

Final Report of the Project for CSE471

Project Title:
Online integrated system for local Super shops

Group No: 08
Group members:

Name	ID
Intiajul Alam Shah	19301185
Tasnimul Hassan	19341001
Taskin Mohammad Mubasshir	19201114

Introduction

The concept of integrating the local supershops is to make it easier for users to find everything all together. People now tend to buy groceries, foods, clothes and other things online. But they have to browse through different websites of different shops. Sometimes the shop owners do not update their listings as they are busy with offline sales and management. Also a lot of time gets wasted finding different products and checking the prices and ratings. So, we initiated a system to integrate all of them in one platform so that people can see the same products of different shops and benchmarking the prices and ratings. This will not only benefit the shop owners to increase their sales but also make it easier for the people to find products easily. This will also save a lot of time for the buyers.

Motivation

In recent years the buying culture has been improving a lot and the people are engaging with online shopping rather than offline. Also the concept of grocery shopping has been changed as many super shops came into the market. It is often hectic for buyers to shop and find products with affordable prices. Also there is a lack of variation in item servicing. So, an integration of all local super shops would be a 360 degree solution for all of us. This is the source of our passion to work on this project. Our key target with this website is to ensure that people could buy daily necessities easily with trust. This website will also make it easier for shop owners to add more sales and revenue annually. And this initiative will make more jobs for the unemployed people in our country as well as the rural sellers can get the deserved payment with their goods. So these are our motivations to proceed with this idea.

Project Usage

This project will bring every local shop into one place, this will help people to find all products in the same category with one click. They can compare the prices and view the verified ratings given by other people. This website will be helpful to research current popular products and which people are buying more. It will also save people's time because they will not have to do the daily shopping. Also, with every purchase buyers will get rewards points which will be used to buy things later, so it will save their money. This system will offer seasonal food items which are hard to find sometimes, so people will get it easily through our platform. It will also be a platform for donation in

emergency situations, so people can donate with their trusted brands. As the ratings will be verified by a dedicated team it will be easy for people to trust more in buying. As a whole this system will bring ease in people's life with shopping.

SYSTEM REQUEST:

1. Project Sponsor:

Intiajul Alam Shah, CEO of Bullet software company, Tasnimul Hasan, CFO of ABC tech, Taskin Mohammad Mobassir, Project head of Sonic Digital.

2. Business Need:

The primary goal for this system is to make an easier way to find local supershops in the current area. This system will show the list of super shops on the basis of competitive price, discounts, crowd and customer's ratings. Shop owners can have their own profile and their campaigns. Depending on certain information their rankings and selection will be done. Furthermore, more offers and exclusive deals will be shared from the platform authority for the customers and shop owners. One of the purposes of this system is to save people's valuable time and energy by sorting the best suited super shops and showing them the lists.

3. Business Requirements:

When people need to buy something online they have to use this platform and follow the necessary steps.

Here, Users can sign up and have their own accounts. They will be able to sign up in different categories as shop owners, admins and buyers. Shop owners can add their products, set prices, discounts and confirm the orders, also they can provide special service in seasonal products. Furthermore, they will be able to communicate with buyers and the admin team.

Admin can manage all the information of customers, shop owners and the platform. They can provide a live help desk 24/7 and run donation campaigns for special events.

Buyers can choose their preferable products, add them to carts, pay online or cash on delivery and get delivery outside the country. They can get the best deals from the different shop owners

and also give reviews and ratings after buying, also they can get their own wallet with reward points which they can spend on buying later on.

4. Business value:

Tangible values :

- The system will charge 2%-5% of profit on the supershops based on the product which will approximately create revenue of minimum BDT 1000000-3000000 per year.
- New shops promotion will generate a minimum BDT 100000-200000 per year which will be 3%-10% of the total revenue.
- The fair competition between the super shops will help to reduce the price of a certain product by 1%-5% which will save at least BDT 7000-10000 of the consumers in total on overall shopping yearly.
- A new delivery system can be developed worth approximately BDT 1800000-2000000 which will generate BDT 200000-300000 profit per year.
- Sponsorships might generate minimum BDT 1000000-5000000 which will increase the business worth to 100%-500%.

Intangible values:

- The system will generate comparison based search results of products, so it will be appreciated by users which will boost up net revenue per year.
- “All the super shops in one place” - this slogan will attract the users and eventually increase the concurrent users.
- User's satisfaction would be the first priority which will increase the conviction and the net revenue eventually.
- User's reviews and ratings will be verified by a dedicated team which will satisfy the sellers and increase promotional revenue.
- The food donation section will create a social value which will attract more sponsorship and fundings.
- As an integrated system monopoly will not be allowed to attract more sellers.

5. Special Issues or Constraints:

- Review team's failure in reviewing the review can decrease the rank of a shop.
- Unethical moves by a delivery person can create disgrace among the users.

- There may be a maintenance break anytime.
- There may be price manipulation in different products.
- Price hikes can affect the whole buyer-seller environment in the system.

Requirement analysis:

Functional requirements:

Admin account:

1. An admin has to register in order to login into the system.He needs to provide necessary data to register for the system.
2. An admin can update, delete or add any information regarding customer or shop owners as well as the platform itself.
3. There would be a group of admins who will be available for 24/7 and provide services to the customers or shop owners online.

Customer account:

1. A customer has to register in order to login into the system.He/she needs to provide necessary data to register for the system.
2. A customer can search for a product in the search box and the system will display the product according to their availability in the shops.
3. Customers can also search for products according to their brand or type (Such as:food, clothes, furniture,groceries etc.).
4. Customers can add products in the cart as well as in the wish list.
5. A customer can pay for the product online using different payment methods.Customers can also avail the cash on delivery Option.
6. Customers can give reviews of a product along with the shop.
7. A customer will get reward points based on his/her purchase,which they can use later while buying a product.
8. A customer can talk to the shop owner through a chat option.
9. Customers can also talk to the admin panel via chat option.

Shop owner account:

1. A shop owner has to register his/her shop in order to login into the system.He/she needs to provide necessary data to register for the system.
2. A shop owner can add a product ,set price and give a special discount.
3. Shop owners can confirm orders from the customer side.
4. Shop owners can talk to the customers as well as the admin team with the chat option.

Other functionalities:

1. There would be an option of donation in the system which will be controlled by the admin panel.
2. There would be a special section for promotion where the promotion of a shop or a brand or a product will be displayed.
3. There would be a dedicated page for seasonal items from where customers can purchase seasonal things according to their needs.

Non Functional Requirements:

Operational:

1. This system should run in all types of devices with the latest version of IOS and android.
2. The system will be operational in the last five versions of windows, linux and macintosh.

Performance:

1. The system should not take longer than 5 seconds to show any data based on the admin search.
2. Users should be able to see their real time updated data.
3. Each action taken by users should work within 3 seconds.
4. Login and signup errors should not take more than 3 seconds to pop up.

5. This system should hold a large number of simultaneous users, more than 200 thousand from 6AM to 10PM.

Security:

1. Shop owners and users' information should only be accessible by themselves.
2. The payment gateway should be verified and follow the gateway policy.
3. For each login one email will be used which will be accessed by admins only.
4. Two factor authentication system ensures the user's safety properly.
5. Password changing warning email will be sent to the user within 5 seconds and the data should be preserved.

Cultural and political:

1. The system will support the English language primarily.
2. This system will show one currency only which is BDT.
3. This system will not show any political agenda or slogans for any purpose.
4. Any icons or symbols will not be shown which might be offensive to certain communities and hurt the religious sentiment.

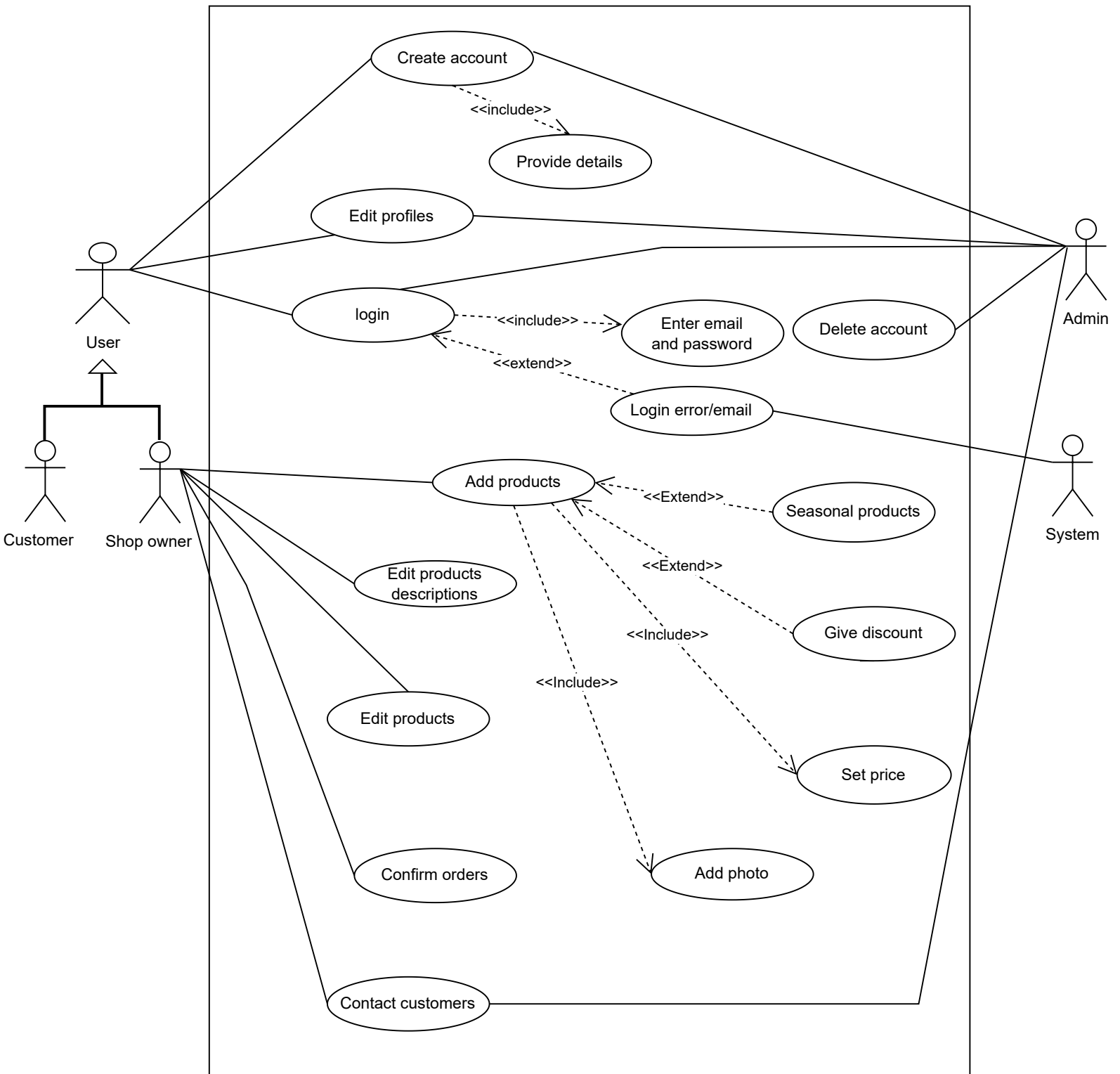
Maintainability:

1. In the release of the new version, an announcement will be given to users.
2. Emergency maintenance break should not exceed more than 30 minutes.

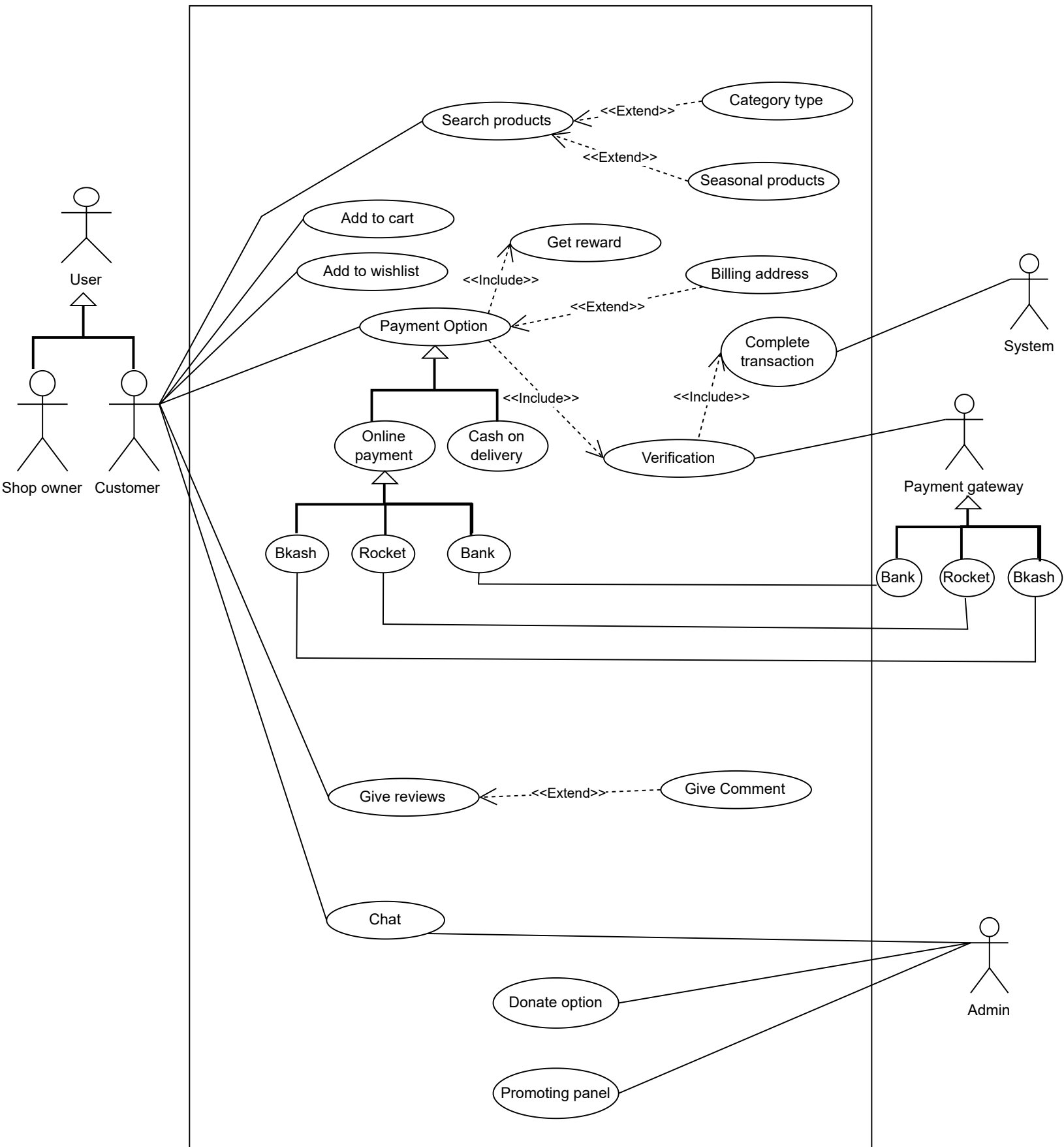
Usability:

1. A farm and fit size of fonts should be used.
2. There should not be use of different and deep colors but a simplistic and consistent color code.
3. An intuitive user interface and a responsive system will be made to make it easy to operate for users.
4. Admins will be able to check all the user and site information with ease and have access properly.

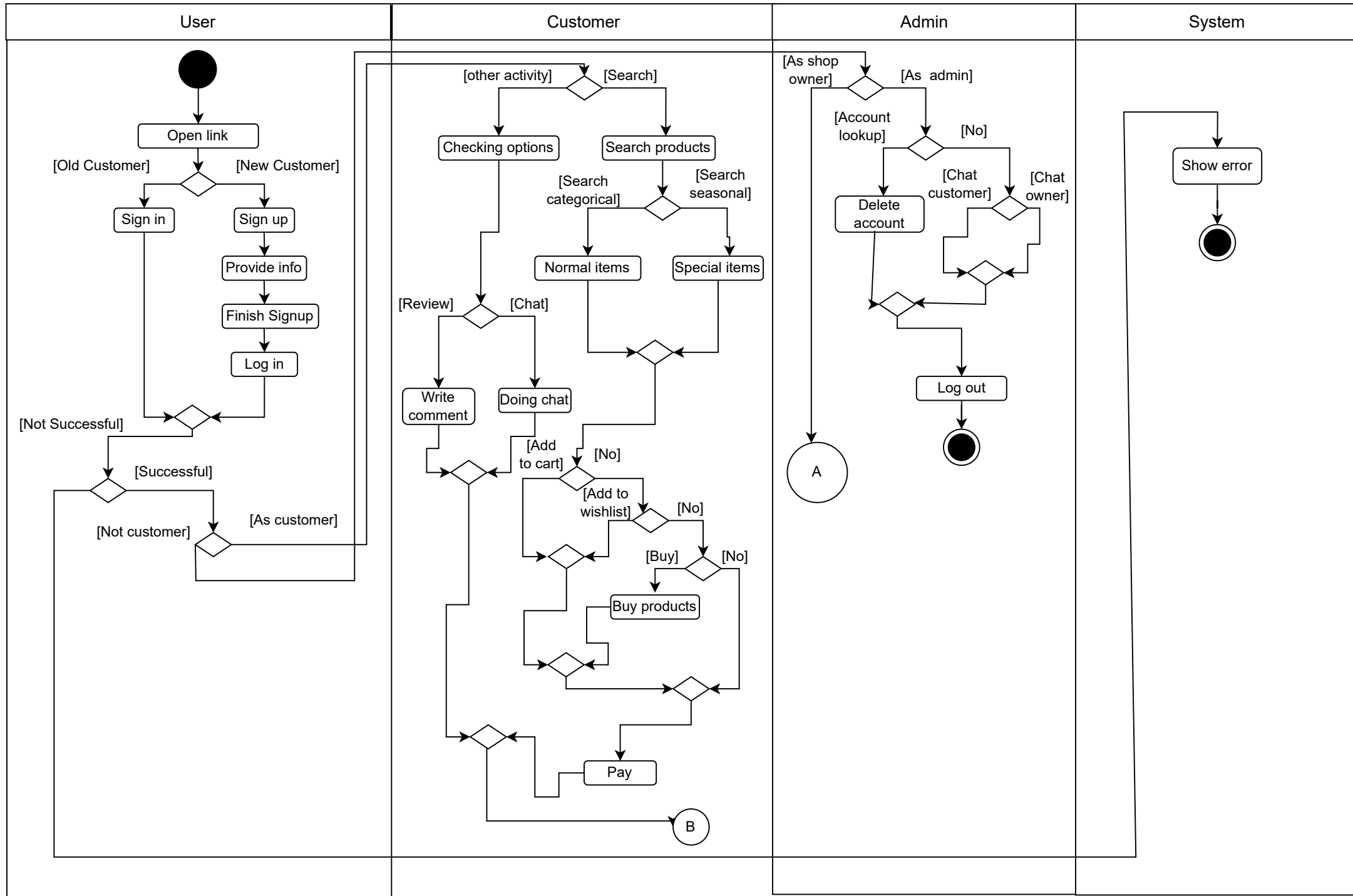
Online Integrated System for Local Shops



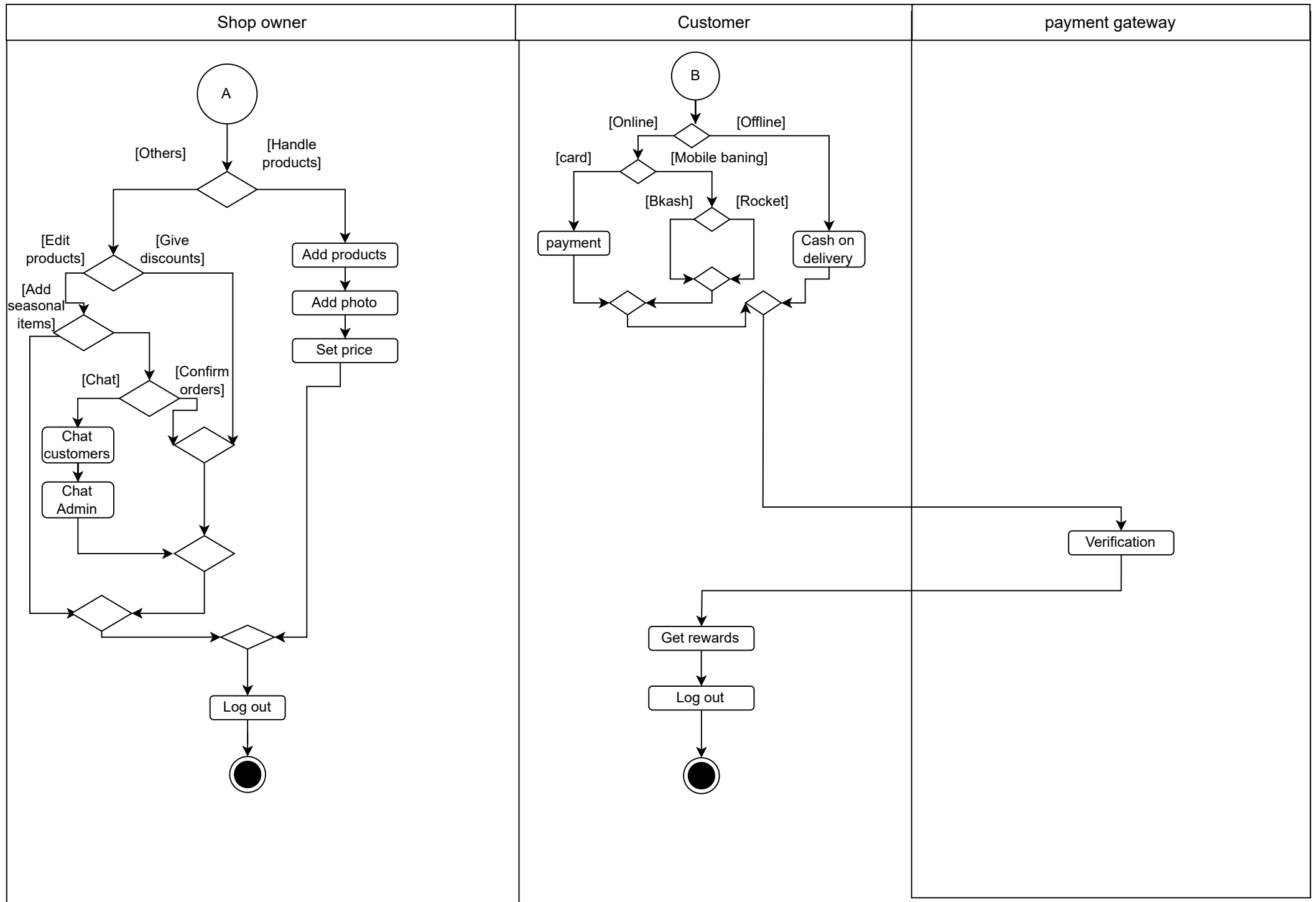
Online Integrated System for Local Shops



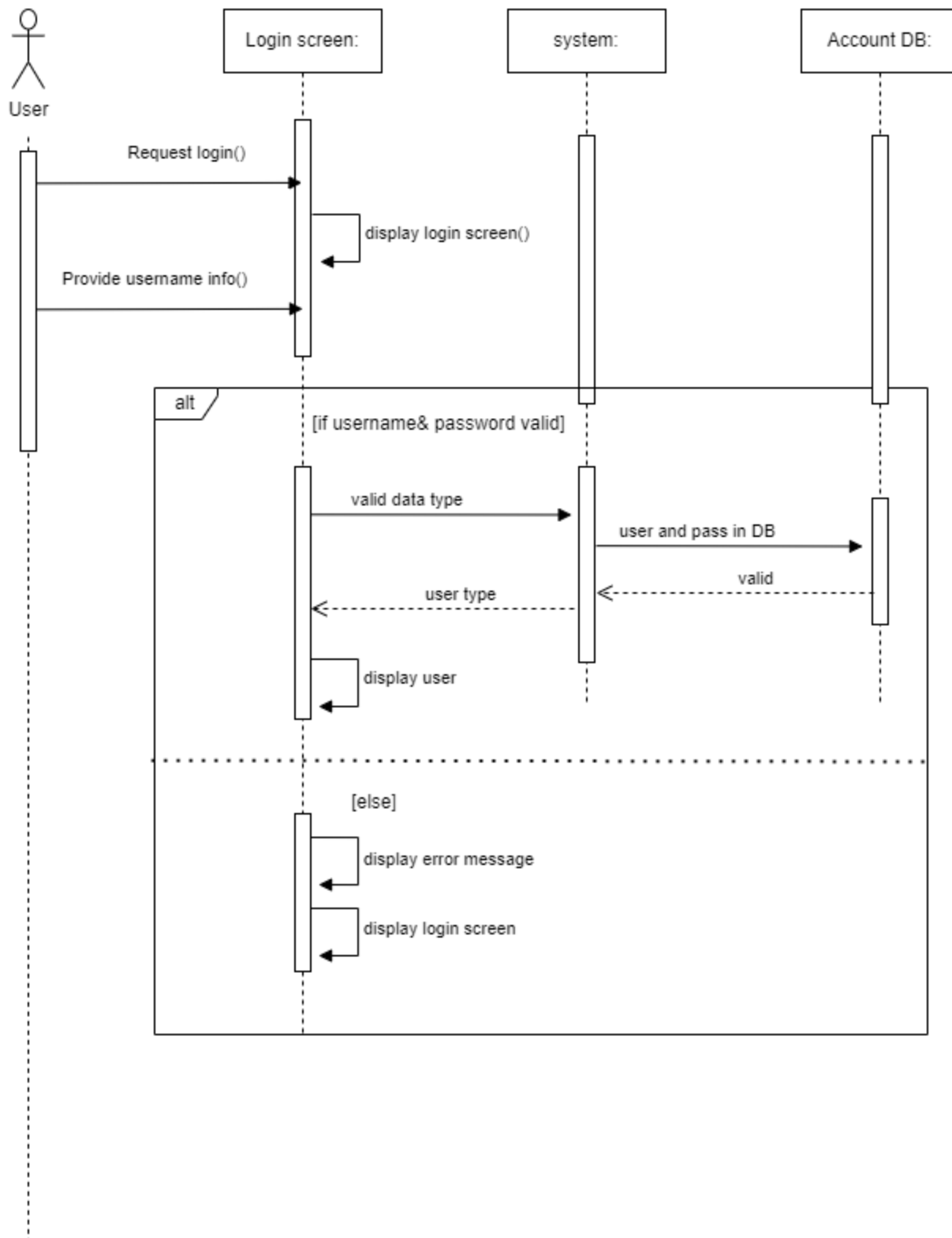
Activity diagram for Users and customers



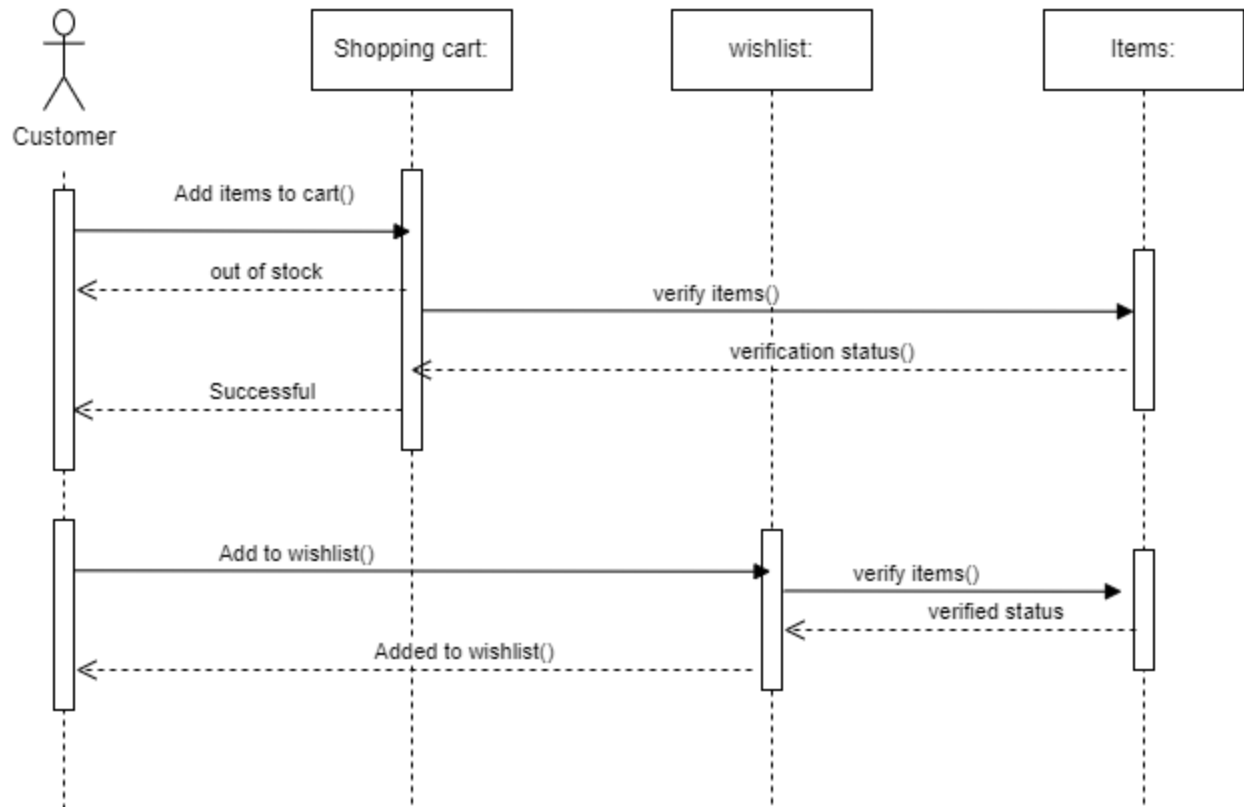
Activity diagram for shop owners



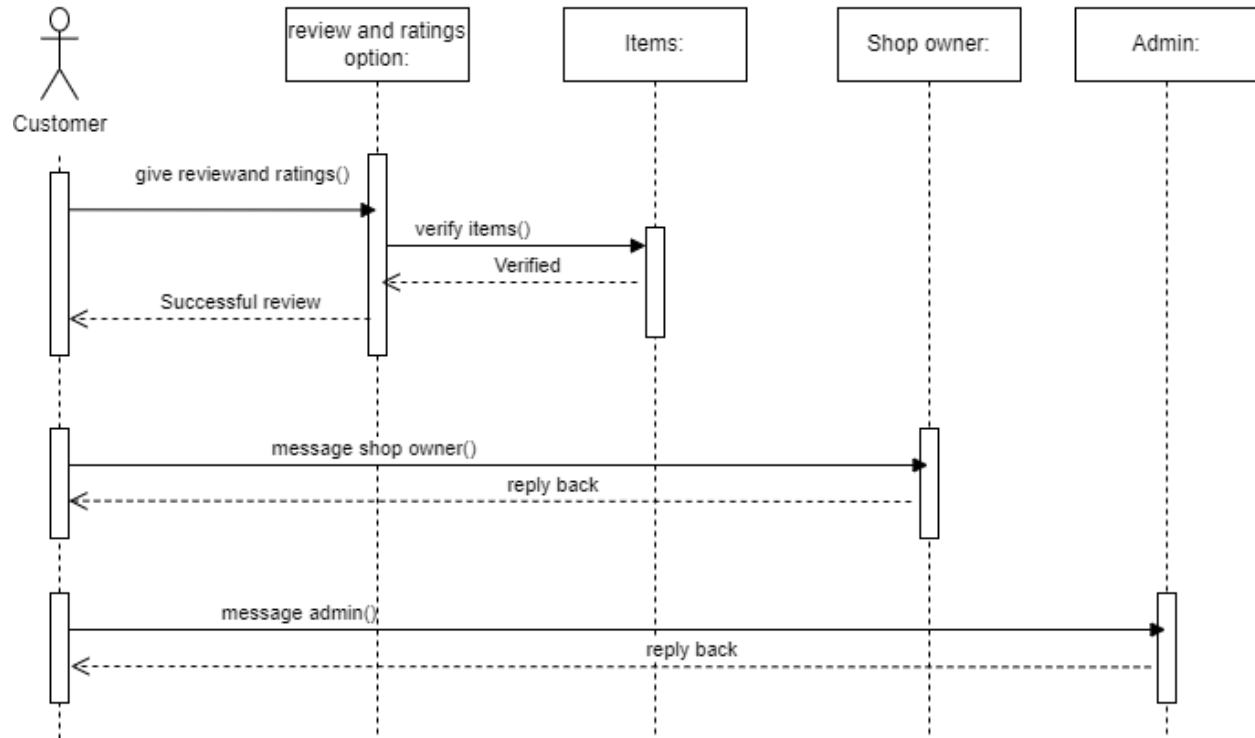
Sequence diagram for User's login



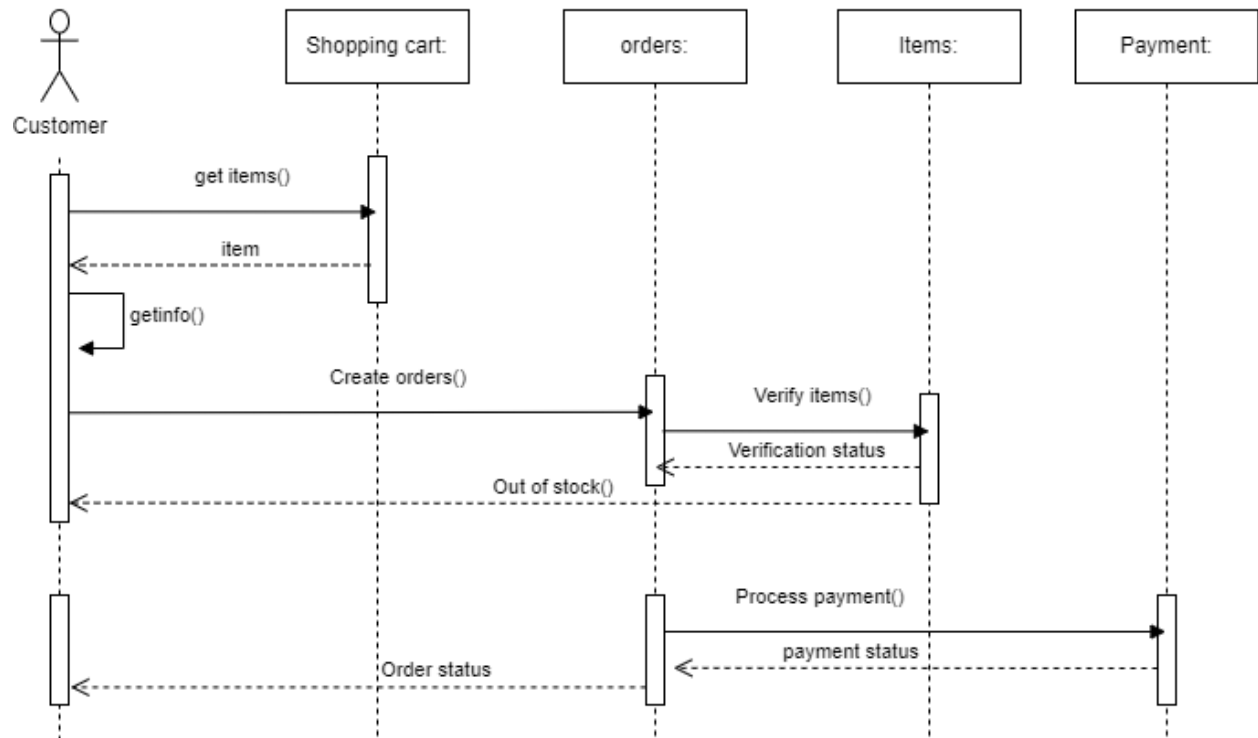
Sequence diagram for Customer(Add to cart)



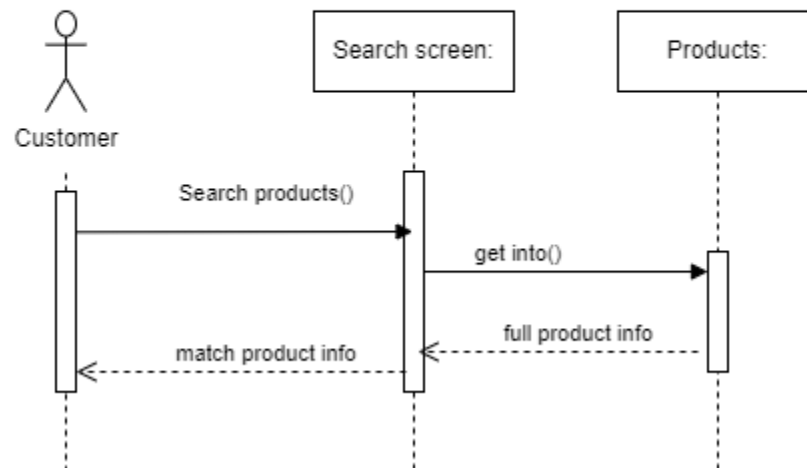
Sequence diagram for Customer (Review)



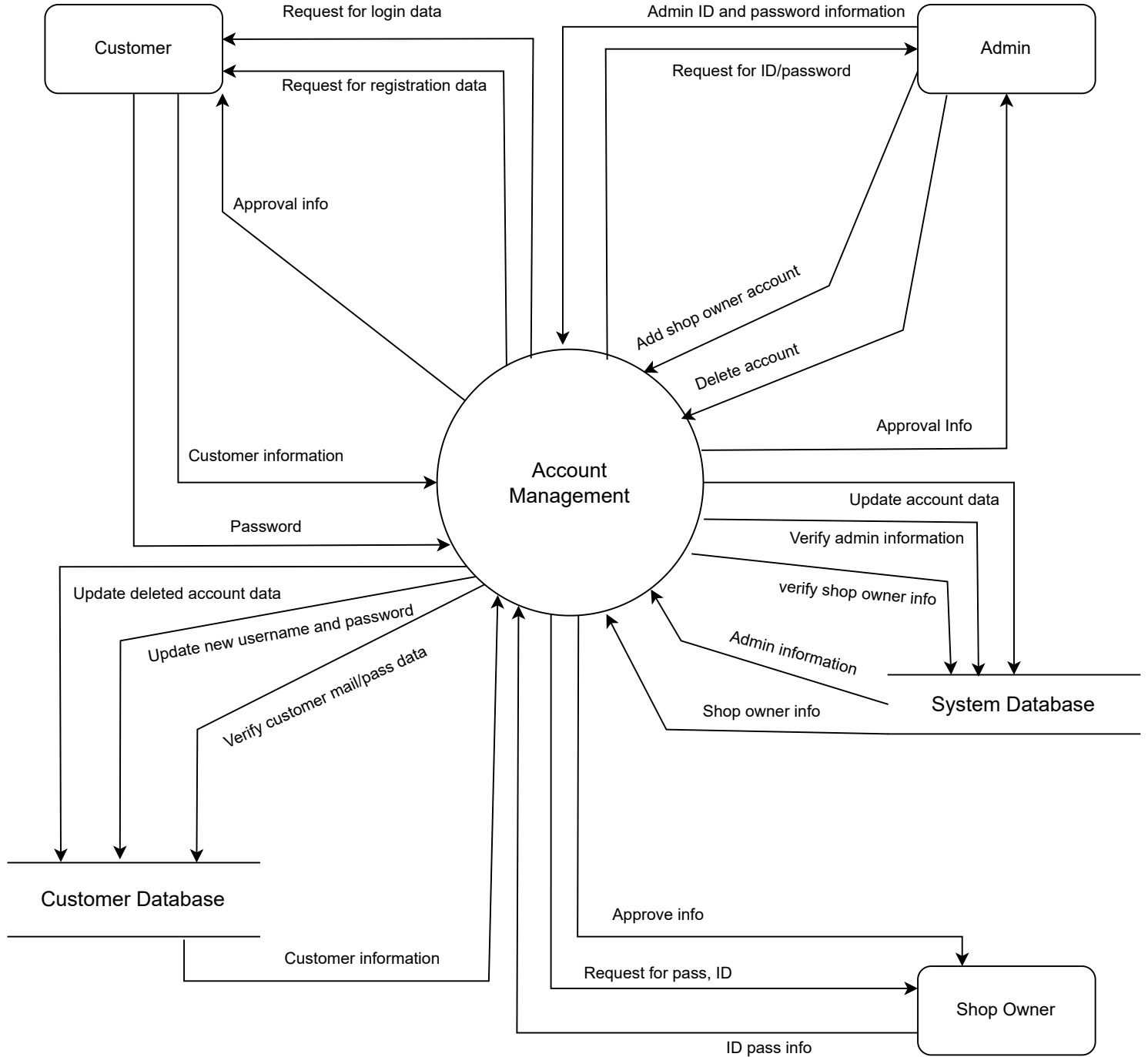
Sequence diagram for Customer (payment)



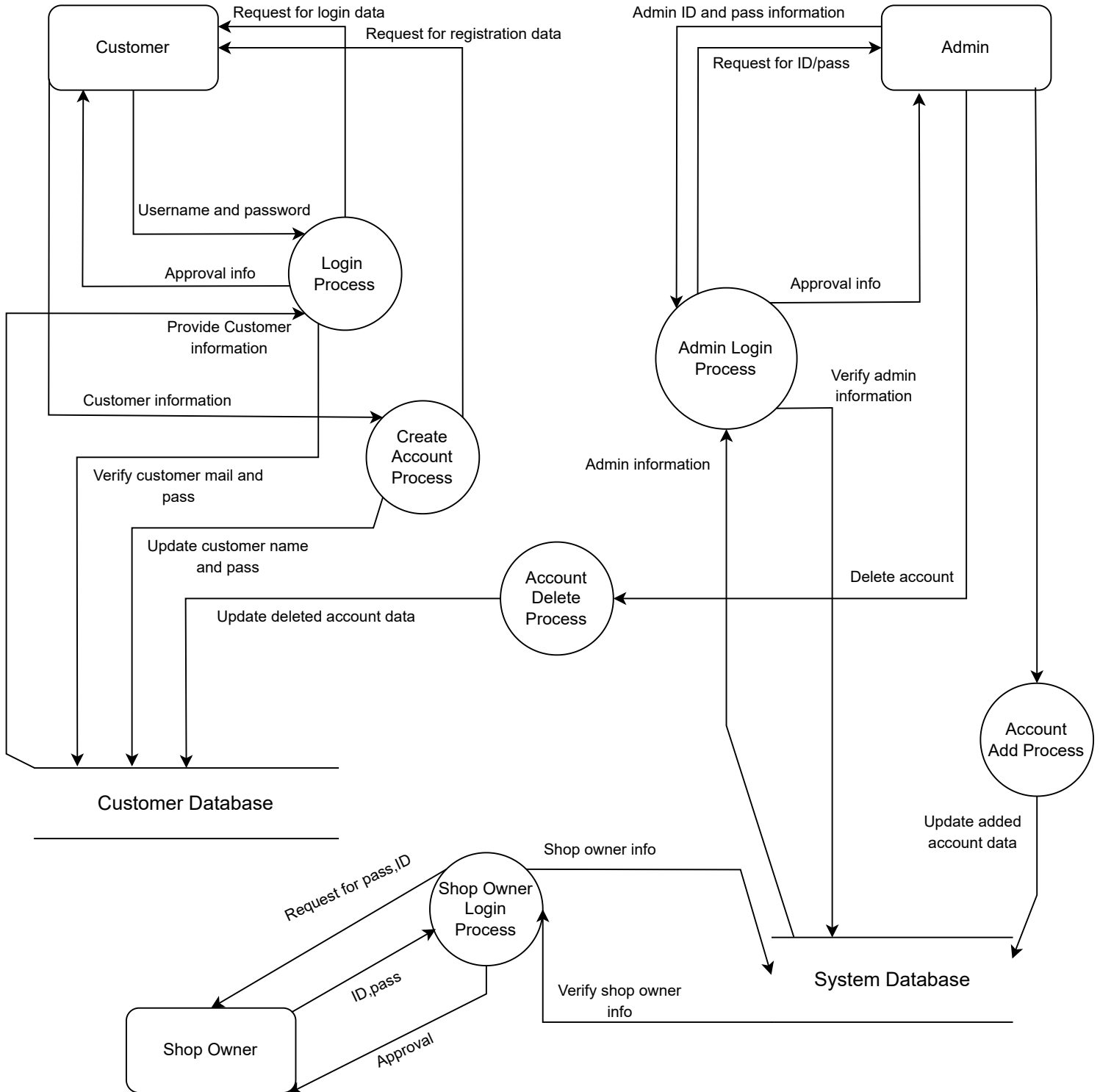
Sequence diagram for Customer (Search products)



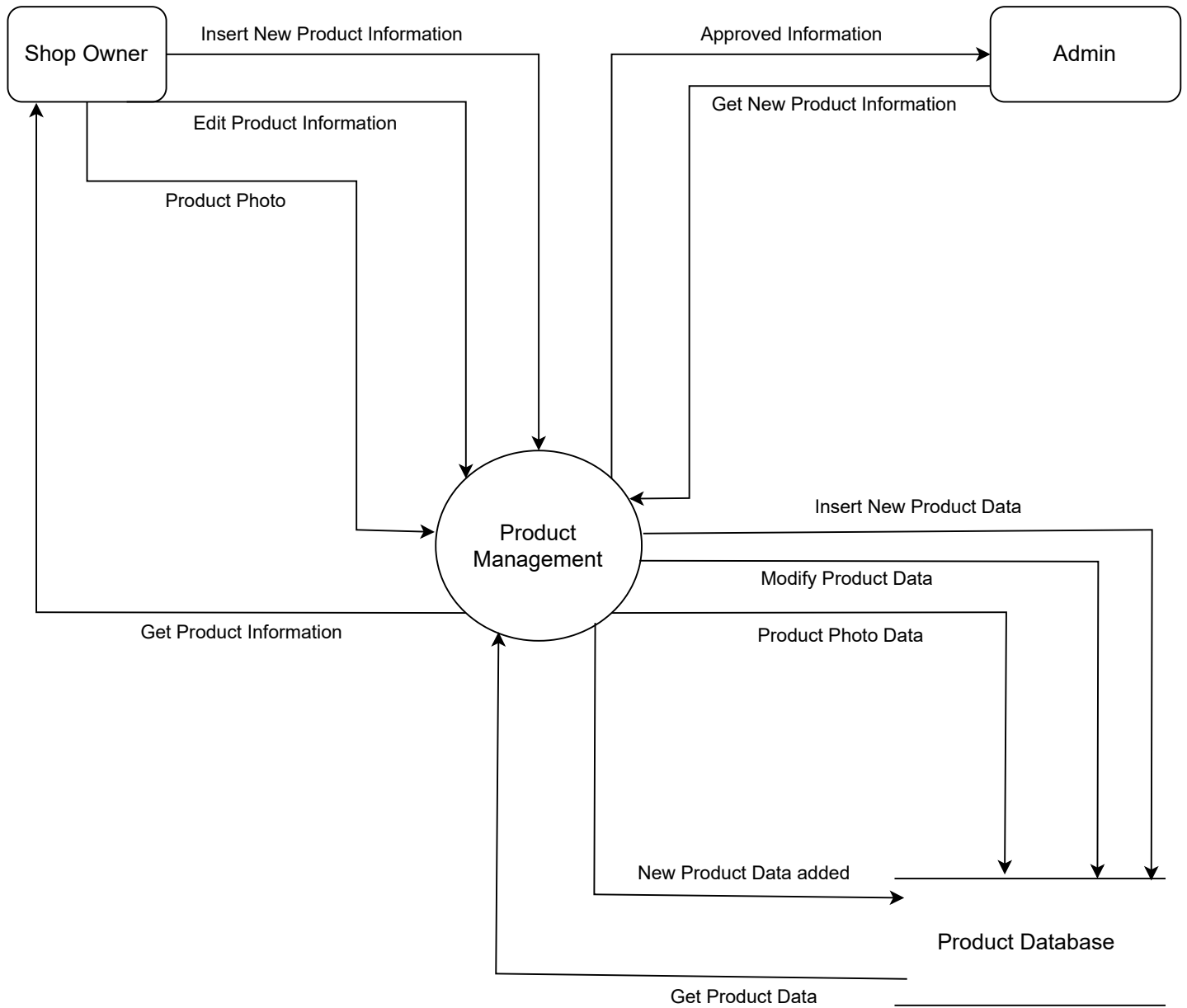
Level-0 Dataflow Diagram of Account Management



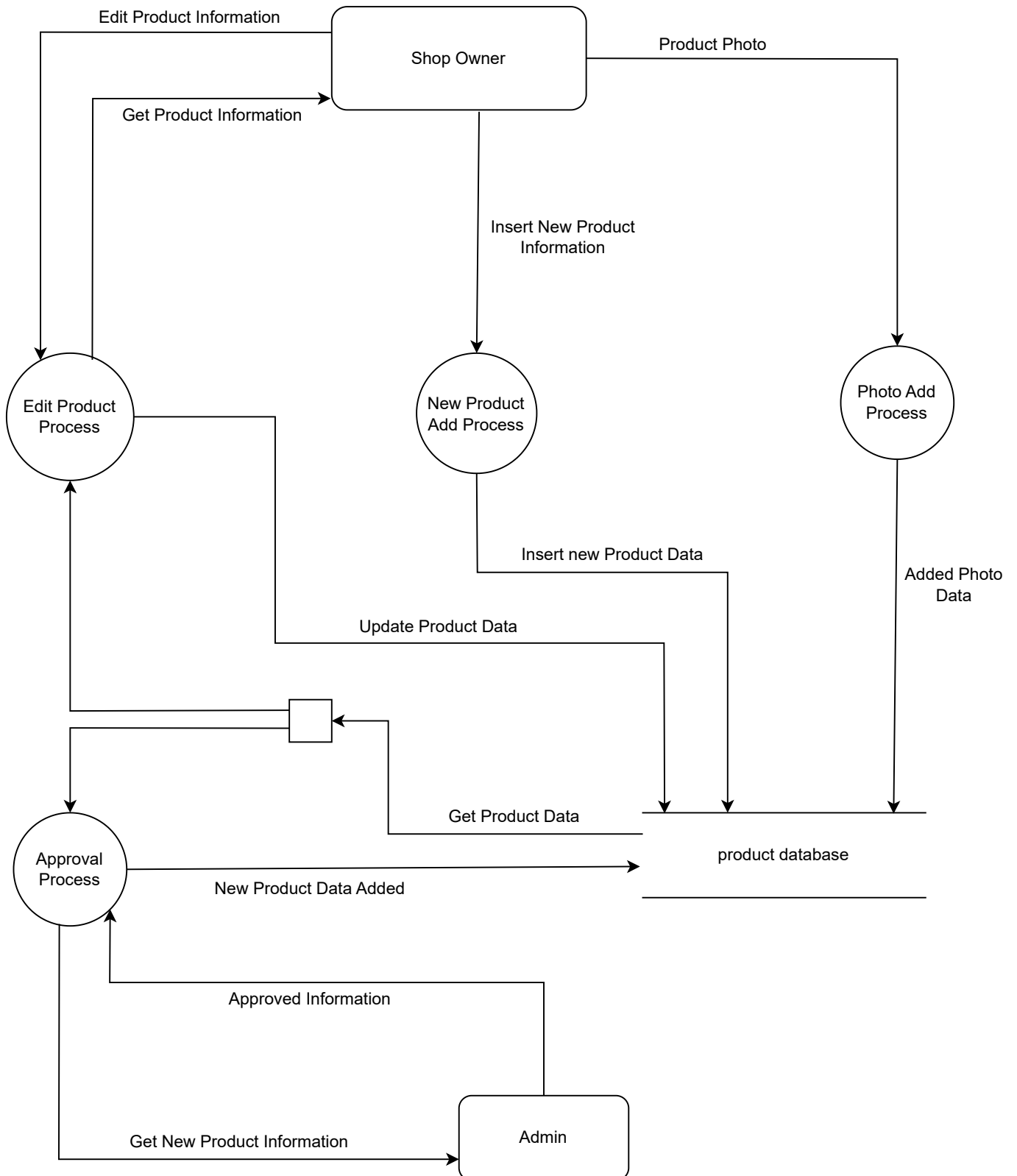
Level-1 Dataflow Diagram of Account Management



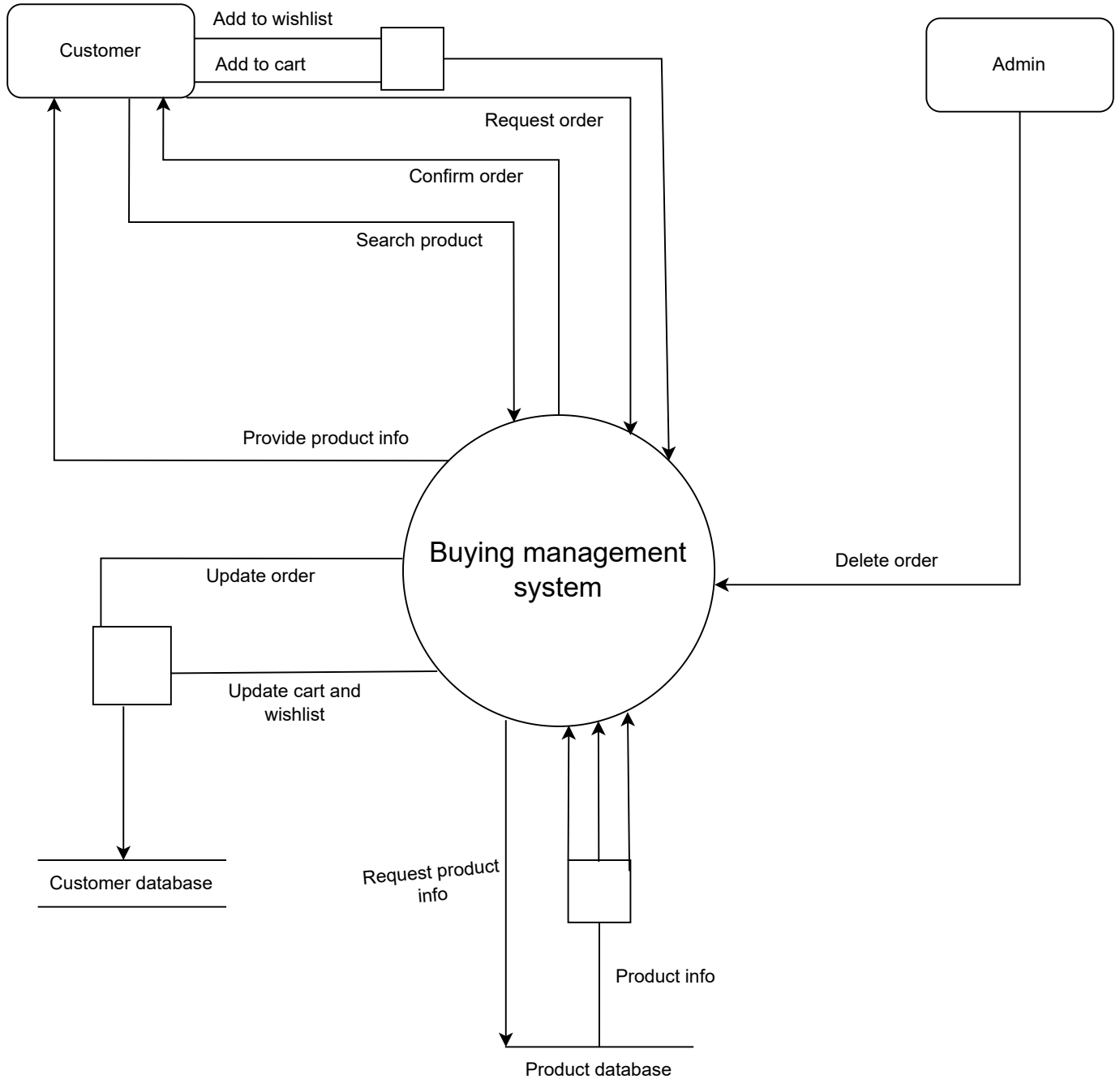
Level-0 Dataflow Diagram of Product Management



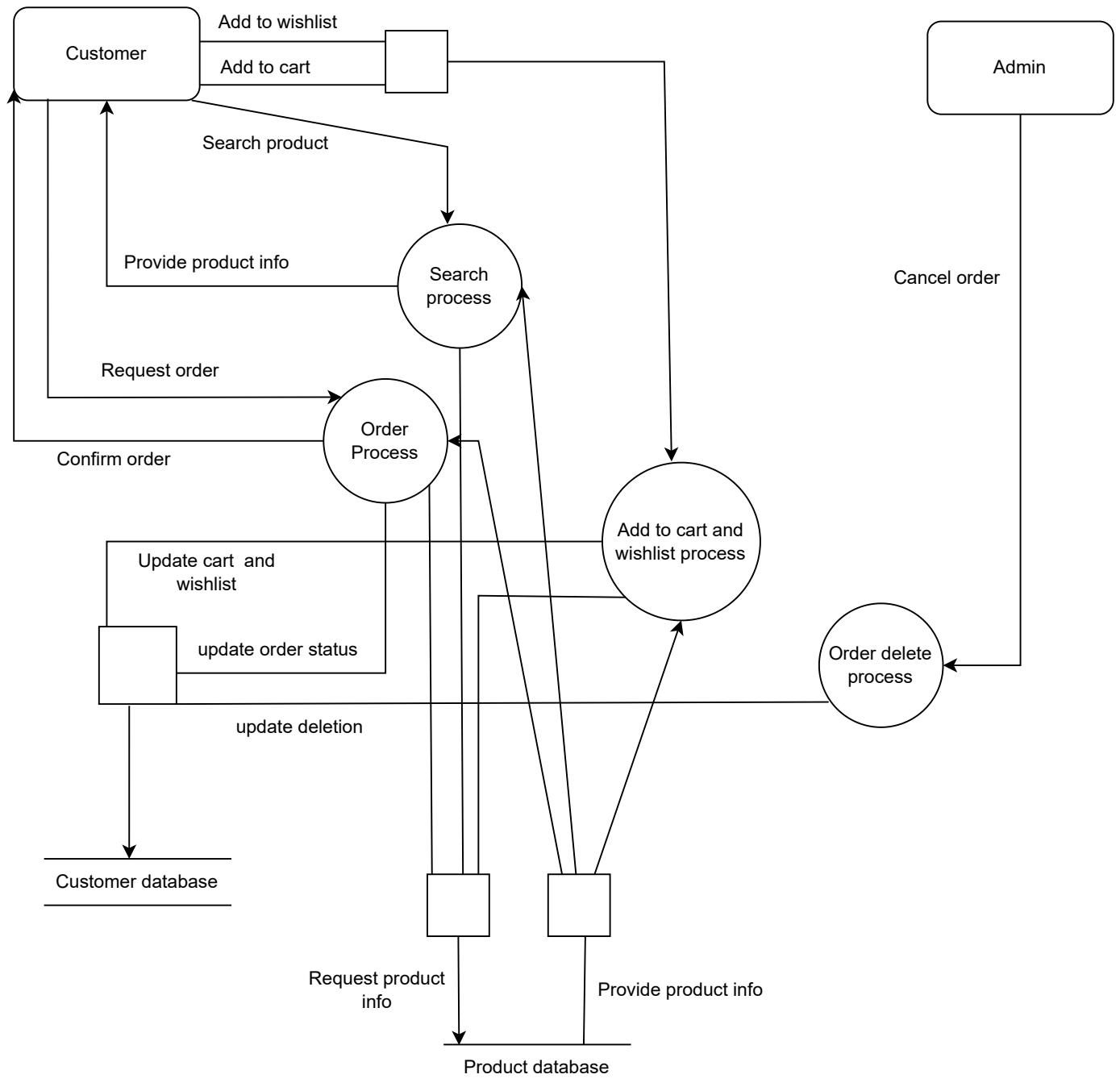
Level-1 Dataflow Diagram of Product Management



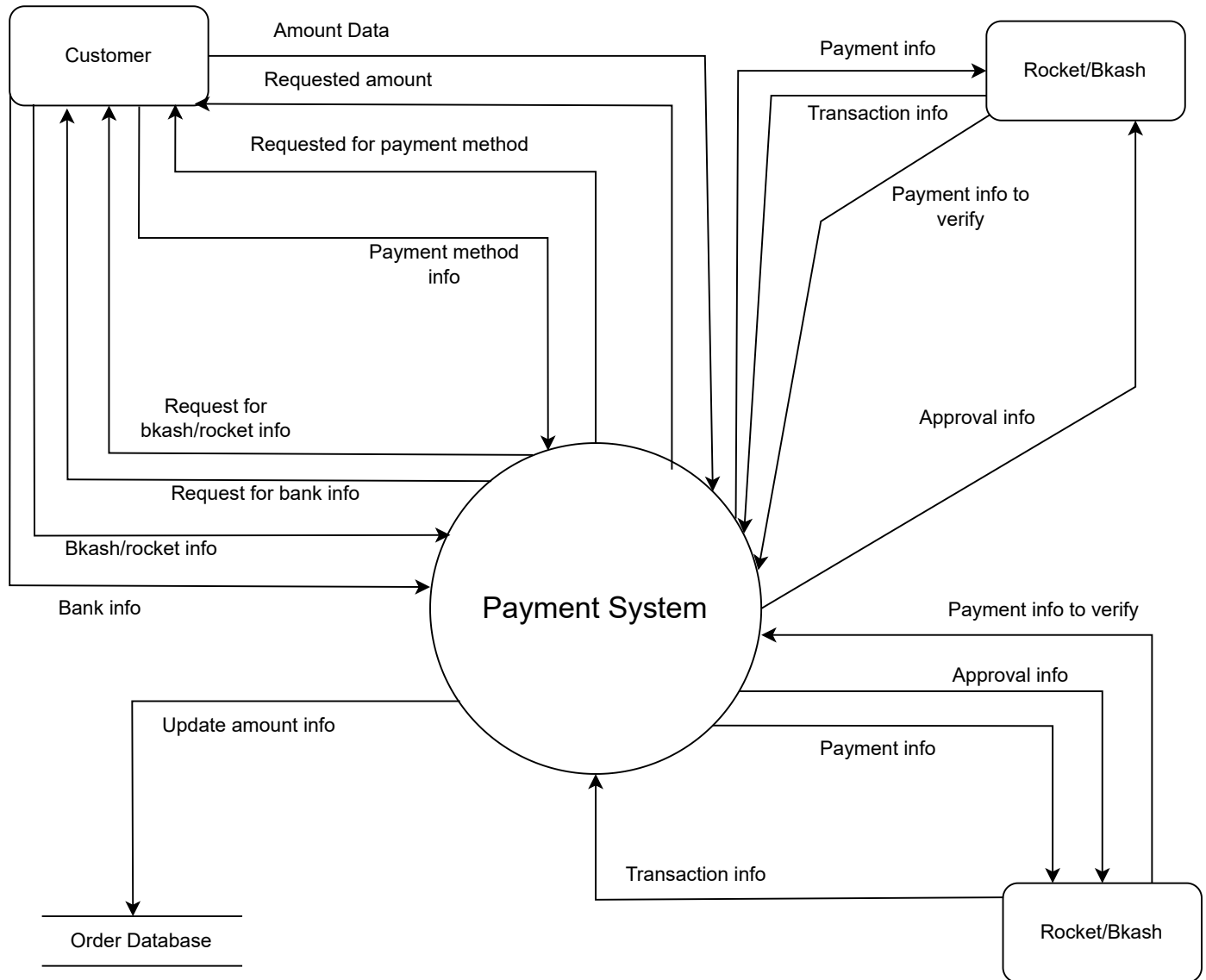
Level-0 Dataflow Diagram of Buying Management System



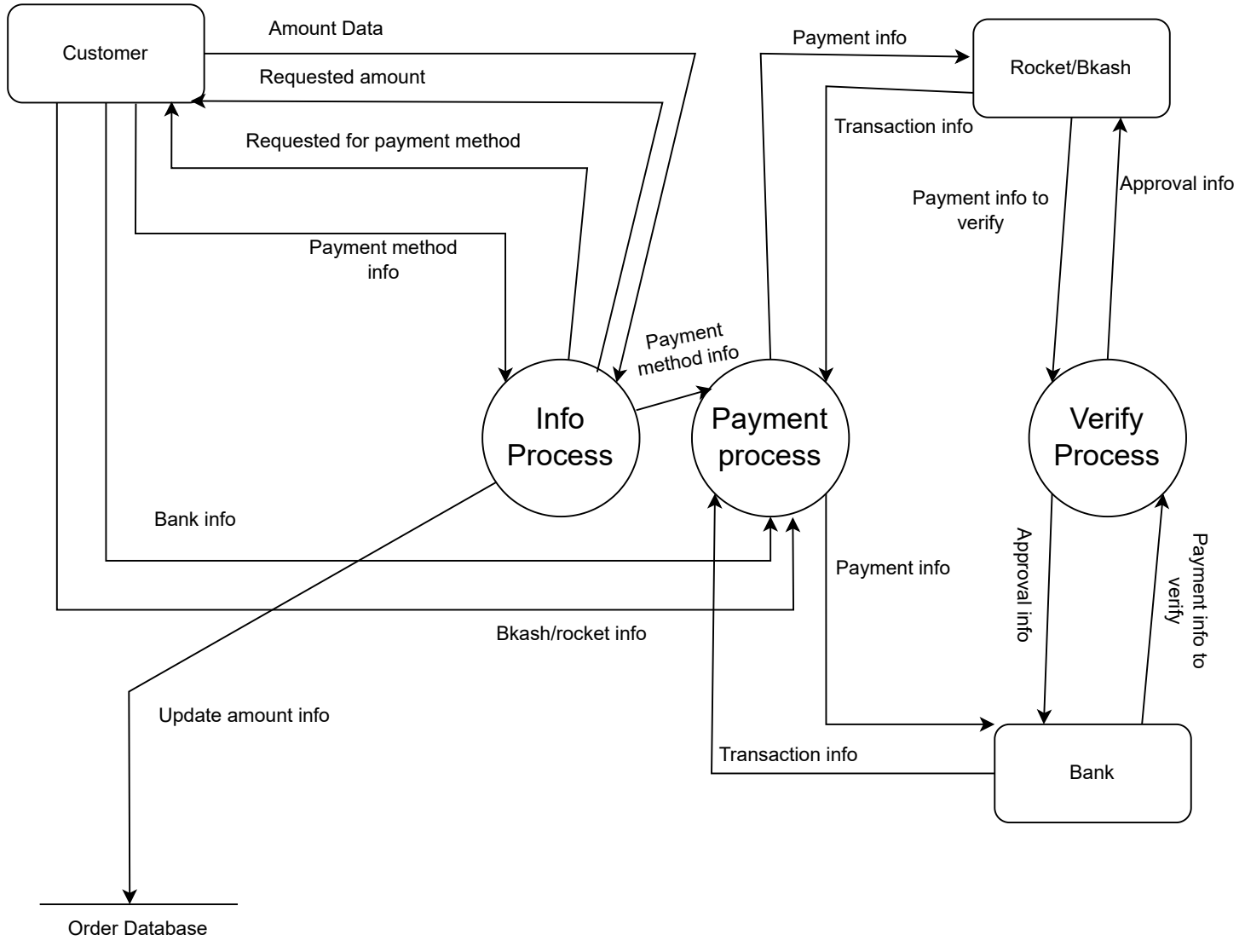
Level-1 Dataflow Diagram of Buying Management System



Level-0 Dataflow Diagram of Payment system



Level-1 Dataflow Diagram of Payment system



Conclusion

All the processes and models are done with the correct version. We tried our best to do the project and It is really amazing that it works well with the functionalities and requirements. We hope people will love using it and we can bring more features to make it more user friendly and useful for the people.