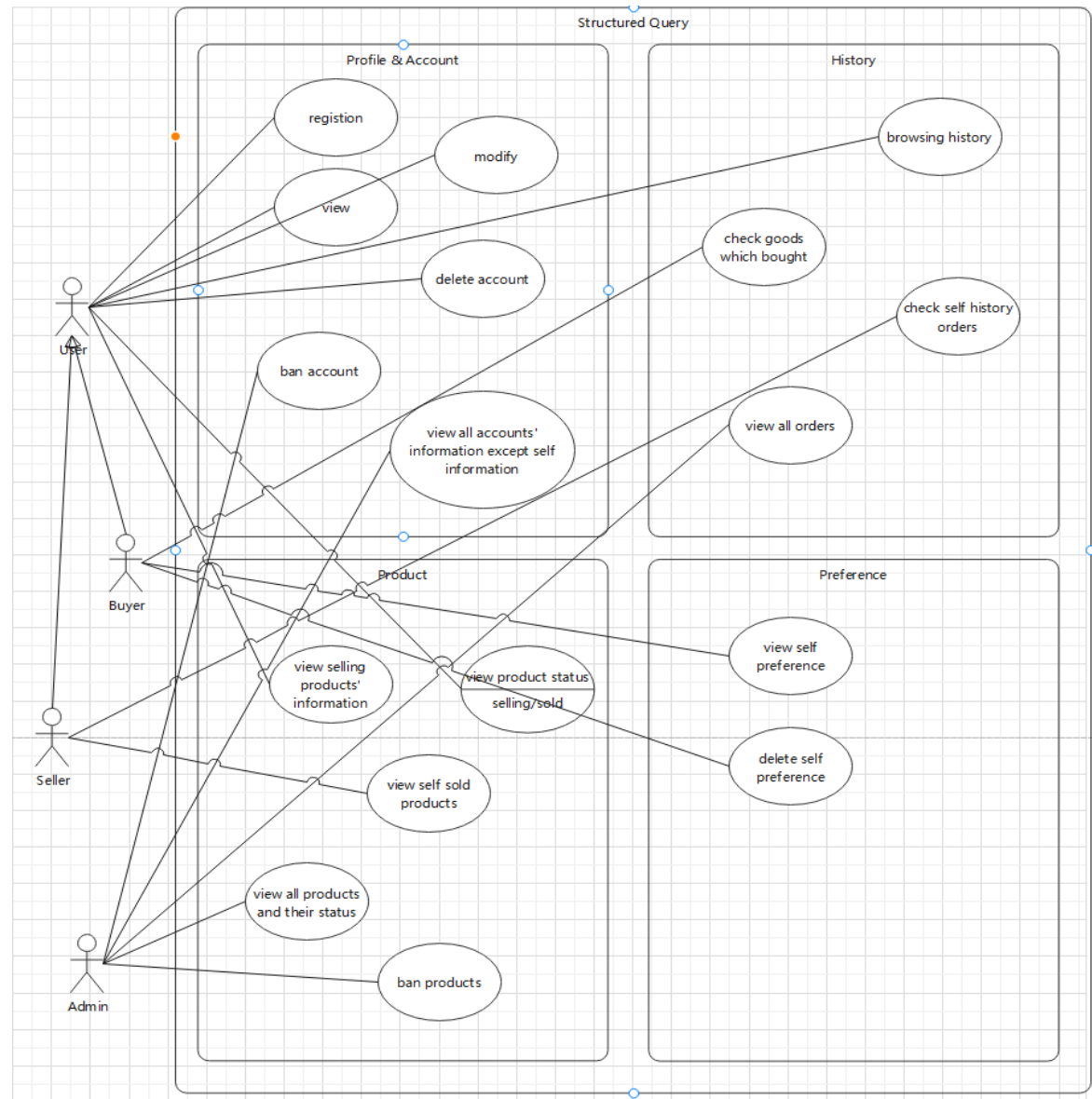
The main purpose of the platform is conducting the transactions, so it is important to have a clear flow path of a transaction.

Here is the sequence of events for buyer and seller and platform to complete a transaction.

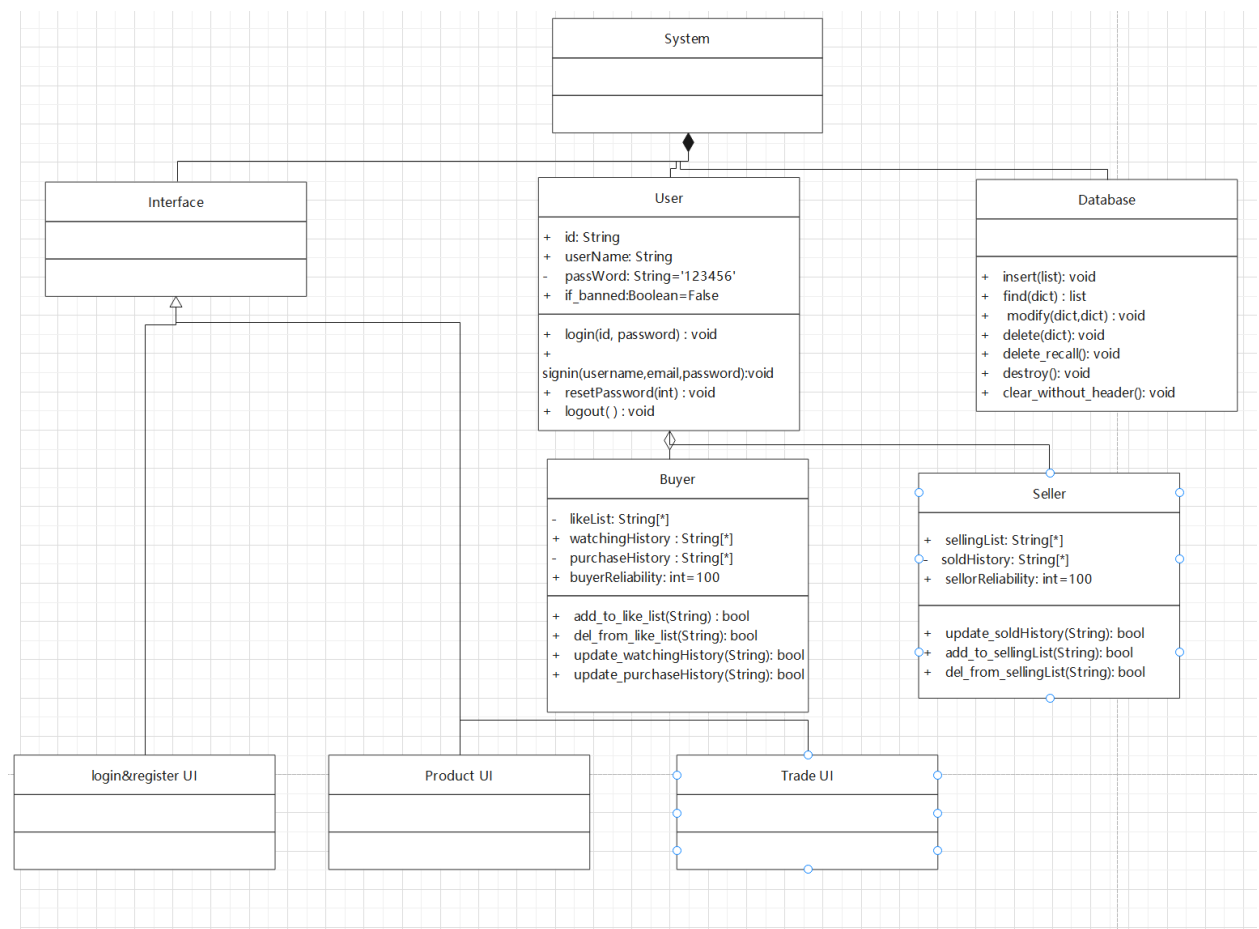


User cases:

The user case diagram of the users and administrator is shown below.



System Architecture:



Software Requirements:

R1: UI

- R1.1: The system should be able to login with two different identities, the User and the Administrator.
 - o R1.1.1: The system should be able to login as an administrator.
 - o R1.1.2: The system should be able to login as a user.
- R1.2: If the system is login as an administrator, the administrator should be able to edit the products and remove the products.
- R1.3: If the system is login as a user, the user should be able to use the platform to buy or sell products, and a series of functions list below.
 - o R1.3.1: The user should be able to browse the products on sale, including the details of the products, the price, the picture, the description, the comment, etc.
 - o R1.3.2: The user can chat with the seller when he is interested in a product.
 - o R1.3.3: The user can add a product to his like-list in order to buy it later.
 - o R1.3.4: The user can check his buy history, watching history, like list; the user can also check his selling information, sold list.
 - o R1.3.5: The user can look up his deal on the progress, including the deals in which he is a buyer and the deals in which he is a seller.
 - o R1.3.6: The user can upload new product on the platform with necessary information.
- R1.4: The user (both buyer and seller) should be able to complete a transaction in this

platform.

- o R1.4.1: The buyer can pay for the product, then the money is deposit at the platform, the seller receive the request.

- o R1.4.2: The seller can receive the purchase request, deliver the product.

- o R1.4.3: The buyer can confirm the receipt of the product, then the platform give money to the seller.

- o R1.4.4: The buyer can return goods with in 7 days with no reasons.

R2: Controller

- R2.1: If the user want to upload a product, the information should be complete.

- o R2.1.1: The upload information should contain the product name.

- o R2.1.2: The upload information should contain the product price.

- o R2.1.3: The upload information should contain the amount of the product.

- o R2.1.4: The upload information should contain the description of the product.

- o R2.1.5: The upload information should contain the image of the product.

- o R2.1.5: The upload information should contain the label of the product.

- R2.2: The related information should be correct and valid.

- o R2.2.1: When upload the product, the amount must be a positive number.

- o R2.2.2: When modify the product, the amount must be a positive number.

- o R2.2.3: When modify the product, the price must be a number.

- o R2.2.4: The comments of the product should be polite and we do not allow the rude words such as f**k, etc.

- R2.3: The user could only return the product with no reason within 7 days, otherwise the return request will not be accepted.

R3 Validate

- R3.1: The user and administrator should login with correct password and valid email.

- o R3.1.1: If the email is invalid (eg: without "@"), then it should be recognized as invalid.

- o R3.1.2: If the input password in not correct, the user or administrator should not be able to login.

- R3.2: When user register an account, the related information should be correct and valid.

- o R3.2.1: If the firstly input password is not the same as the input of the verify password, the user should not be able to register.

- o R3.2.2: If the input email has already been used in an account, the user should not be able to register.