
JAMX Co.

Assigned Team # 10

**<An Electronic Business System> Software Requirements
Specification For
<Subsystem or Feature>**

Version <2.0>

Xue Ru Chen, Anjana Rajan, Moiya Josephs, Janice Ma

Revision History

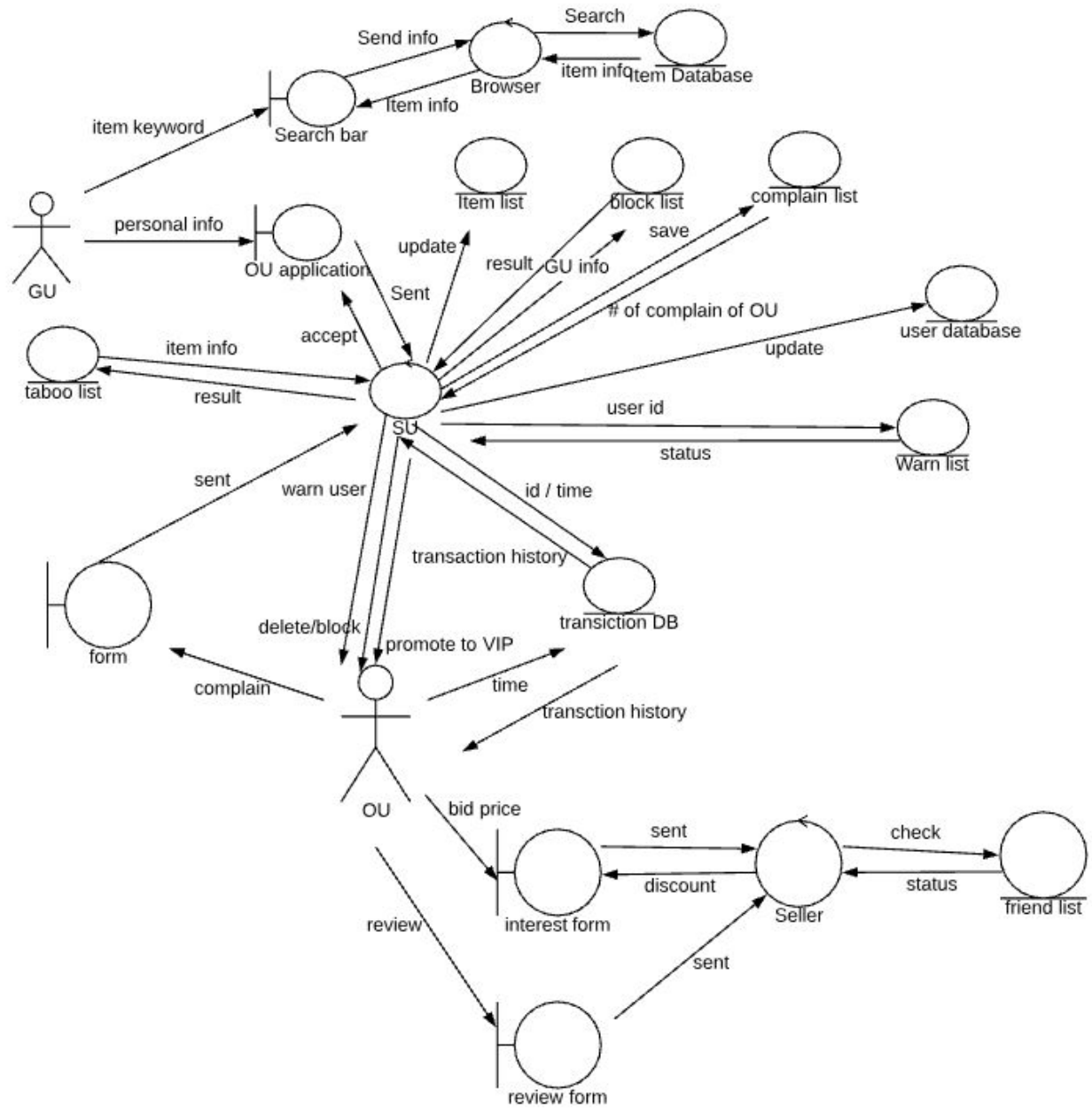
<mm/dd/yyyy>	Version	Description	Author
03/24/2019	<1.0>	First version of the eBusiness platform.	Xue Ru Chen, Anjana Rajan, Moiya Josephs, Janice Ma
04/18/2019	<2.0>	Second phase report of the eBusiness platform.	Xue Ru Chen, Anjana Rajan, Moiya Josephs, Janice Ma

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Introduction

Collaboration Class Diagram:

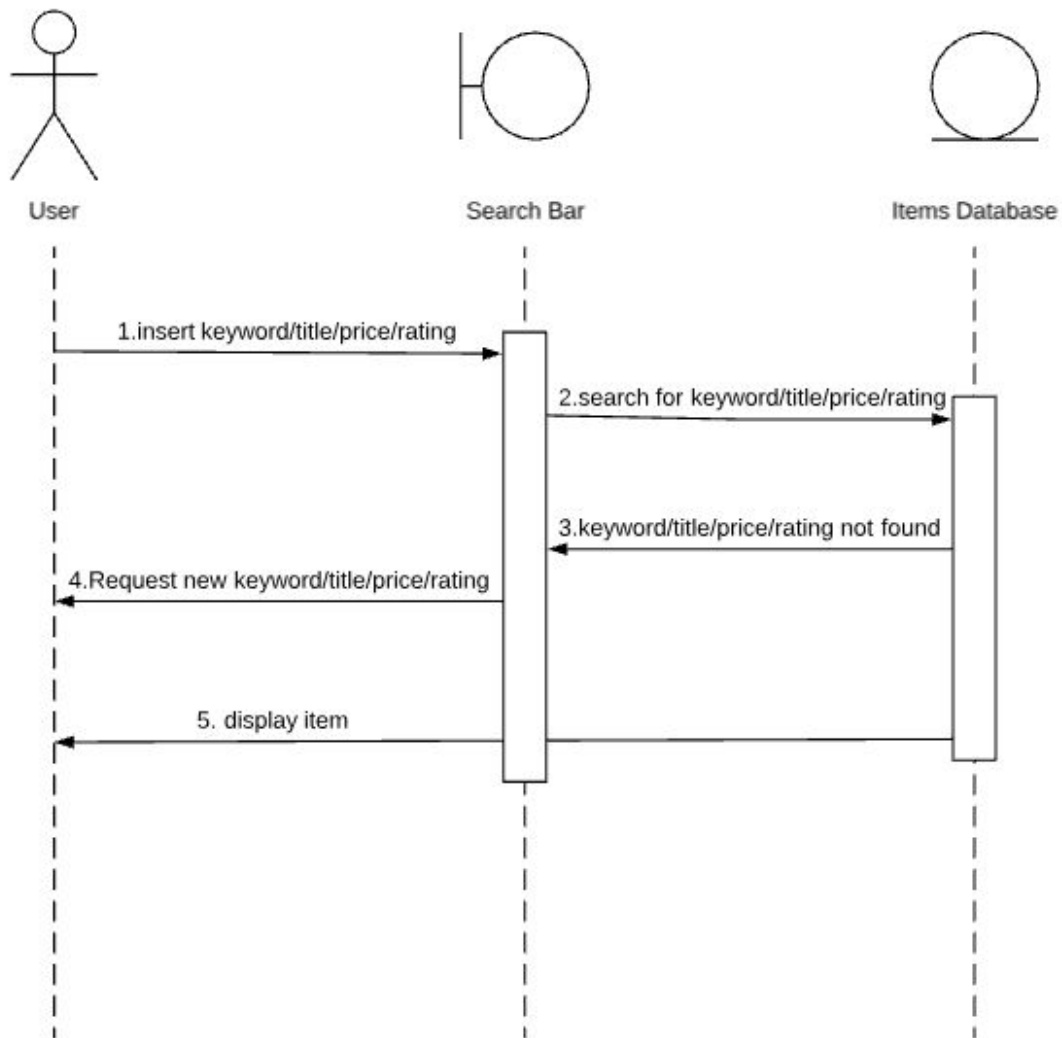


Use Cases

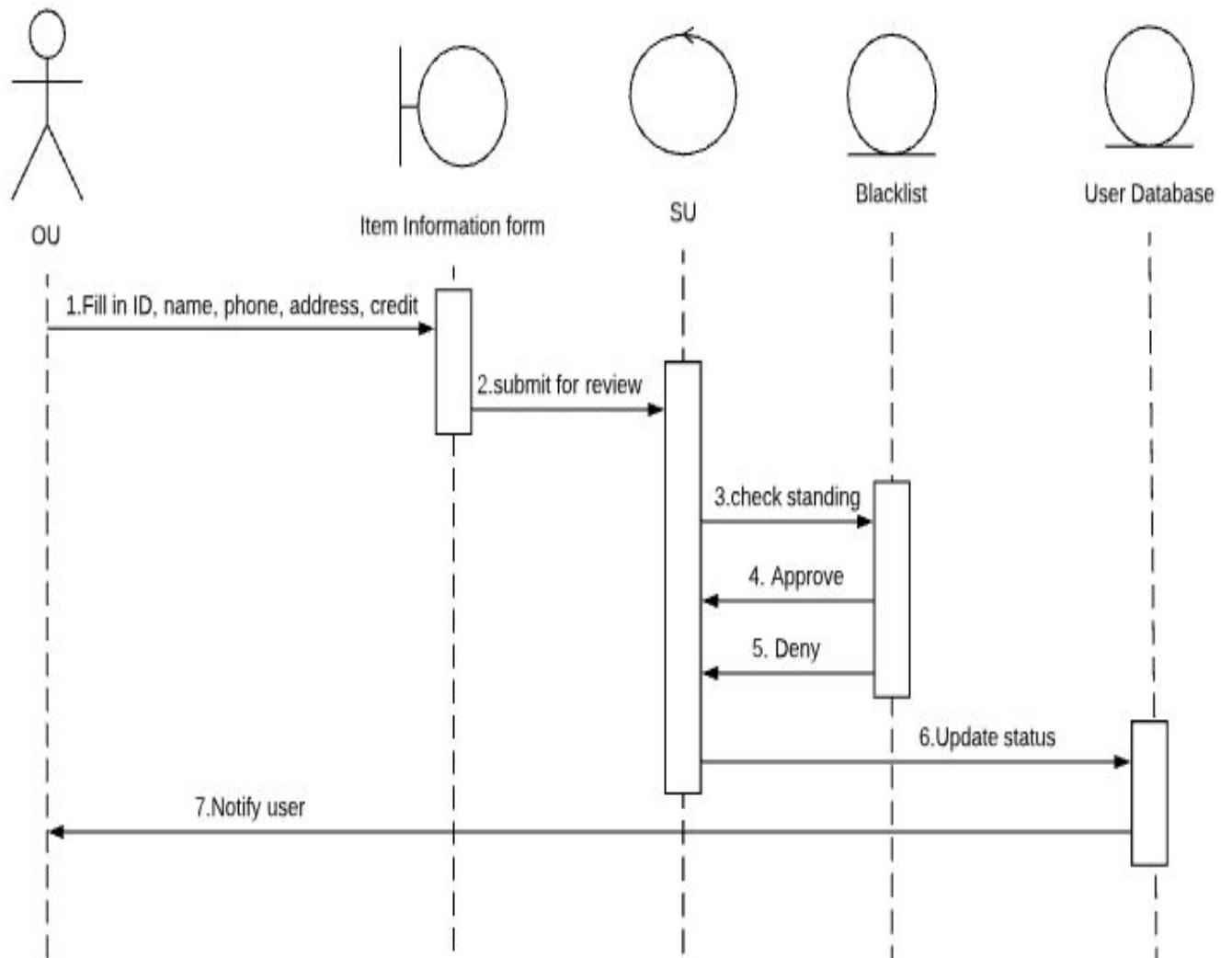
This section contains the normal scenarios and exceptional scenarios, if applicable, for each use-case. To show the different type of scenarios, sequence diagrams and petri-nets will be used to showcase the functionalities of each use-cases. Within the sequence diagrams, user refers to GU, OU and VIPs users.

Sequence Class Diagrams

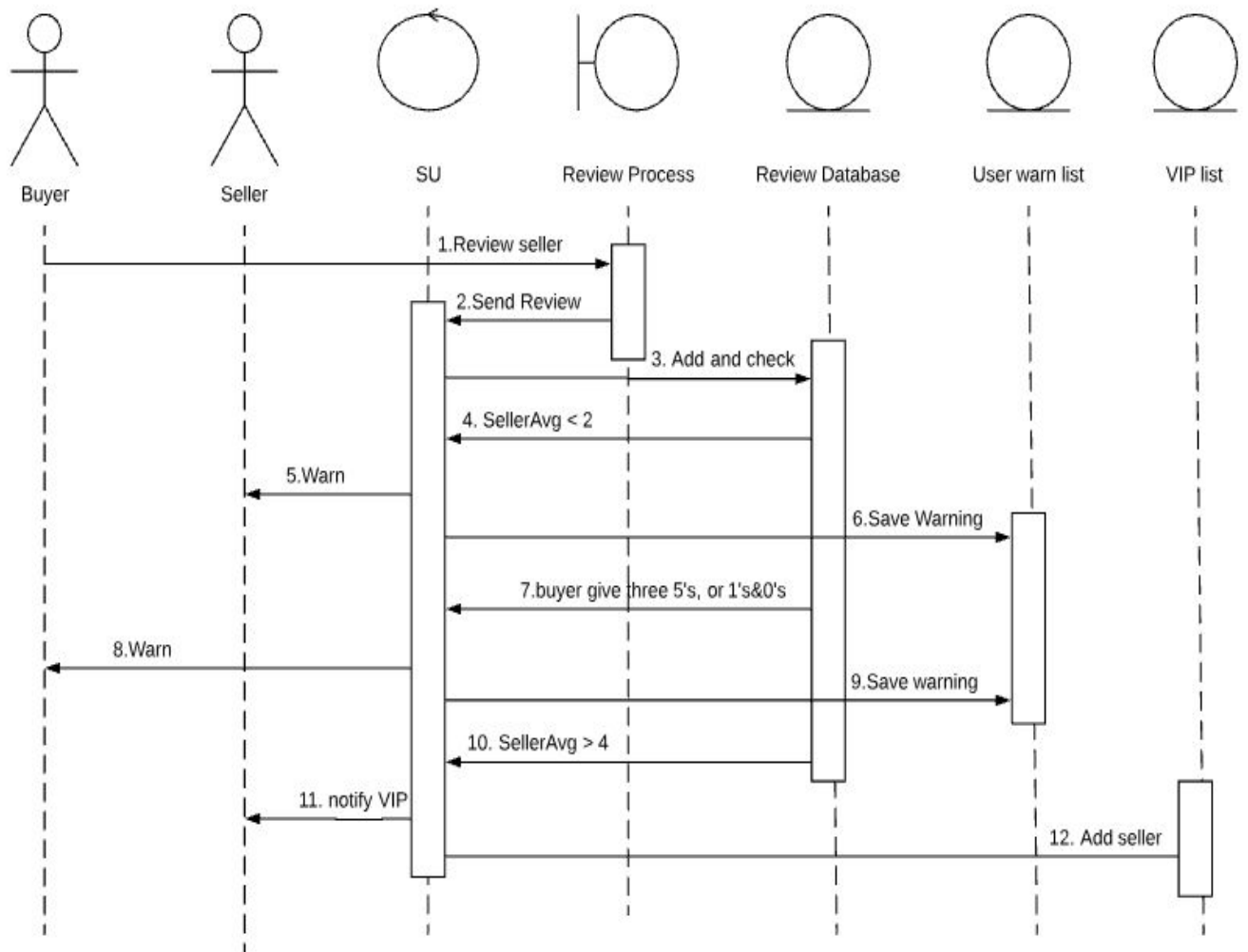
Use-Case #1: Browse/search



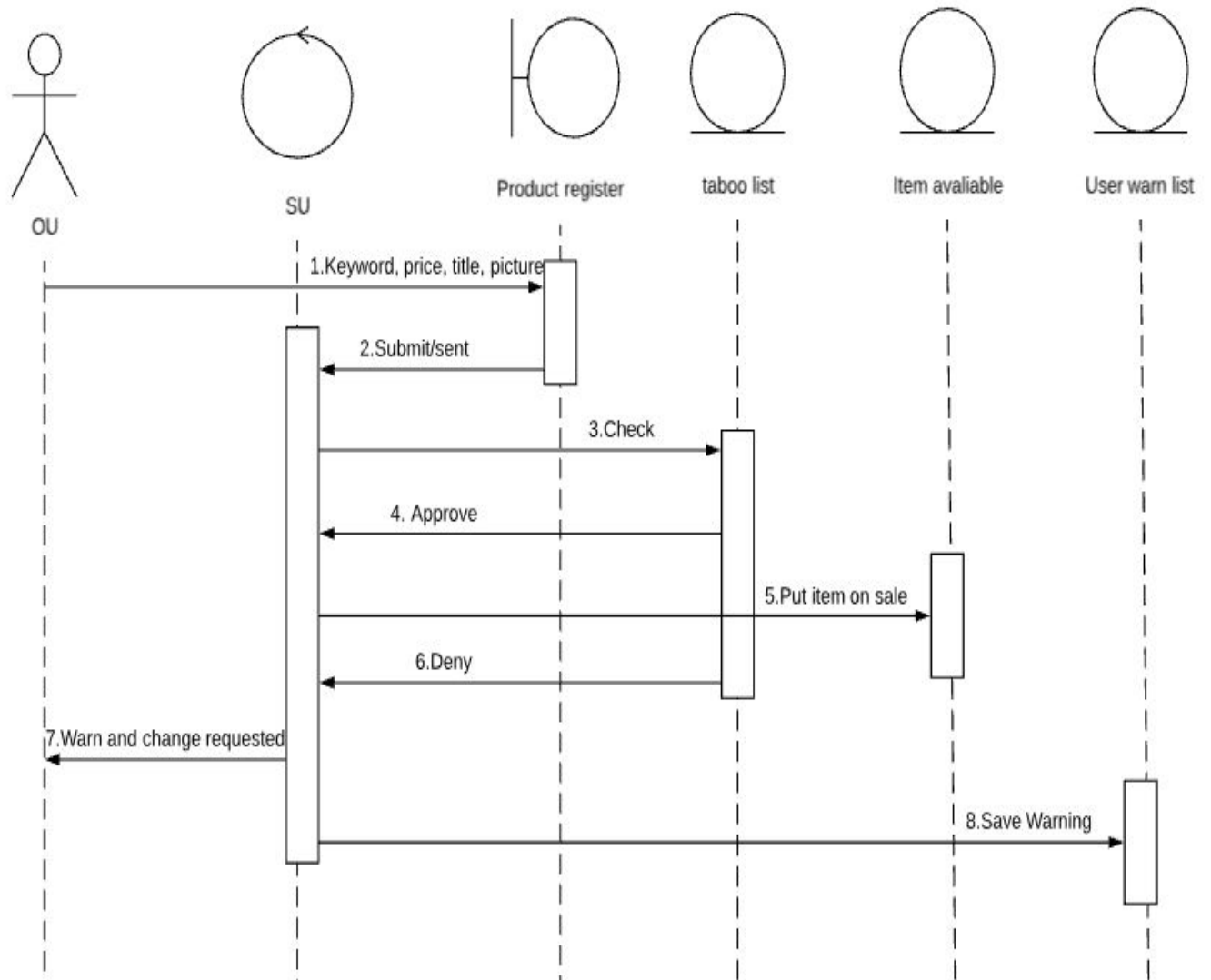
Use-Case #2: GU requesting to be OU



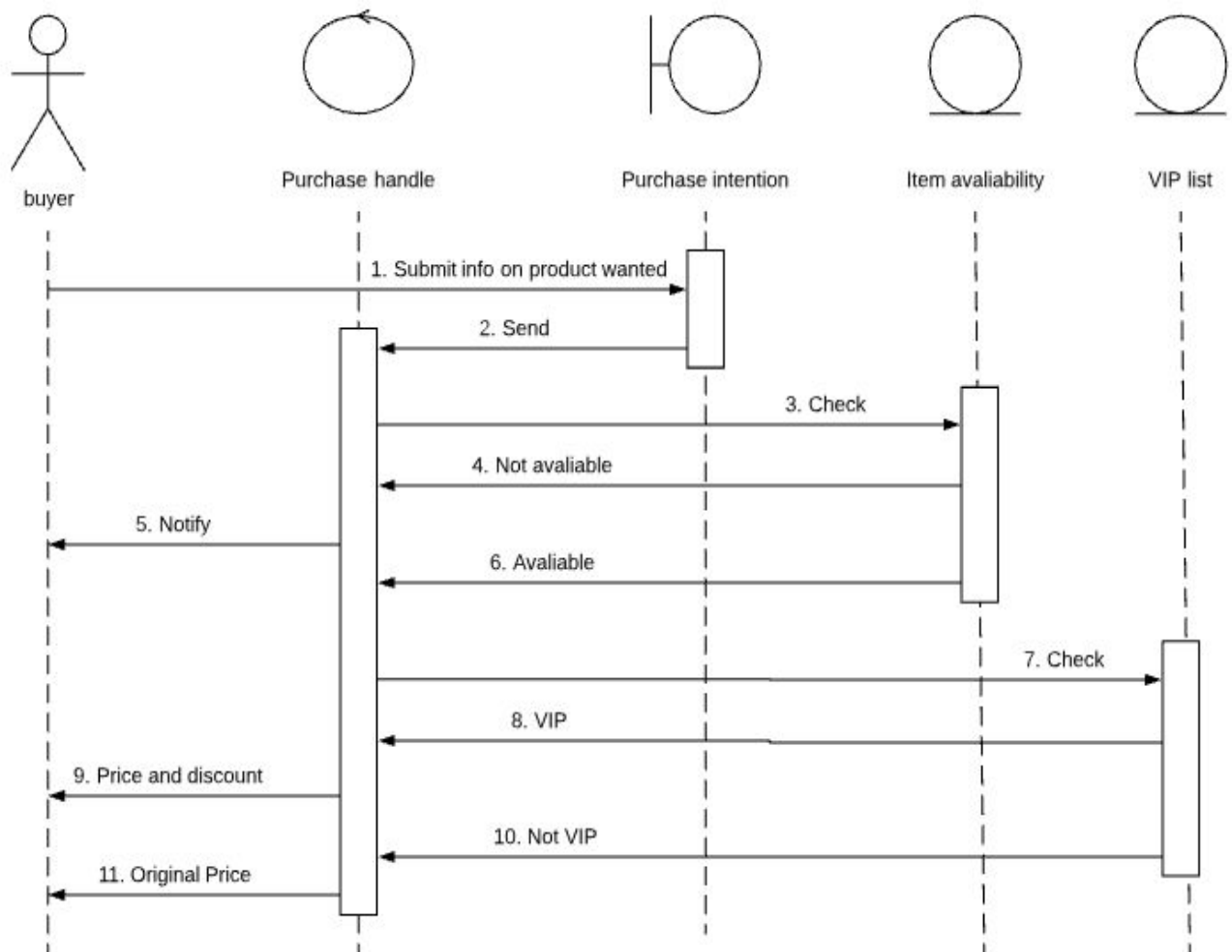
Use-Case #3: Giving Reviews



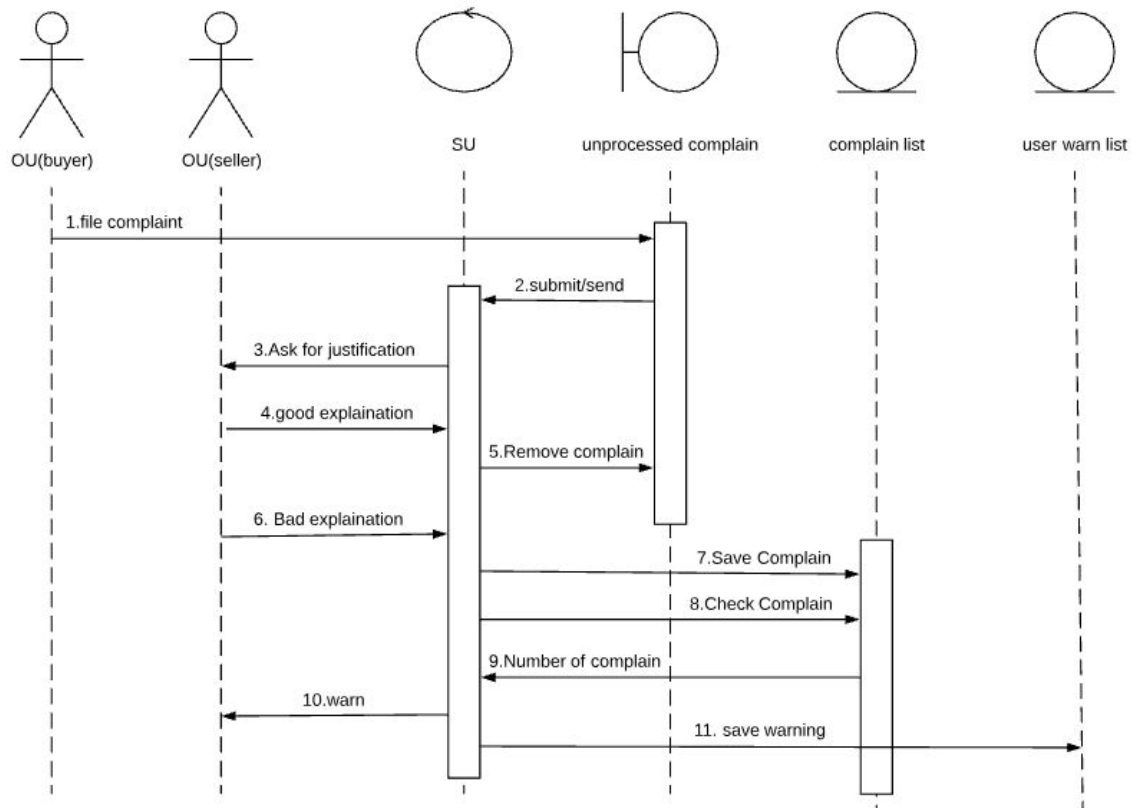
Use-Case #4: Intention to sell a product



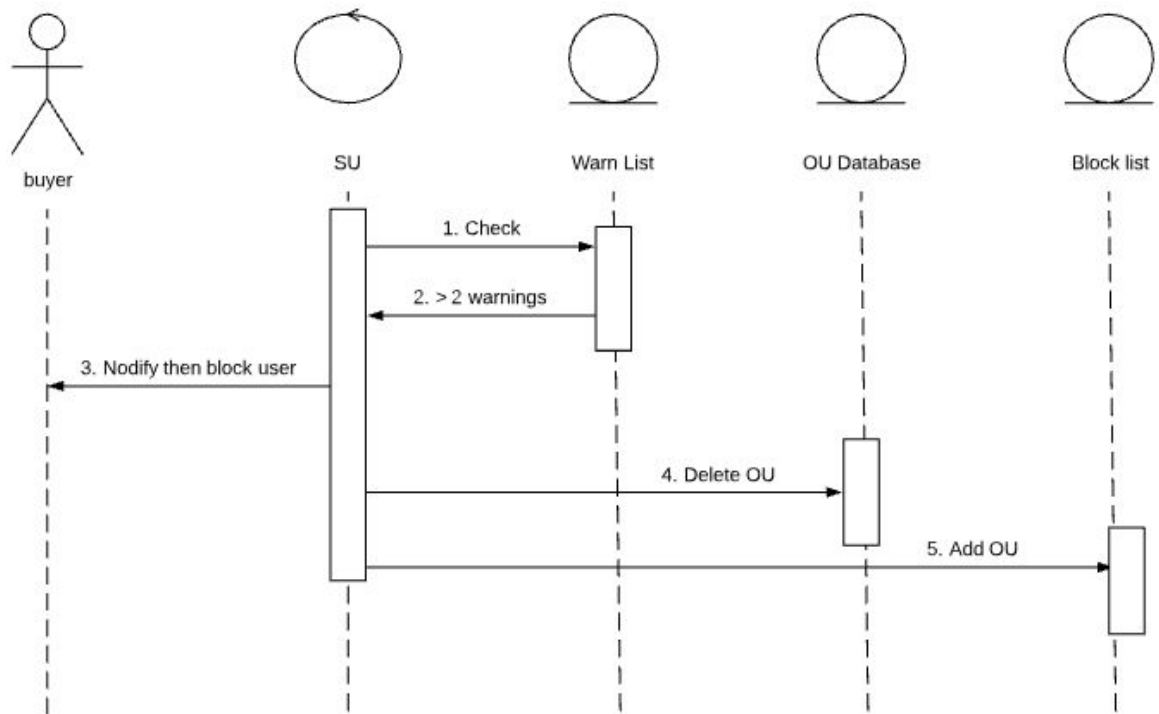
Use-Case #5: Sell



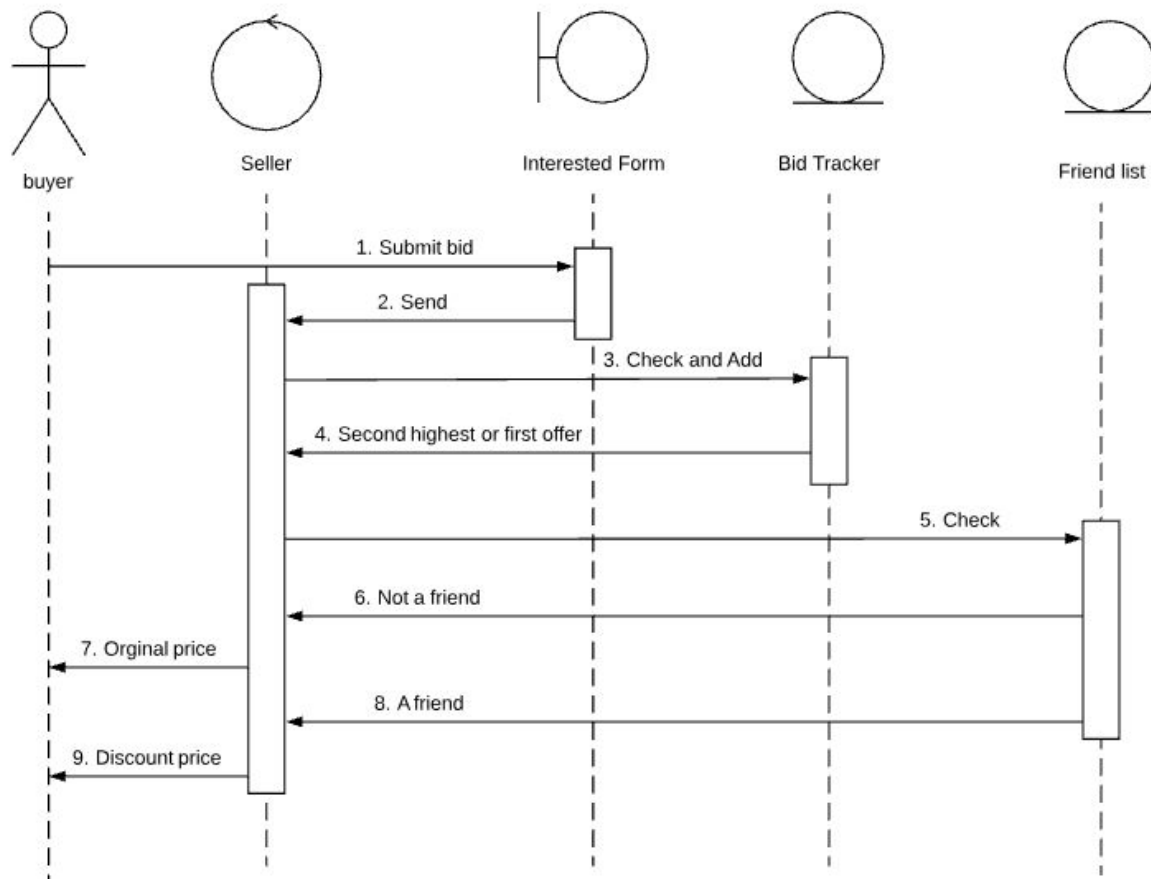
Use-Case #6: Save Complaint



Use-Case #7: Remove OU



Use-Case #8: Bid and Friend List



Petri-Nets

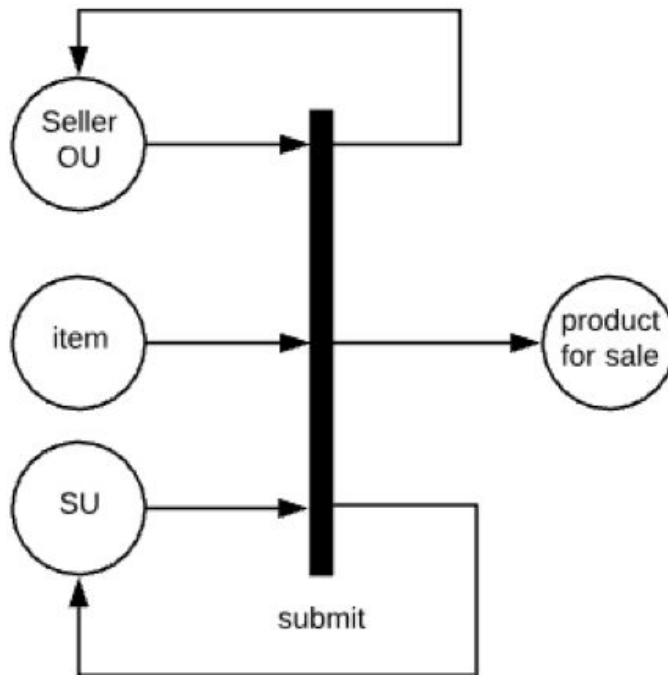


Figure 1 Petri-net of OU submitting an item to possibly sell

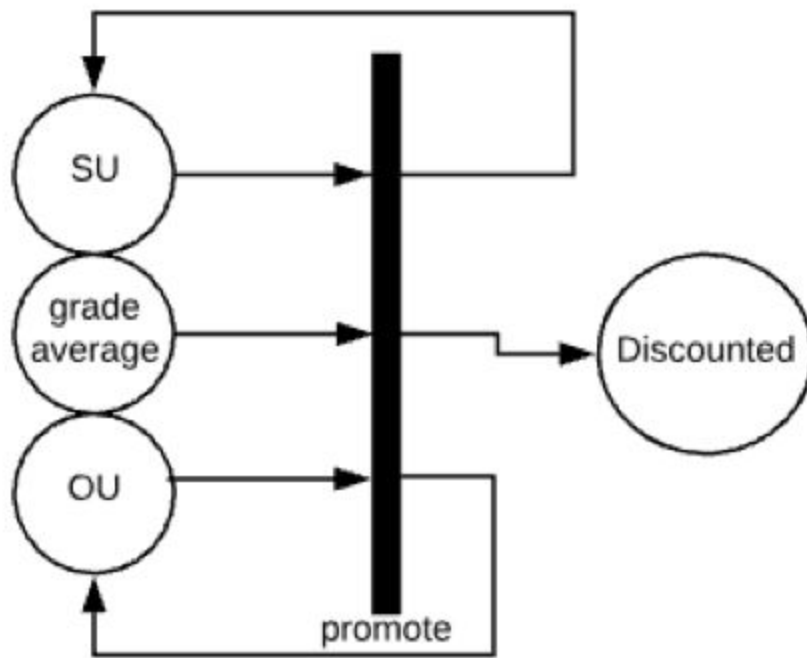


Figure 2 Petri-net of OU being promoted to VIP user and getting Discounted price

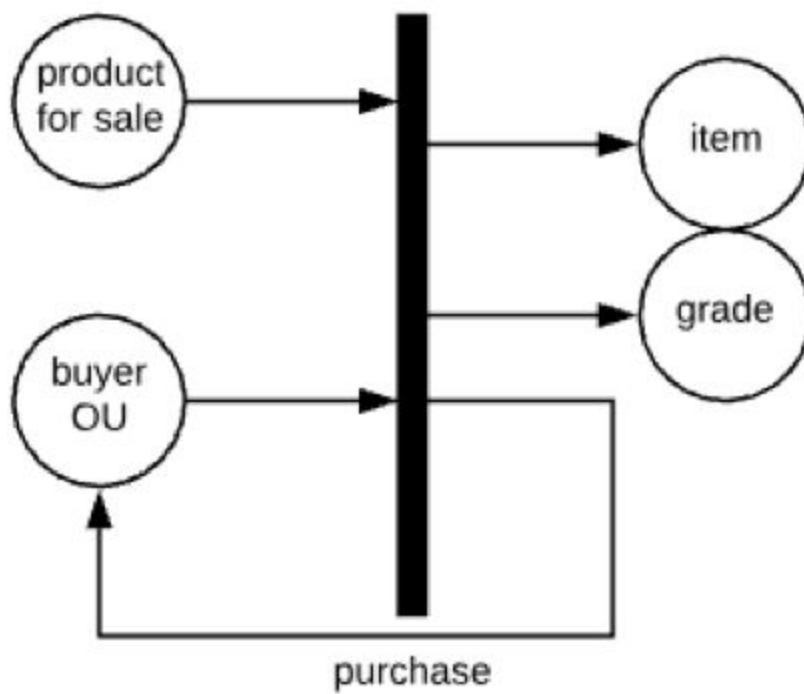


Figure 3 Petri-net of OU purchasing an item and reviewing

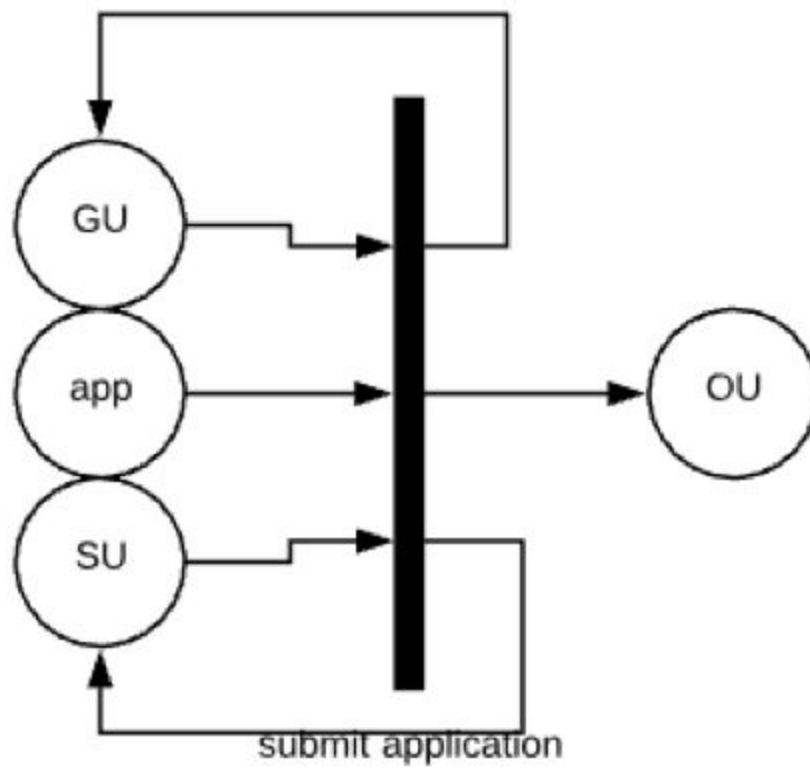


Figure 4 Petri net of GU submitting application to become OU

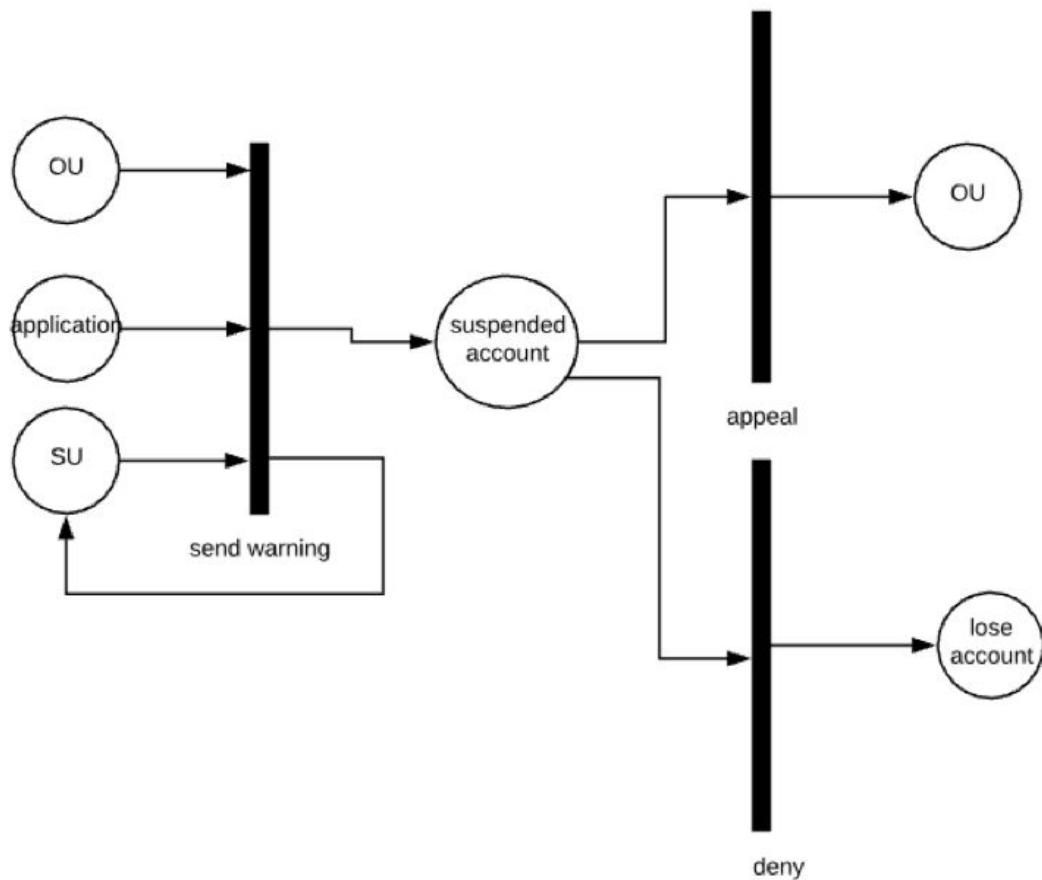
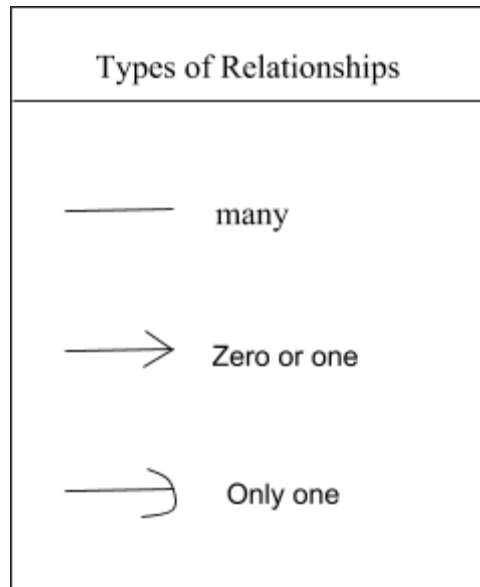


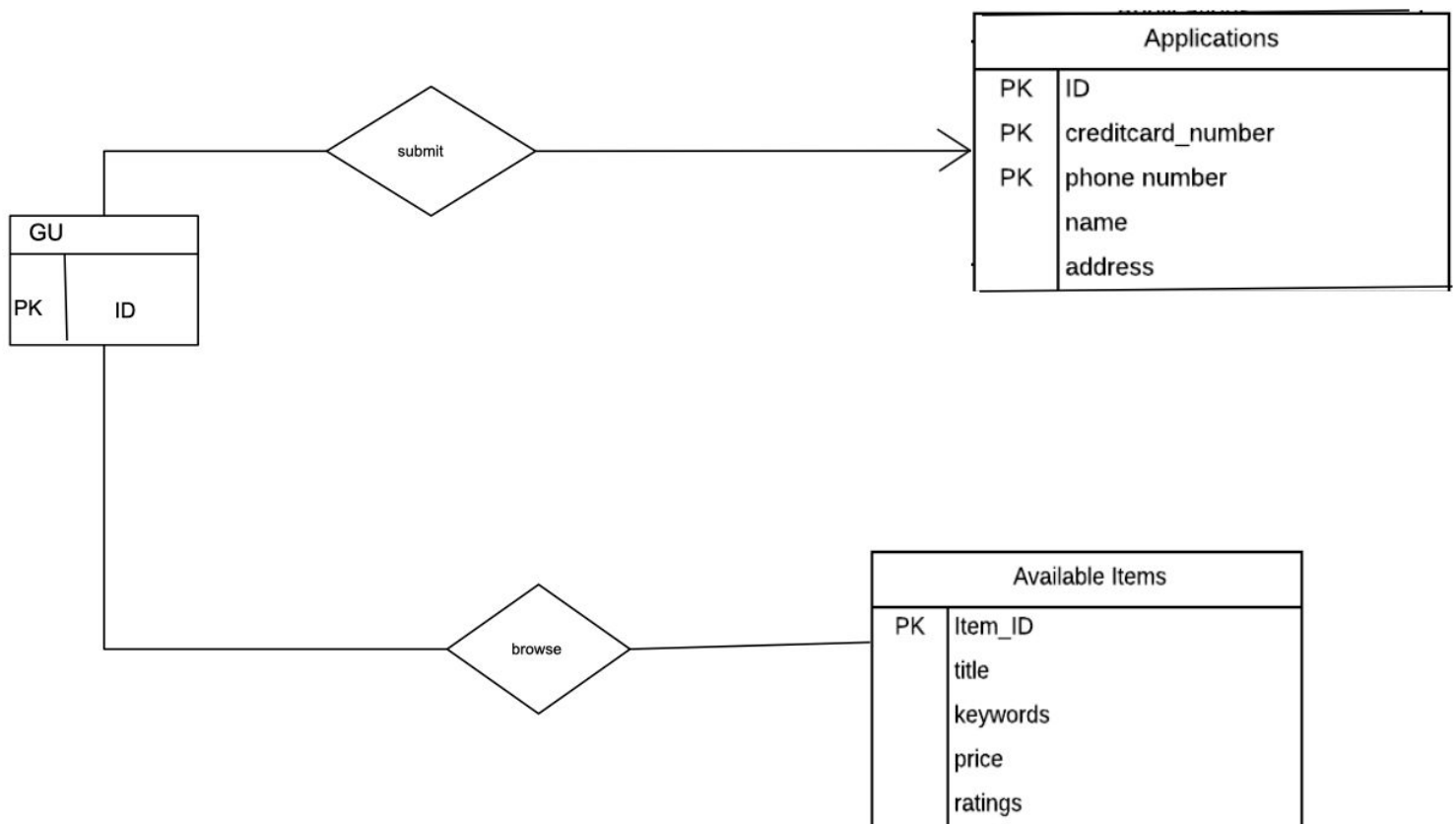
Figure 5 Petri net of OU suspension

E-R Diagrams

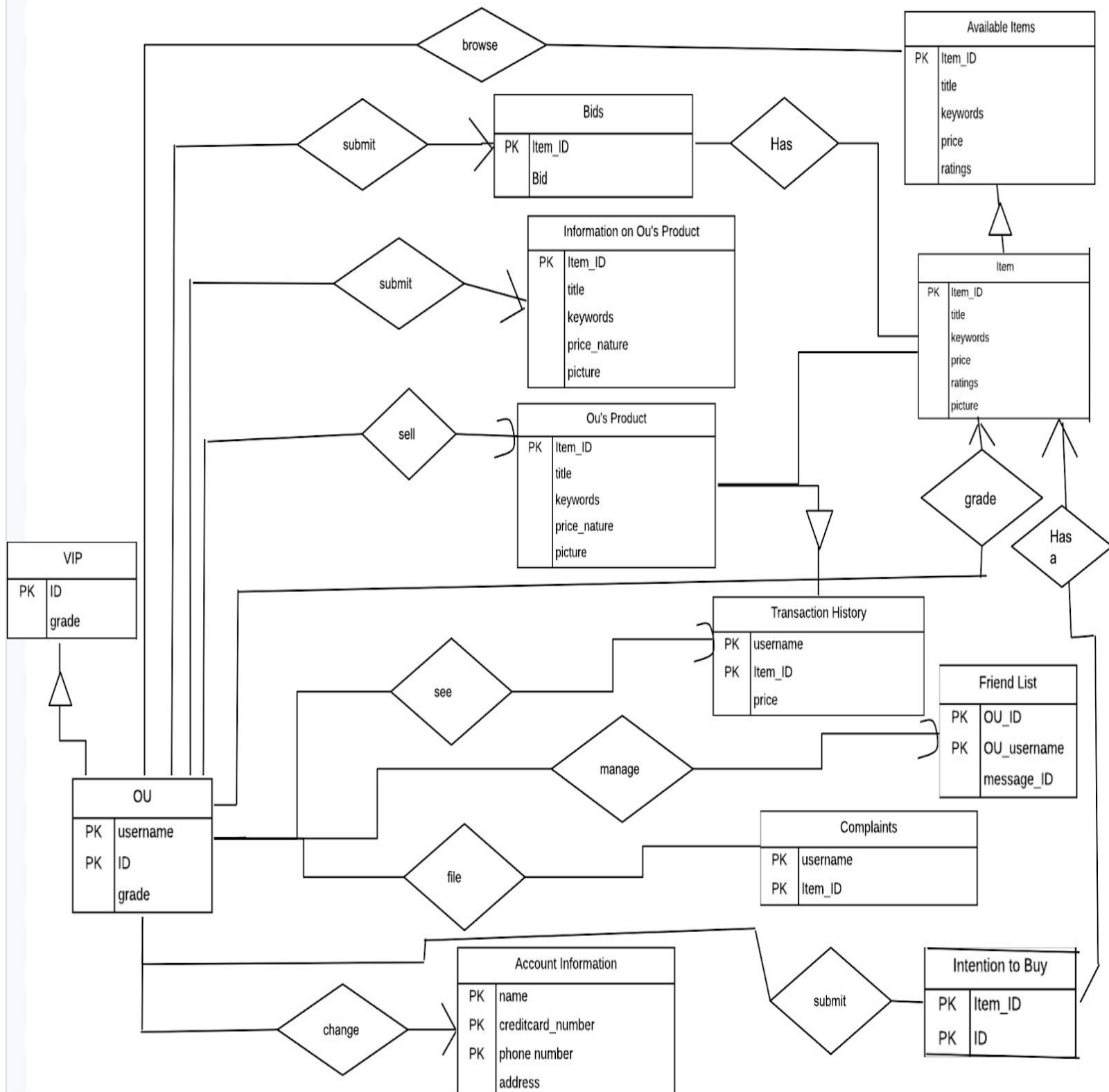
This section contains the E-R diagrams for the entire system. Since there are three types of users, there is an E-R diagram for each user to give a clear insight of how the overall relationships of the entities would be stored in a database for the eBusiness platform. Below are the E-R diagrams for guest user, ordinary user, and super user.



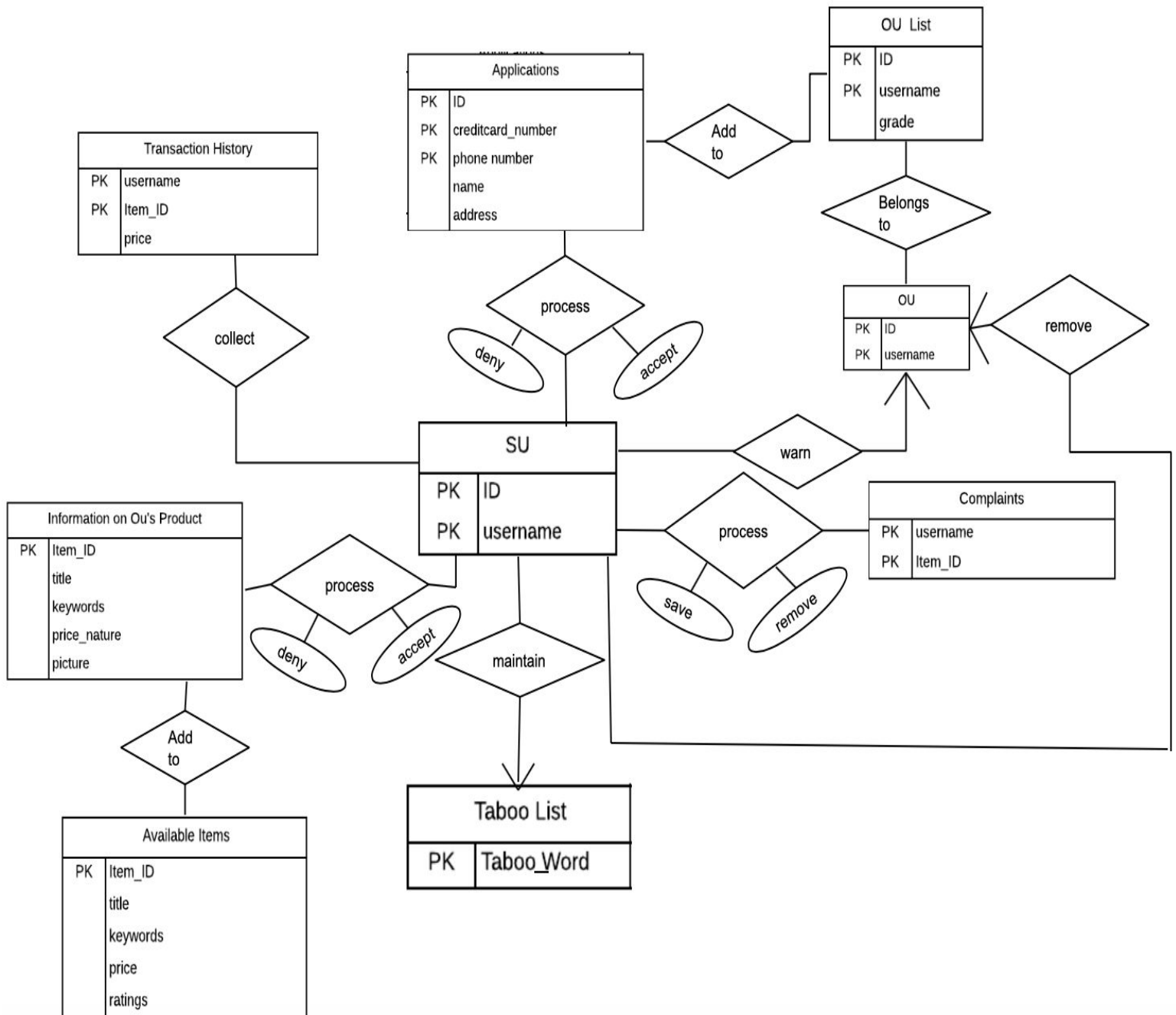
Guest User



Ordinary User



Super User



Detailed Design

This section includes the pseudo-code for the primary methods of this system. The pseudo-code gives an insight of the main functionalities of the system and the kind of input and output for each method.

Class to initialize new Application for guest to apply to become an ordinary user.

Class Application{

```
    Private Long id;  
    Private String name;  
    Private String address;  
    Private String phone_number;  
    Private String credit_card;  
    Private String password;
```

```
    Public Application(Long Nid, String Nname, String Naddress, String Nphone_number,  
String Ncredit_card)
```

```
    {  
        setID(Nid);  
        setName(Nname);  
        setAddress(Naddress);  
        setPhone_number(Nphone_number);  
        setCredit_card(Ncredit_card);  
        setPassword(Nid);  
    }    //constructor
```

```
    Public Long getID(){  
        Return id;  
    }
```

```
    Public String getName(){  
        Return name;  
    }
```

```
    Public String getAddress(){  
        Return address;  
    }
```

```
    Public String getPhoneNumber(){  
        Return phone_number;  
    }
```

```

Public String getCreditCard(){
    Return credit_card;
}

Public void setID(long newID){
    if (CheckValid(newID))
        this.id=newID;
    print("please enter a valid id")
}
Public void setName(String newName){
    if (CheckValid(newName))
        this.name=newName;
    print("please enter a valid name")

}
Public void setAddress(String newAddress){
    if (CheckValid(newAddress))
        this.address=newAddress;
    print("please enter a valid address")

}
Public void setPhoneNumber(String newPhoneNumber){
    if (CheckValid(newAddress))
        this.phonenumber=newPhoneNumber
    print("please enter a valid phone number")

}
Public void setCreditCard(String newCreditCard){
    if (CheckValid(newCreditcard))
        this.creditcard=newCreditCard;
    print("please enter a valid credit card number")

}
}

```

Class used to initialize a new product.

```

Class New_Item_Info{
    Private String title;
    Private String key_word;
}

```

```

Private int price
Public New_Item_Info(String Ntitle, String Nkey_word, int Nprice)
{
    setTitle
    setKeyword
    setNprice
}

Public String getTitle(){
    Return title;
}
Public String getKey_Word(){
    Return key_word;
}
Public String getPrice(){
    Return price;
}
Public void setTitle(String newTitle){
    this.title=newTitle;
}
Public void setKey_Word(String newKey_Word){
    this.key_word=newKey_Word;
}
Public void setPrice(String newPrice){
    this.price=newPrice;
}
}

```

Guest user class where they could browse for items and apply to become an ordinary user.

```

Class Account_gu extends Application{
    //this will only have the browse method
    Browse(title){
        List of products
    }
    Browse(keyword){
        List of products
    }
    Browse(price){
        List of products
    }
}

```

```

    }
}

```

Ordinary User class where they can buy, bid, sell, submit new information on new item, complain and grade. This class also has a method for the ordinary user's average of purchases.

Class Account_ou extends Account_gu{

```

    Private buy_array
    Private sell_array
    Private transaction_history
    Private int grade =0
    buy(item) {
        Remove item from product list
        Add item to transaction history
        Remove item from seller's array
    }

    bid(item){
        assert(item.price!=fixed_price) { //to make sure it's not a fixed price
            Append the bid to the seller's bid list
        }
    }
    sell(item){
        assert(item.sup_pp) {
            Append item to seller's array
            Append item to product list
        }
    }
    //information_newItem(item){

    new_item(item){
        assert(SU_approved){
            Append item to available items
        }
    }
    avg_buy(){
        Sum up average of buying
    }
    avg_grades(grade, new_grade){
        Function to average grade
        Update grade
    }
}

```

```

    }
    //File complaints
}

```

Super User's class to maintain taboo list, process items, process applications, and warn.

```

Class account_su {
    Private blocked_users_list
    Private Taboo_list

    Remove_User(user_id){
        Function to remove user}
    Add_User(Application newUser){
        Check if user is on blocked list
        Make account
    }

    Item_verification(item,user_id){
        if(Not_a_taboo)
            approve
        Else
            denied
    }

    SU_approved(user){
        if(Not_a_Block_User)
            approve
        Else
            denied
    }

    Promote(user){
        Check if user rating average is >=4
        Make new VIP
        Else if check avg_buy(user) > 500
        Make new VIP
    }
    SU_warn(){
        Print warning message }
}

```


System Screens

This section includes the system screens to demonstrate the major GUI screens of the eBusiness platform.

LOGIN

USERNAME

PASSWORD

Login

Guest

New to eBusiness?

Register Now

This screen is used for the user login. The ordinary user can just login with credentials. If the user is a guest, there is a button for “guest” and the guest can even register to become an ordinary user.

Registration

Name

Valid Credit Card Number

Address

Phone Number

User ID

Register

After clicking on the “Register” button, the user will be directed to the registration page where the information will be submitted to the super user.

USER

View Transaction History

My Product List

Friend List

New Items

My Account

After logging in, the ordinary user would be directed to their respective page.

SUPER USER LOGIN

USERNAME

PASSWORD

Login

This screen is used for the Super User login. Super User's would have a separate login page to login with their credentials.

Super User

Available Items

Applications

New Item Information

Complaints

Users

Transaction Statistics

Taboo List

VIP List

After logging in, the super user will be directed to the page where the super user would be able to select the task of their choice.

Github Repository:

https://github.com/xchen008/CS322_FinalProject

Team Meeting Minutes:

Around 400 minutes