PET BOOK

Proposal Defense

Supervisor

Mr. Usman Ghous

Co-Supervisor

Dr Umar Aftab

Team Members

19F-0170 Danish Ahmad

19F-0228 Muhammad Zain

19F-0328 Muhammad Umar

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1. Introduction

Animals are one of the most common and important parts of daily life. With our system, people can engage and solve their daily life queries about their pets and other stray animals. So, our project is based on a community filled with pet enthusiasts.

2. Vision

In this section, the project vision is discussed in detail.

2.1.Problem Statement

The Problem of	• Pet owners not having enough knowledge about how to take care of their pets. • Not having a proper platform for buying and selling pets, their products, and accessories. • Pet owners are not aware of the best-suited food and habitat for their pets. • Lack of apps platform for pet-related communities.
Affects	• Pets suffer because of the lack of education of pet owners. • A lot of time is wasted in looking for the desired pet, its products, and its accessories.
A successful solution would be	• An App that provides users the online help for pet-related queries. • An App that provides an e-commerce platform for buying/selling pets, their products, and accessories. • An App that enables pet-related businesses to register themselves.

2.2.Business Opportunity

An easy way to connect and gather animals and pet enthusiasts under a single platform. Pet Book enables pet lovers to share their pet-related queries with each other and avail the help of experts online. Pet Book also provides an amazing business opportunity for pet-related businesses as they can register their businesses. Pet lovers can also buy and list their pets for sale.

2.3. Objectives

A platform for pet enthusiasts to connect with each other.

A platform for pet lovers to ask queries regarding their pets from experts online.

A platform for pet enthusiasts to buy/sell pets, their products, and accessories.

An opportunity for pet-related businesses to expand their businesses by registering their business on our platform.

2.4. Scope

Pet Book is a mobile application. The main problem we are currently facing is pet lovers have no proper single platform to interact with each other. The other problem we are facing right now is that there is no proper platform for pet-related businesses where they can register their businesses online and connect them with a pet-related community. Pet Book will provide an environment through which all these entities would be able to build strong connections with each other.

2.5. Constraints

- If the amount of memory available in the phone is low, the system may ask your application to shut down or sacrifice cached data, slowing program execution.
- The system shall not require any special hardware development or procurement.
- If there is an internet problem, then app contents will not be loaded.
- If the user is not registered, he cannot view the app contents.
- If the pet-related businesses have not registered their business, then they will not be able to list anything for sale.

2.6. Stakeholder and user description

Stakeholder and User descriptions are defined in detail below.

2.6.1. Market Demographics

Our target market is any pet or animal-related entity (pet owners, businessmen, vets, pet trainers). Also, those people want to learn about animals and develop their interest in them.

2.6.2. Stakeholders Summary

Name	Description	Responsibilities
FAST-CFD	Have copyrights of our Final Year Project.	Provide resources and help to develop this application.
Supervisor and Co-supervisor	Involves Supervisor and Co-supervisor who are guiding the developers' team while designing and implementing the project.	Monitors the project's progress and helps the development team to develop the project.
Pet Book developers	Includes the development team involved in designing and implementing the application.	Design the application considering the user's needs and should perform proper testing.
End-User	Includes pet owners, businessmen, vets, pet trainers, and people with some interest in animals.	Should have a basic knowledge of using smartphones.

2.6.3. User Environment

It is a mobile application that allows any user to install and use it. Users must have a basic knowledge of installing and using mobile apps. The proper user interface and installation guidelines must be sufficient to educate the users on how to use the application. It is an android application so it must operate on android phones.

2.6.4. Stake Holders Profiles

2.6.4.1. Supervisors of the project

Representatives	Supervisor: Mr. Usman Ghous Co-supervisor: Dr. Umar Aftab
Description	They are involved in supervising the activities of the development process.
Type	They are technical stakeholders. They have expertise in domains that are being applied to this project.
Responsibilities	Monitors the project's progress and helps the development team to develop the project within specified resources and time.
Success Criteria	The completion of features that are being committed by the development team at the start of the project.
Involvement	Requirement reviewer and review implementation.

2.6.4.2. Development of the project

Representatives	Mr. Danish Ahmad Mr. Muhammad Zain Mr. Muhammad Umar
Description	Includes the development team involved in designing and implementing the application.
Type	They are technical stakeholders who build the project.
Responsibilities	Design the application considering the user's needs and should perform proper testing.
Success Criteria	The completion of features that are being committed by the development team at the start of the project.
Involvement	Designers and Testers.
Deliverables	• Documentation • Development • Data acquisition

3. System Requirement Specification

3.1.System Features

Login
User must be able to login in the system.

Search items
User will be able to search the desired items through the app.

Add to cart
User will be able to add to - cart the items he/she wanted to buy.

Payment integration
User will get option for the payment, either an online payment or cash on delivery.

Live chat
User will be able to do live chat with other users or with experts.

Newsfeed
Newsfeed section will update the user about so many information and will develop the interest of the new users among the community.

Ads posting
User will be able to post ads and queries.

Pet authenticity
User will be able to check pet authenticity before making a purchase.

Hire trainers
User will be able to hire trainers for the better development of their pets.

Animal photography
This module will provide user amazing photographs of animals and allow them to hire animal photographers.

Pet adoption
Animal shelters will provide the healthy stray animals or left-out animals for adoption to the users.

Nearby pet shops
User will be able to locate nearby pet shops.

Alerts
It will be a sensitive feature and user will be able to filter out the alerts of their desired alerts

Rent a pet
User will be able to rent pets from other users for their functions or events.

Pet shows
User will be able to get details about pet shows happening in near future.

NGO’s
User will be able to contact NGO’s for animal related emergencies.

3.2.Functional Requirements

- User must be able to login in the system.
- User will be able to search the desired items through the app.
- User will be able to add to cart the items he/she wanted to buy.
- User will get option for the payment, either an online payment or cash on delivery.
- User will be able to do live chat with other users or with experts.
- Newsfeed section will update the user about so much information and develop the interest of the new users in the community.
- User will be able to hire trainers for the better development of their pets.
- Animal shelters will provide the healthy stray animals or left-out animals for adoption to the users.
- User will be able to locate nearby pet shops.
- Alerts will be a sensitive feature and user will be able to filter out the alerts of their desired alerts
- User will be able to rent pets from other users for their functions or events.
- User will be able to get details about pet shows happening in near future.
- User will be able to contact NGOs for animal related emergencies.

3.3.Non-Functional Requirements

3.3.1. Privacy
Ensure a system that will keep the privacy of users.

3.3.2. Performance
To enhance the user experience, the system will be optimized and will tackle every kind of technical difficulties.

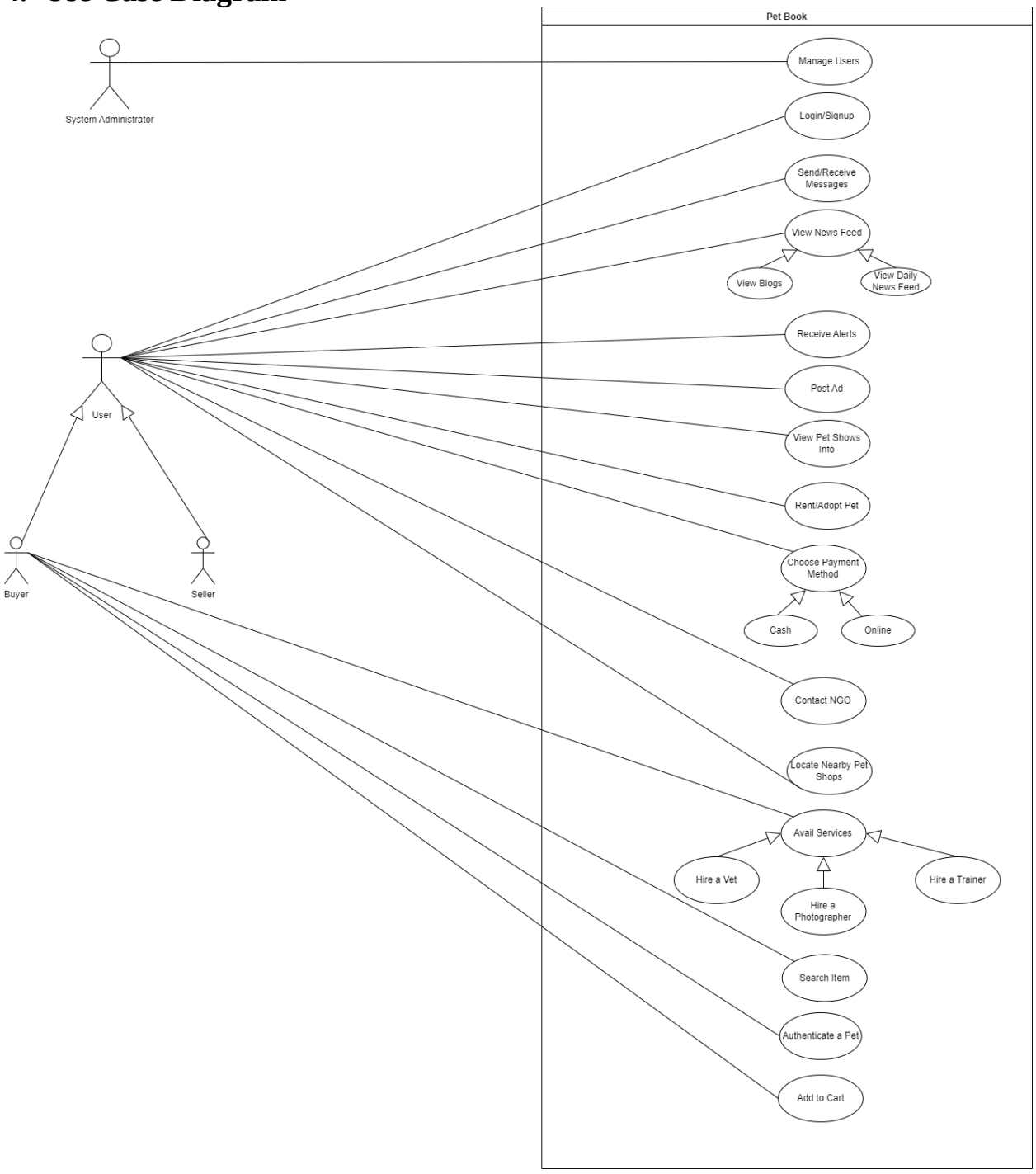
3.3.3. Availability
System will be functional 24/7. Down times will be notified earlier.

3.3.4. Security
System will be secure to avoid any payment scams.

3.3.5. Data Integrity
Data will be stored in secured database to avoid any misleading or misuse of data.

3.3.6. Quality
Only a quality content will be provided to users.

4. Use Case Diagram



5. High Level Use Case

5.1.Manage Users

Table 5: UC-01 Manage Users

Use case ID	01
Use case Name	Manage Users
Actor	System Administrator
Type	Primary
Description	The System Administrator manages the accounts of users.

5.2.Login/Signup

Table 6: UC-02 Login/Signup

Use case ID	02
Use case Name	Login/Signup
Actor	Buyer, Seller
Type	Primary
Description	The Buyer/Seller would have to login into the system to continue using the application

5.3.Send/Receive Messages

Table 7: UC-03 Send/Receive Messages

Use case ID	03
Use case Name	Send/Receive Messages
Actor	Buyer, Seller
Type	Primary
Description	The Buyer/Seller would be able to chat with each other.

5.4.View News Feed

Table 8: UC-04 View News Feed

Use case ID	04
Use case Name	View News Feed
Actor	Buyer, Seller
Type	Primary
Description	The user would be able to view the different posts on his news feed.

5.5.Receive Alerts

Table 9: UC-05 Receive Alerts

Use case ID	05
Use case Name	Receive Alerts
Actor	Buyer, Seller, System Administrator
Type	Primary
Description	The user will receive Alerts for awareness purposes.

5.6.Post an Ad

Table 10: UC-06 Post an Ad

Use case ID	06
Use case Name	Post an Ad
Actor	Buyer, Seller
Type	Primary
Description	The user can post ads about anything related to pets.

5.7.View Pet Shows Info

Table 11: UC-07 View Pet Shows Info

Use case ID	07
Use case Name	View Pet Shows Info
Actor	Buyer, Seller
Type	Primary
Description	The user will be able to check info on ongoing pet shows and also can organize his own pet show and post in this section.

5.8.Rent/Adopt a Pet

Table12 : UC-08 Rent/Adopt a Pet

Use case ID	08
Use case Name	Rent/Adopt a Pet
Actor	Buyer, Seller
Type	Primary
Description	The Buyer/Seller would be able to rent their pets and get pet rent in exchange.

5.9. Choose Payment Method

Table 13: UC-09 Choose Payment Method

Use case ID	09
Use case Name	Choose Payment Method
Actor	Buyer, Seller
Type	Primary
Description	The Buyer/Seller would be able to make/receive their payments.

5.10. Contact NGO

Table 14: UC-10 Contact NGO

Use case ID	10
Use case Name	Contact NGO
Actor	Buyer, Seller
Type	Primary
Description	The Buyer/Seller would be able to get in contact with different NGOs.

5.11. Locate Nearby Pet Shops

Table 15: UC-11 Locate nearby Pet Shops

Use case ID	11
Use case Name	Nearby Pet Shops
Actor	Buyer, Seller
Type	Primary
Description	The user would be able to locate the nearby pet shops.

5.12. Avail Services

Table 16: UC-12 Avail Services

Use case ID	12
Use case Name	Avail Services
Actor	Buyer
Type	Primary
Description	The user would be able to avail the services of VET, Trainer, and a Photographer.

5.13. Search Item

Table 17: UC-13 Search Item

Use case ID	13
Use case Name	Search Item
Actor	Buyer
Type	Primary
Description	The user would be able to search for different items.

5.14. Authenticate a Pet

Table 18: UC-14 Authenticate a Pet

Use case ID	14
Use case Name	Authenticate a Pet
Actor	Buyer
Type	Primary
Description	The Buyer would check the authenticity of the pet he is going to buy.

5.15. Add to Cart

Table 19: UC-02 Add to Cart

Use case ID	15
Use case Name	Add To Cart
Actor	Buyer
Type	Primary
Description	The buyer would be able to add different items to his cart that he intends to buy.

6. Expanded Use Case

6.1.Login/Signup

Use case ID	02
Use case Name	Login/Signup
Actor	Buyer, Seller
Description	The user would have to login into the system to continue using the application.
Pre-Condition	The user has installed the application
Post Condition	The user has logged in
Normal Flow	• Enter Username and password
Alternative Flow	• Authentication problem, request reset password • Re-enter username and password

6.2.Manage Users

Use case ID	01
Use case Name	Manage Users
Actor	System Administrator
Description	The System Administrator manages the accounts of users.
Pre-Condition	The system Administrator must be logged into the system.
Post Condition	The required changes must be made to the user accounts.
Normal Flow	1. System administrator opens the application and enters login credentials. 2. System validates the credentials. 3. System grants access to the system administrator. 4. System administrator manages the account of the user when needed. 5. System saves the changes and returns a success message.

Alternative Flow	• System fails to save the changes due to an error. • Error message is returned.

6.3.Send/Receive Messages

Use case ID	03
Use case Name	Send/Receive Messages
Actor	Buyer, Seller
Description	The user would be able to communicate with each other by sending or receiving messages
Pre-Condition	The user must be logged in
Post Condition	A message would be sent, or old messages would be viewed
Normal Flow	• Click on the option of Messages • Send a message to someone • View Received replies
Alternative Flow	• Message can not be sent due to an internet problem • Refresh and try again

6.4.Authenticate a Pet

Use case ID	14
Use case Name	Authenticate a Pet
Actor	Buyer
Description	The Buyer would check the authenticity of the pet he is going to buy.
Pre-Condition	The Buyer must be logged in.
Post Condition	The buyer will successfully check the authenticity of the pet.
Normal Flow	• The buyer would log in and check for the pet Id of the pet he is willing to buy. • The buyer will enter the Pet Id in the text box. • The System will inform the user with a message whether the searched pet is authentic or not.
Alternative Flow	• The request cannot be sent due to internet problem. • The requested Id is invalid or not available in database. • Refresh and try again

6.5.Post an Ad

Use case ID	06
Use case Name	Post an Ad
Actor	Buyer, Seller
Description	The user can post ads about anything related to pets.
Pre-Condition	The user must be logged in.
Post Condition	A request to post an Ad would be sent to the admin.
Normal Flow	• Click on the button to post an Ad. • Enter related information and skillset required for the job • Request would be sent to the admin to post a job
Alternative Flow	• Request can not be sent due to an internet problem or the request has been declined by the admin. • Refresh and try again

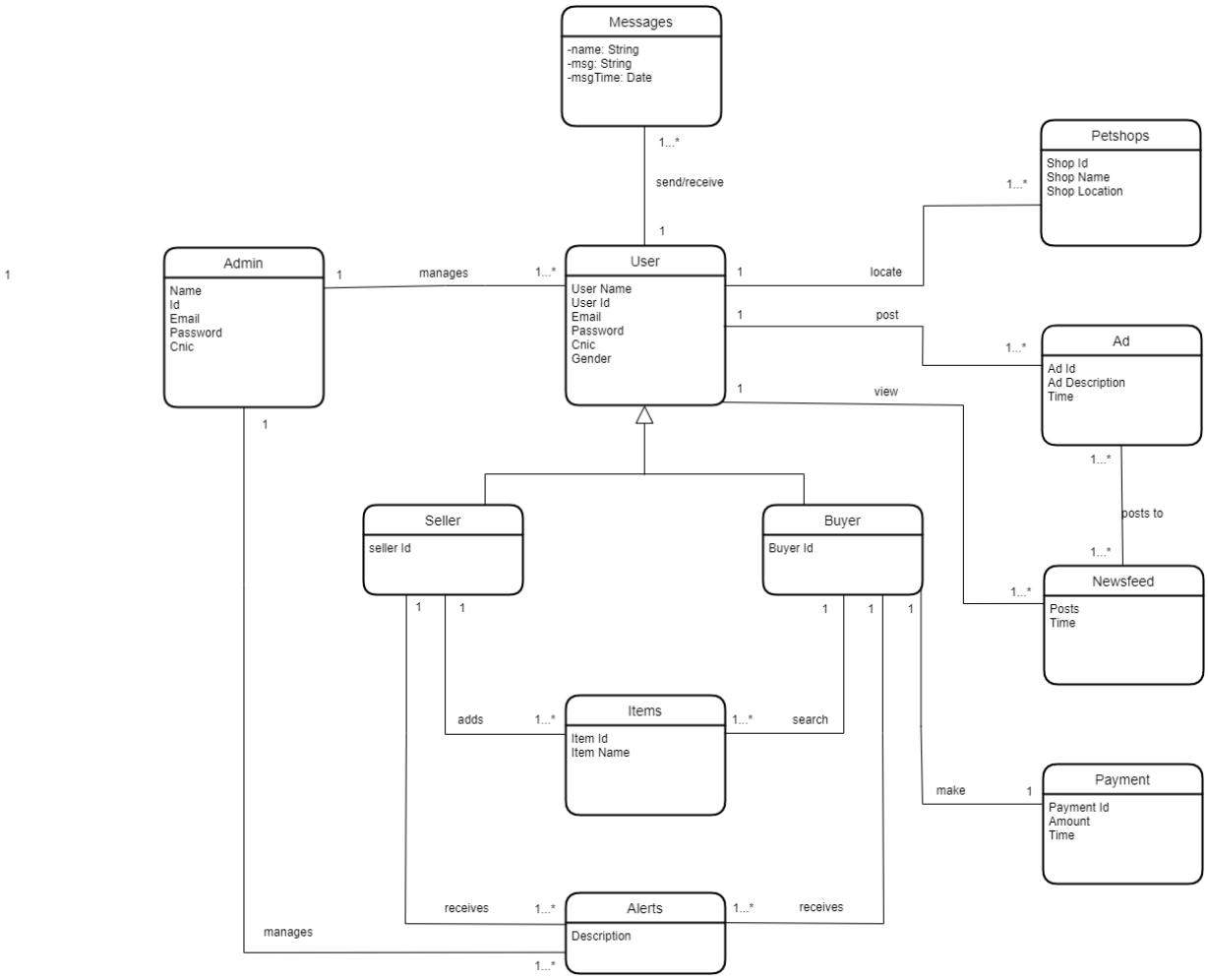
6.6.Search Item

Use case ID	14
Use case Name	Search Item
Actor	Buyer, Seller
Description	The user would be able to search for different items.
Pre-Condition	The Buyer must be logged in.
Post Condition	The buyer will be shown the desired search result if the items exist.
Normal Flow	• Buyer searches for an item. • System gets the searched item from the database.
Alternative Flow	• System could not find the searched item from the database.

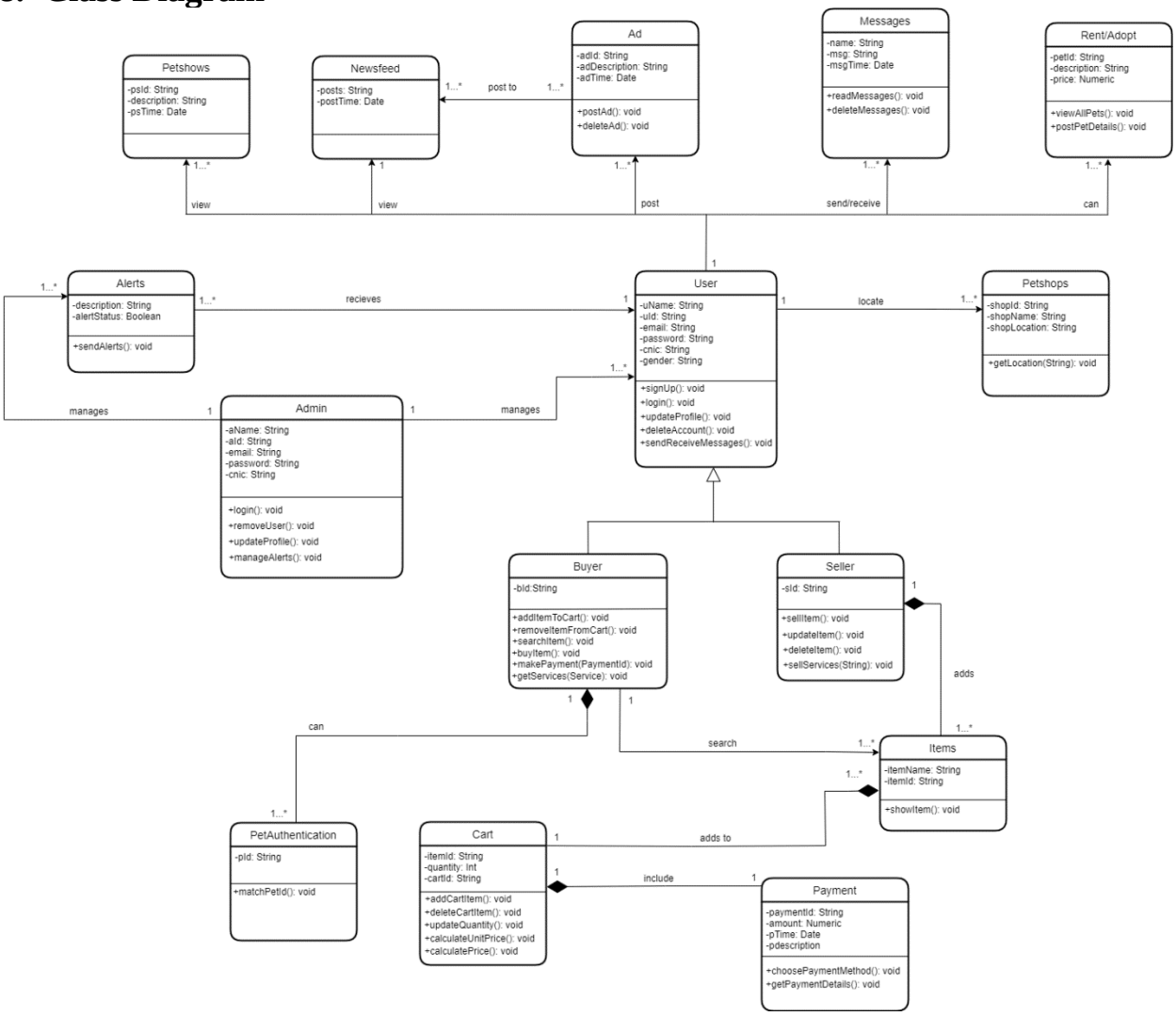
6.7.Choose Payment Method

Use case ID	09
Use case Name	Choose Payment Method
Actor	Buyer
Description	The user would be able to make his payments.
Pre-Condition	There must be some items in the cart.
Post Condition	The buyer successfully made his payments.
Normal Flow	• Buyer checks out. • Buyer enters billing details. • Buyer enters shipping details. • Buyer confirms the order. • Use case ends with a success.
Alternative Flow	• Not enough amount in the bank. • The entered credentials are invalid. • Refresh and try again.

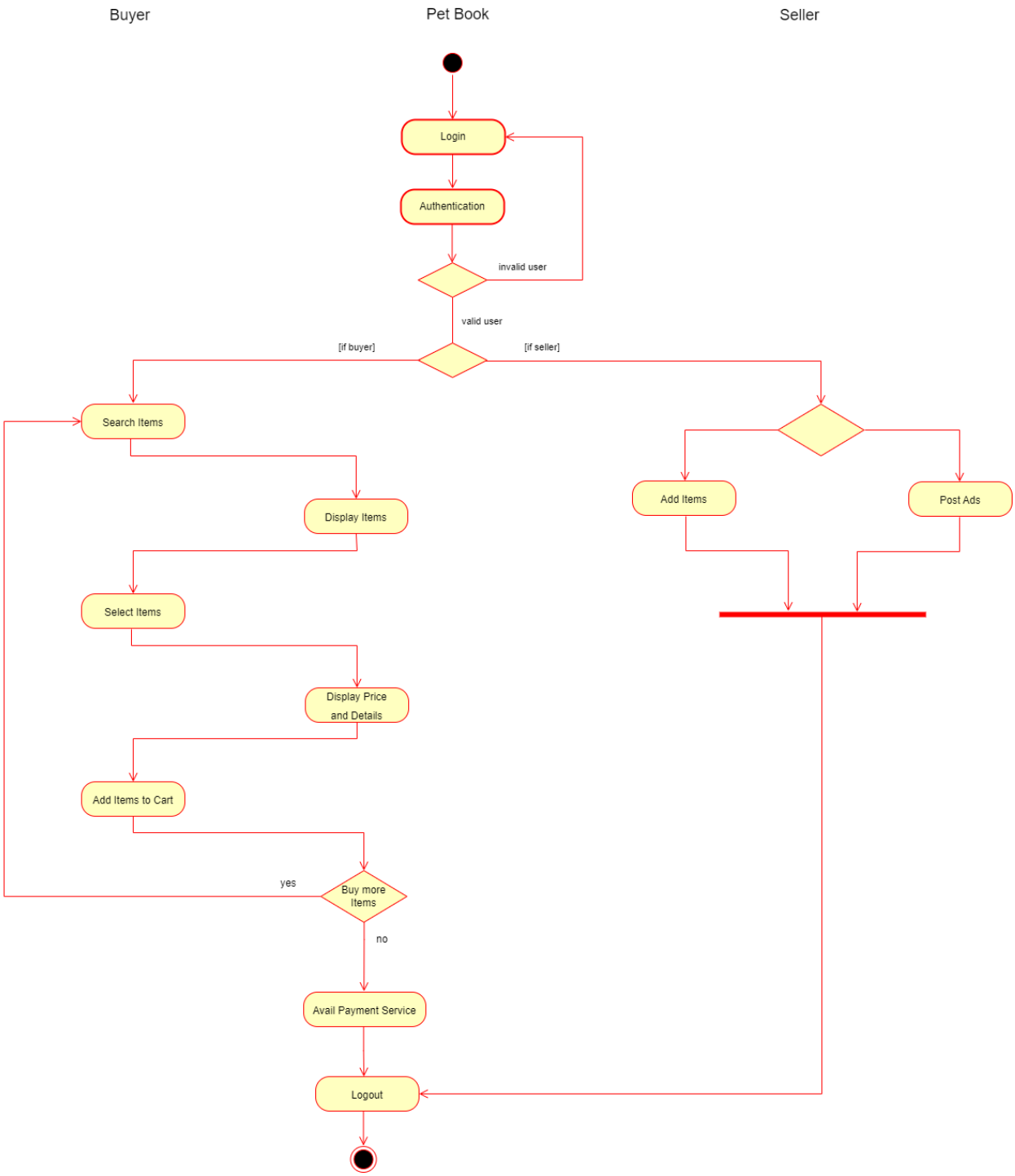
7. Domain Model



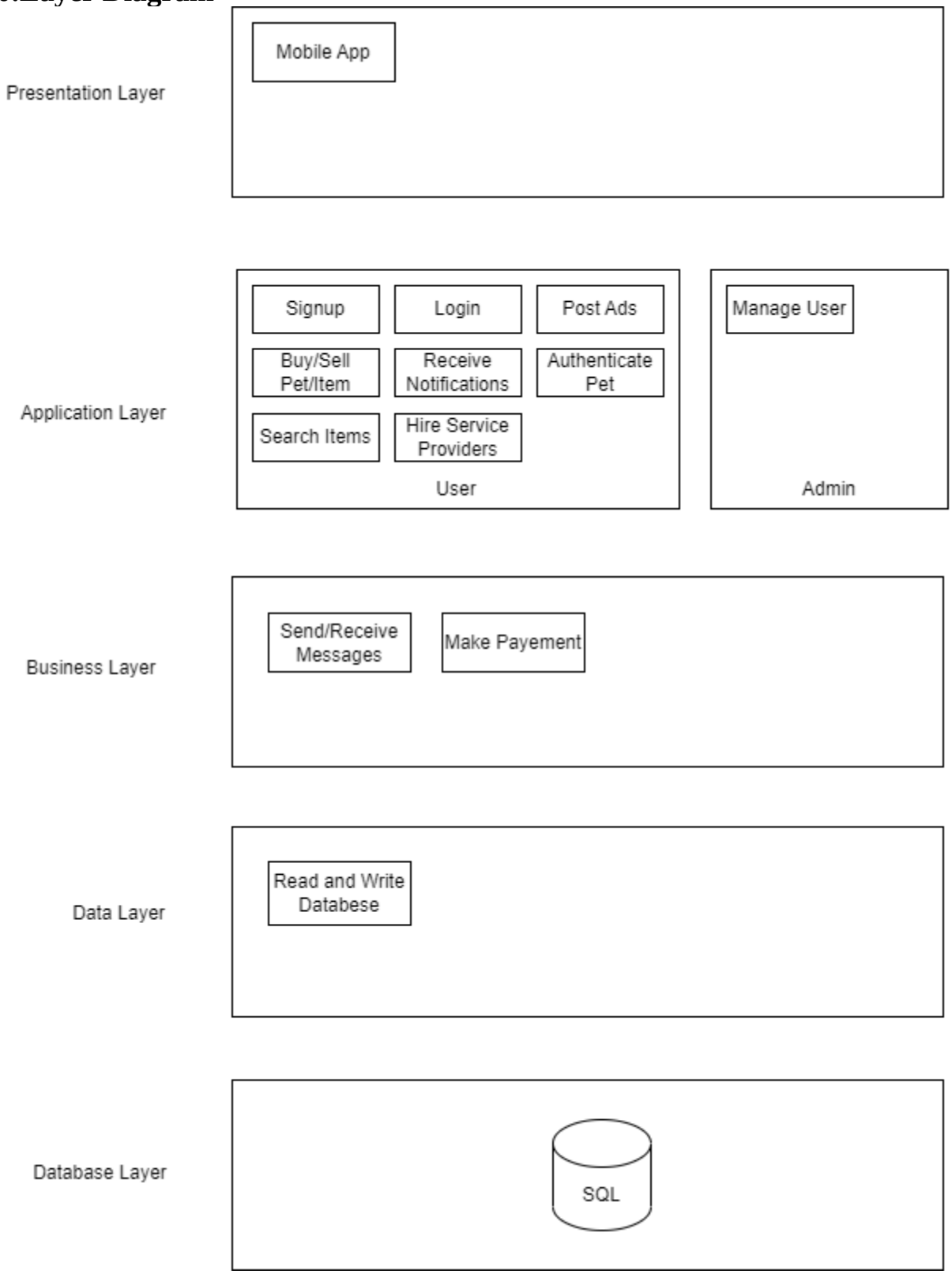
8. Class Diagram



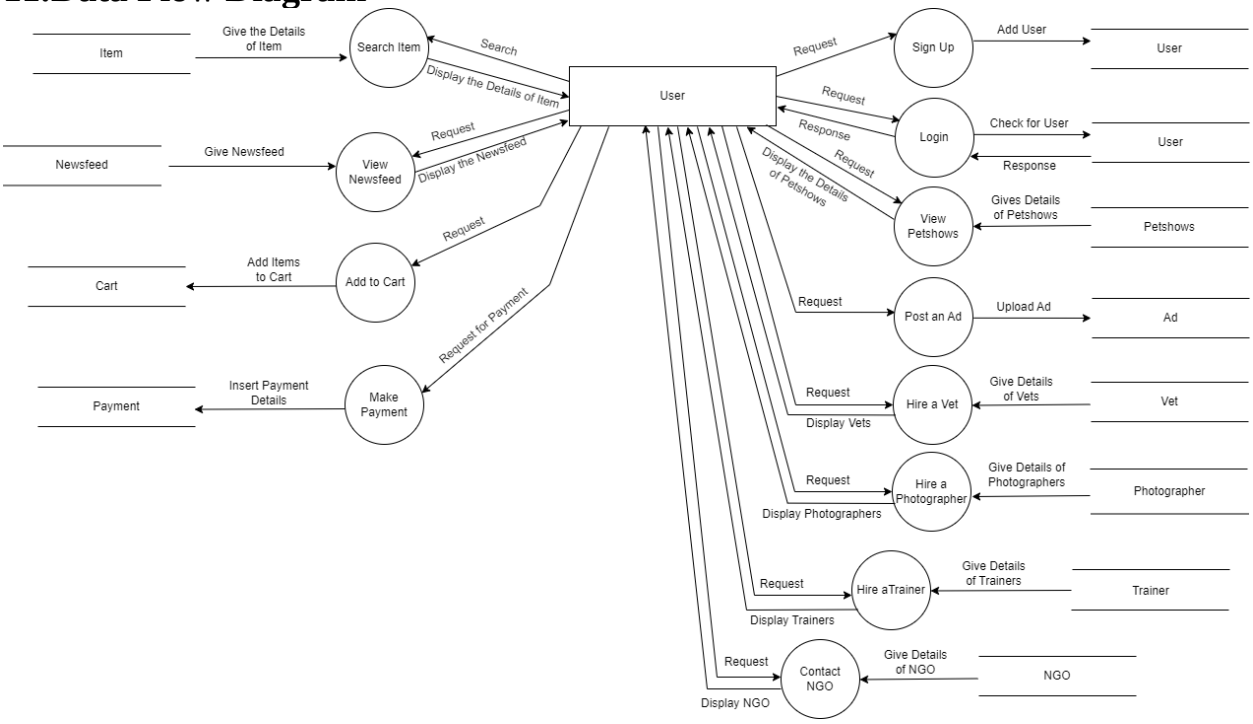
9. Activity Diagram



10.Layer Diagram

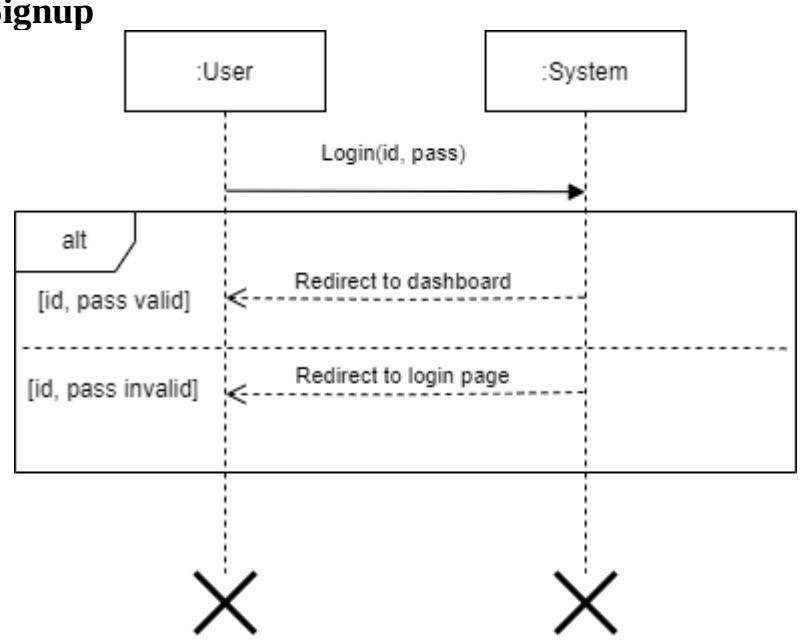


11.Data Flow Diagram

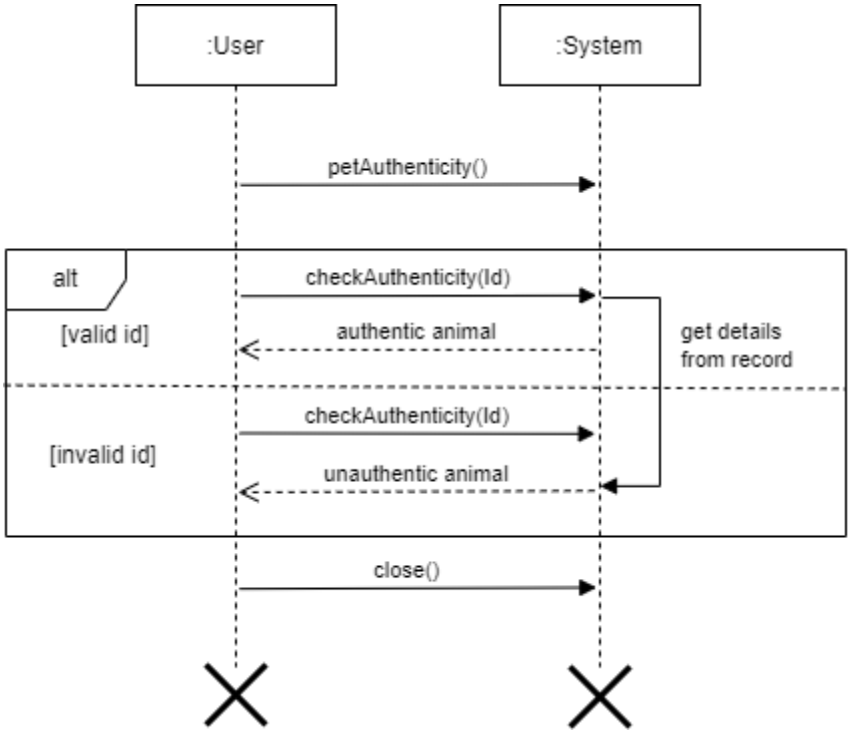


12.System Sequence Diagram

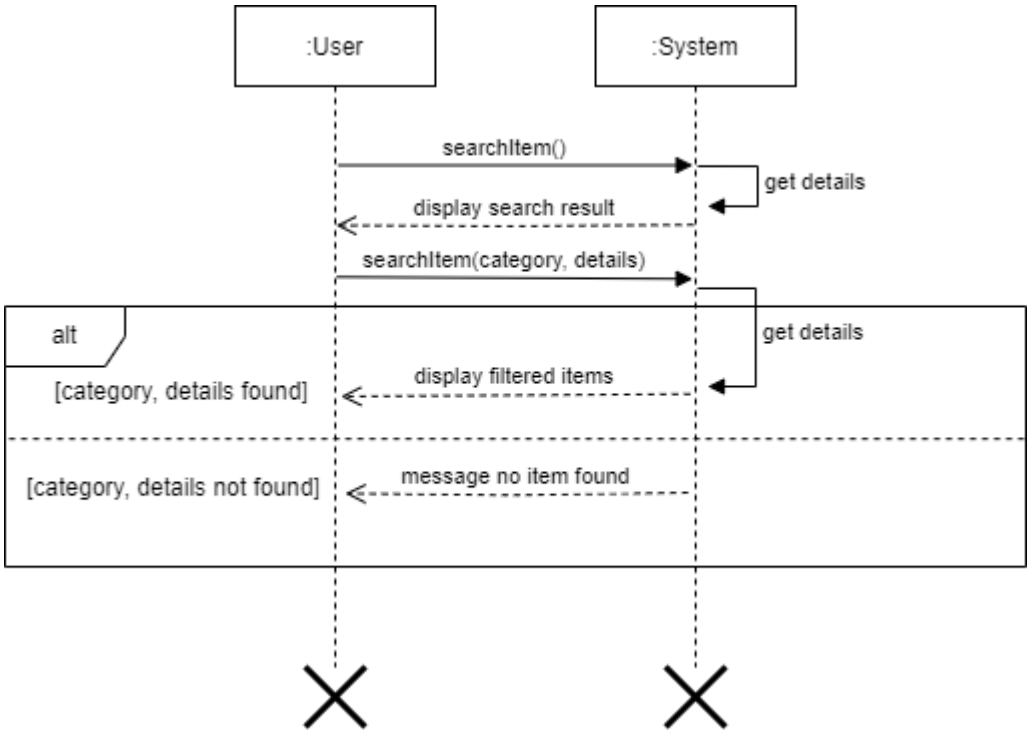
12.1. Login/Signup



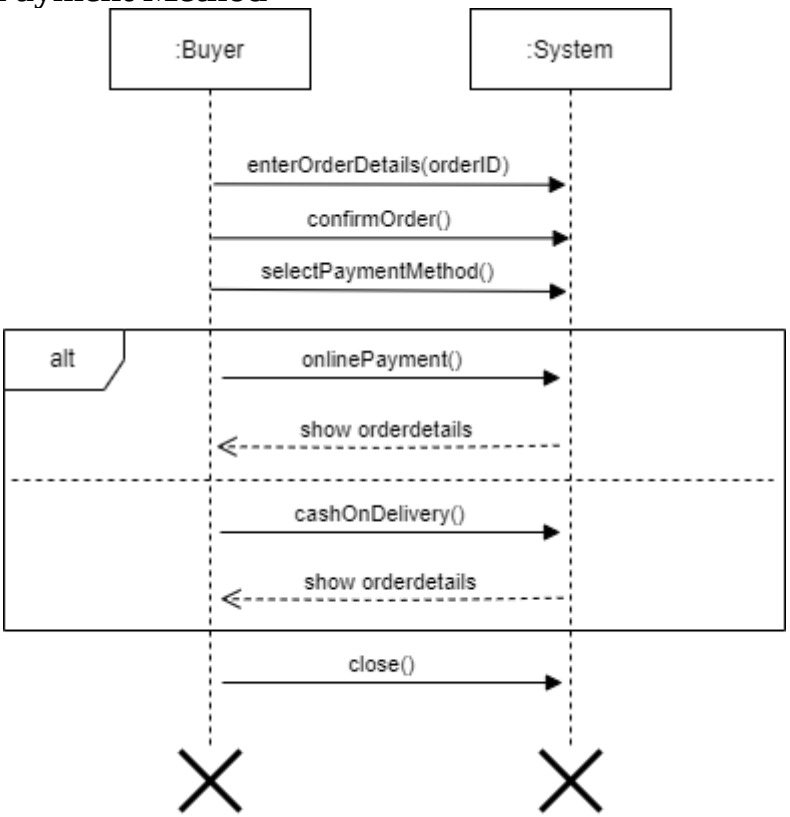
12.2. Authenticate a Pet



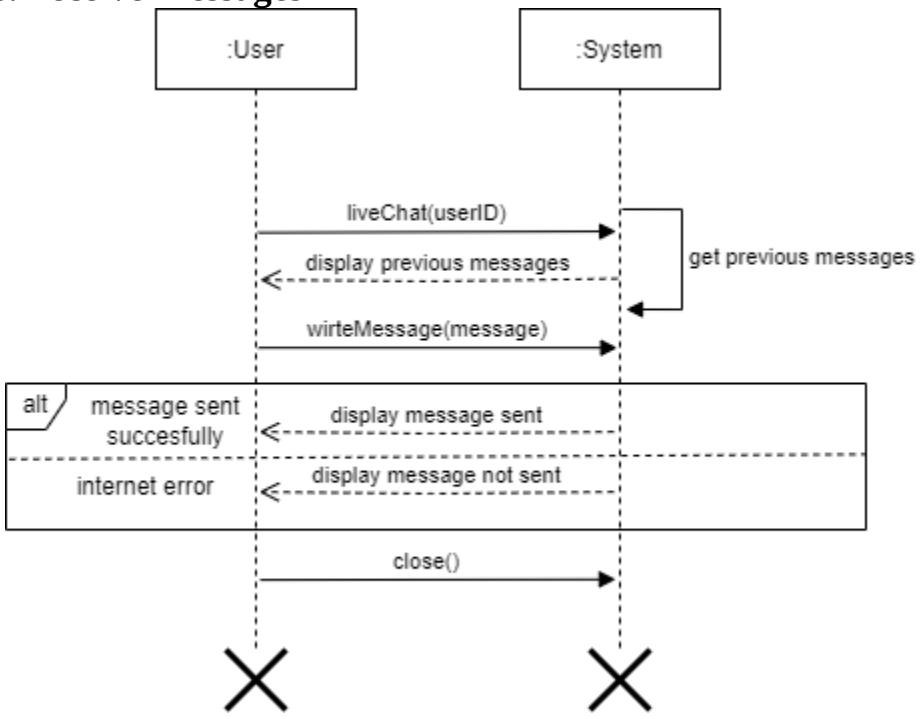
12.3. Search Item



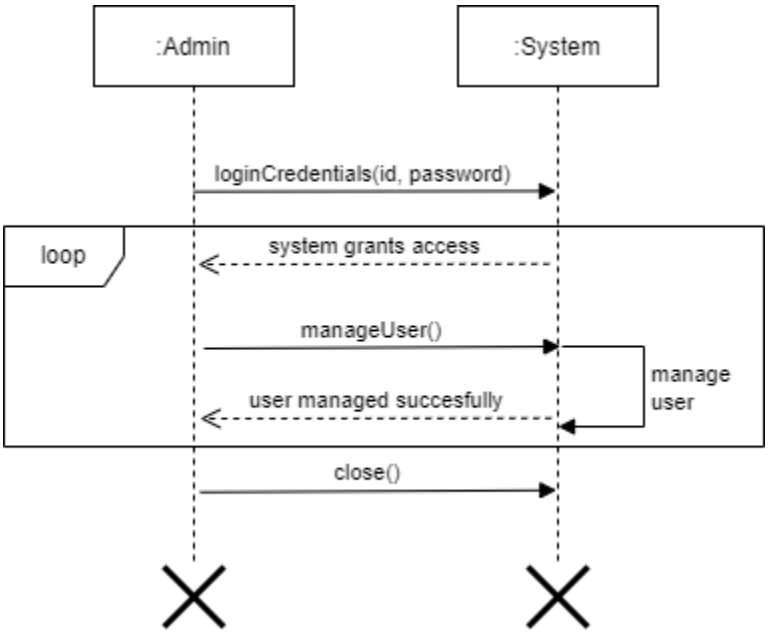
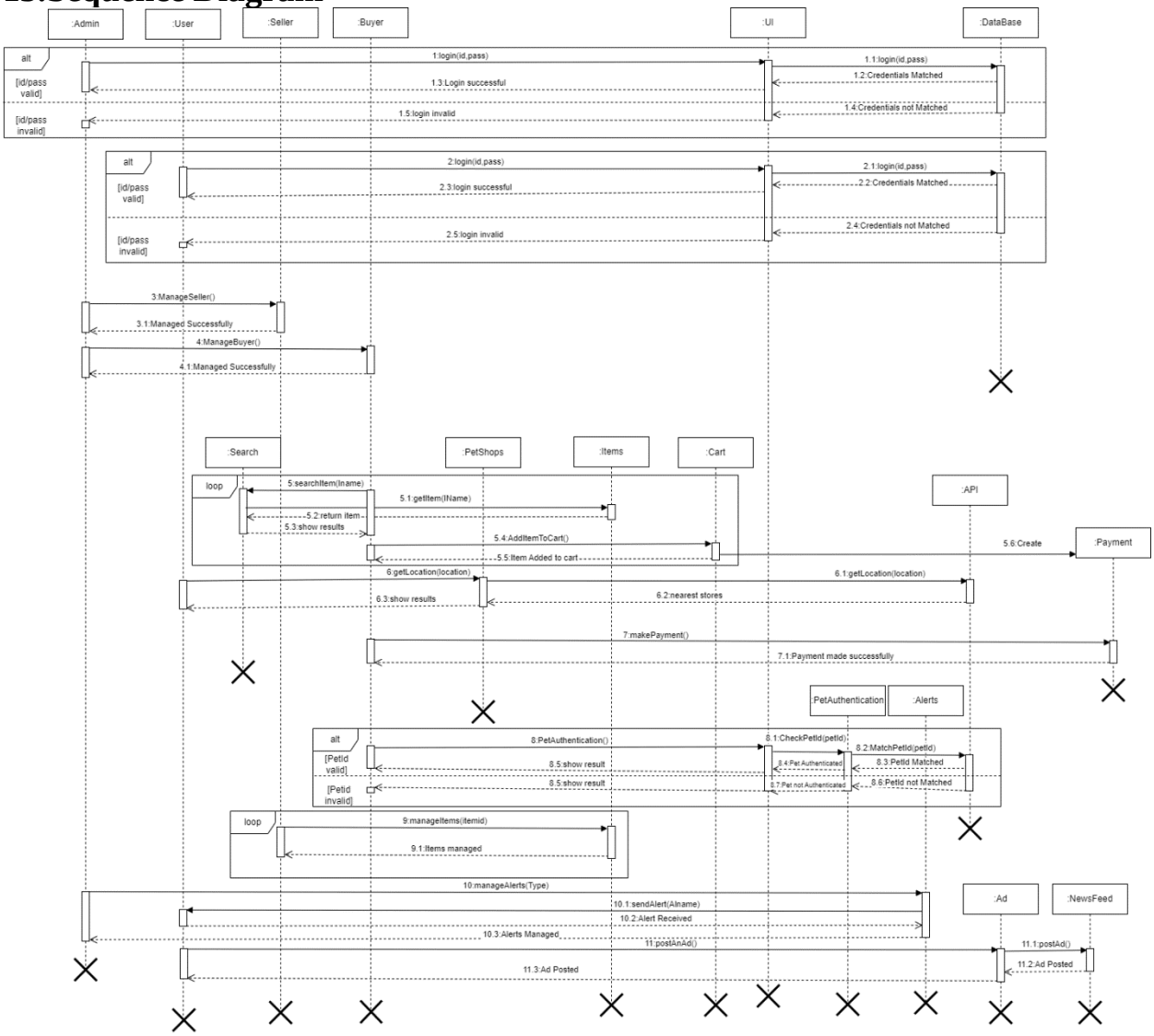
12.4. Choose Payment Method



12.5. Send/Receive Messages



12.6. Manage User



13.Sequence Diagram