Pet Care System

Tails in the City

Group No. 7

Final Report

Team Members:

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Project URL

Project drive

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CUSTOMER STATEMENT OF REQUIREMENTS

The purpose of this section is to define the requirements for a pet care system that will be used by pet owners to manage their pets' health and well-being. The system will provide a comprehensive set of features and functionality to help pet owners keep their pets healthy, happy, and safe.

That's why, we built a comprehensive website that includes almost all pet owners needs for adopting or maintaining a healthy, happy pet. It provides them with all the necessary services that any of them needs at the comfort of your home. Our mission has always been about saving lives and alleviating pain, and we believe that animals just like humans need care and affection, whether your goal is to adopt a new animal or care for your pet, our goal is to help you with that.

We made it an easy to use, available and pain-free website that digitalizes the process of caring for an animal. Why go through all the effort of having to look and search for the services that you need, when you can have it all in one place just a few taps away. through our services that will be outlined later in the report.

WEBSITE SERVICES

We are always welcoming new parents!

We are committed to ensuring that your pet receives the quality of care they deserve. That's why firstly, you will have to create a pet-profile if you are an owner and a parent-profile to help you having an amazing experience.

Serve you with smoother in-store experience…

When it comes to their feathered, furry, and scaled friends, pet owners only want the best, therefore**,** the website will allow the pets parents to shop all their needs of high-quality pet supplies and services, from food, toys, treats and accessories to grooming.

Book your appointment!

The website will allow pets owners to book, check, change or cancel doctor appointments, after choosing the specialty, the day and the time, navigating a wide range of veterinarians in order to keep their pets in excellent health.

You can search for the perfect match for their pets too!

After uploading all the specifications of your pet, the website will display for you all the matches with the profiles of their owners to be able to contact them and agree on the rendezvous.

If you're looking to adopt a pet, there's a website that'll match you to a furry friend based on compatibility.

It's a unique pet-matching service that connects aspiring pet owners to cat and dog profiles based on given specifications.

Rehoming your pet…

Rehoming your pet should be easy and stress free both for you and your pet. We are creating a simple, reliable program to help you place your pet from your loving home directly to another.

Our services put your pet first!

Our program facilitates the process of booking a daycare for your pet by specifying the day, your pet will enjoy a day full of care, training, spa and boarding.

Every user has accounts and he can navigate through his pets history including purchases, appointments, daycare, and rendezvous.

WEBSITE USER REQUIREMENTS

Functional Requirements

- User registration: Users must be able to register for an account on the website.
- User login: Users must be able to log in to their account on the website.
- Pet profile: Users must be able to create a profile for each of their pets, including the pet's name, breed, age, gender, and other relevant information.
- Pet clinic appointments: Users must be able to book appointments with a veterinarian for their pets.
- Pet products: Users must be able to purchase products for their pets, such as food, toys, and bedding.
- Pet adoption: Users must be able to search for and adopt new pets.
- Pet breeding: Users must be able to search for and choose breeding partners for their pets.

- Pet care information: Users must be able to access information on pet care, such as feeding, grooming, and training.
- Pet community: Users must be able to connect with other pet owners and share information and experiences.

Non-Functional Requirements

- Performance: The website must be able to handle a high volume of traffic.
- Security: The website must use secure protocols to protect user data.
- Availability: The website must be available 24/7.
- Scalability: The website must be able to scale to accommodate an increasing number of users.
- Usability: The website must be easy to use and navigate.
- Accessibility: The website must be accessible to users with disabilities.

WEBSITE SYSTEM REQUIREMENTS

Functional Requirements

- The website must be able to store and retrieve user data, pet data, and appointment data.
- The website must be able to process payments for products and services.
- The website must be able to be accessed on mobile devices.

Non-Functional Requirements

- The website must be able to handle a high volume of traffic.
- The website must be secure and use secure protocols to protect user data.
- The website must be available 24/7.
- The website must be scalable and able to accommodate an increasing number of users.
- The website must be user-friendly and easy to use.
- The website must be accessible to users with disabilities.

DELIVERED FILES

The “**Menu**” file creates a login form for a pet care service website. The form has two fields: a username and a password. When the user submits the form, the script checks if the username and password are valid. If they are, the script redirects the user to the main page of the website. If they are not, the script displays an error message. If the user is not registered, he can state if he owns a pet or not, and accordingly he will be redirected to a signup page.

The "**new parent signup**” file creates a form for users to register for a pet care service website. The form has 10 fields: name, email, address, password, confirm password, SSN, phone number, pet name, pet type, pet breed, pet age, pet gender, and pet color. When the user submits the form, the script checks if all of the fields are filled out. If they are, the script inserts the user's information into the database and redirects the user to their profile. If they are not, the script displays an error message.

The ”**no pet user**” file delivers the same service as “new parent sign up ” file but the difference that there are no pet information to insert.

The “**profile processing**” file allows users to view their profile and the profile of their pet. The script first connects to a MySQL database to retrieve the user's and pet's information, displays the user's information in a table, and the pet's information in a card. The user can also choose to view their pet's appointment schedule.

The “**adopt**” file displays a list of adoptable pets on a website. The script first connects to a MySQL database and retrieves the list of pets that are available for adoption. Then loops through the list of pets and displays each pet's information on a separate card. The information that is displayed for each pet includes the pet's name, breed, age, color, gender, and photo. The script also includes a form that allows users to adopt a pet. When a user submits the form, the script will send the pet's information to the adoption processing script.

The “**breeding**” file displays a list of potential breeding partners for a user's pet. The script first connects to a MySQL database and retrieves the list of pets that are available for breeding. The script then loops through the list of pets and displays each pet's information on a separate card. The information that is displayed for each pet includes the pet's name, breed, age, color, gender, photo, and breeding status. The script also includes a form that allows users to confirm that they would like to breed their pet with the selected pet. When a user submits the form, the script will send the pet's information to the breeding processing script.

The “**daycare**” file creates a form for users to book a daycare for their pets. The form asks for the user's pet's name, the date and time of drop-off and pickup. Once the user submits the form, the script will check to make sure that all of the required fields have been filled out. If any fields are missing, the script will display an error message. If all of the fields are filled out, the script will save the information to the database and displays the corresponding total price.

The “**rehome**” file allows the user to rehome their own pets by updating the status of a pet to "adopt" and removes it from the parent's pet table. The script first checks to make sure that the user is signed in. If the user is not signed in, the script will redirect them to the login page. If the user is signed in, the script will then update the status of the pet to "adopt" and remove it from the parent's pet table. Once the changes have been made, the script will redirect the user to the adopt page.

The “**reservation**” file allows users to book an appointment with a vet at a pet clinic. The script first connects to a MySQL database to retrieve a list of available vets. The user then selects a vet and a date for their appointment. Then validates the user's input and sends it to the database. If the input is valid, the script creates a new appointment record in the database and redirects the user to a confirmation page. If the input is invalid, the script displays an error message to the user.

The “**store**” file displays a list of pet supplies on a website. The script first connects to a MySQL database to retrieve a list of all the items in the store. Then loops through the list of items and displays each item in a separate card. The card includes the item's name, price, image, and a link to a form where the user can purchase the item. If the user purchased an item, he will be redirected to an invoice page displaying all the information about his purchases and the total price.

SOFTWARE PROCESS AND PHASES DIVISION

Phase 1: Requirements Gathering

The first phase of the software development process is requirements gathering. This is where the team gathers information about what the website needs to do. This information can come from a variety of sources, such as user interviews, surveys, and focus groups. The goal of requirements gathering is to create a clear and concise document that describes the functionality of the website.

Phase 2: Design

The next phase is design. This is where the team creates a blueprint for the website. The design should include the overall layout of the website, as well as the look and feel of the website. The design should also take into account the user experience and usability of the website.

Phase 3: Development

The development phase is where the team actually builds the website. This is where the team takes the design and turns it into a working website. The development phase can be divided into two sub-phases:

- Coding: This is where the team writes the code for the website.
- Testing: This is where the team tests the website to make sure it works correctly.

Phase 4: Deployment

The deployment phase is where the website is made available to users. This can be done by uploading the website to a web server or by hosting the website on a cloud platform.

Phase 5: Maintenance

The maintenance phase is where the team keeps the website up and running. This includes tasks such as fixing bugs, adding new features, and performing security updates.

ARCHITECTURAL DESIGN

Waterfall architecture is a sequential design method where each phase of the development process is completed before the next phase begins. This method is well-suited for projects with well-defined requirements and a clear timeline. Waterfall architecture is a good choice for the pet website mentioned above because it is a complex project with a lot of moving parts. The waterfall method will help to ensure that the project is completed on time and within budget.

Here are some of the benefits of using waterfall architecture for the pet website:

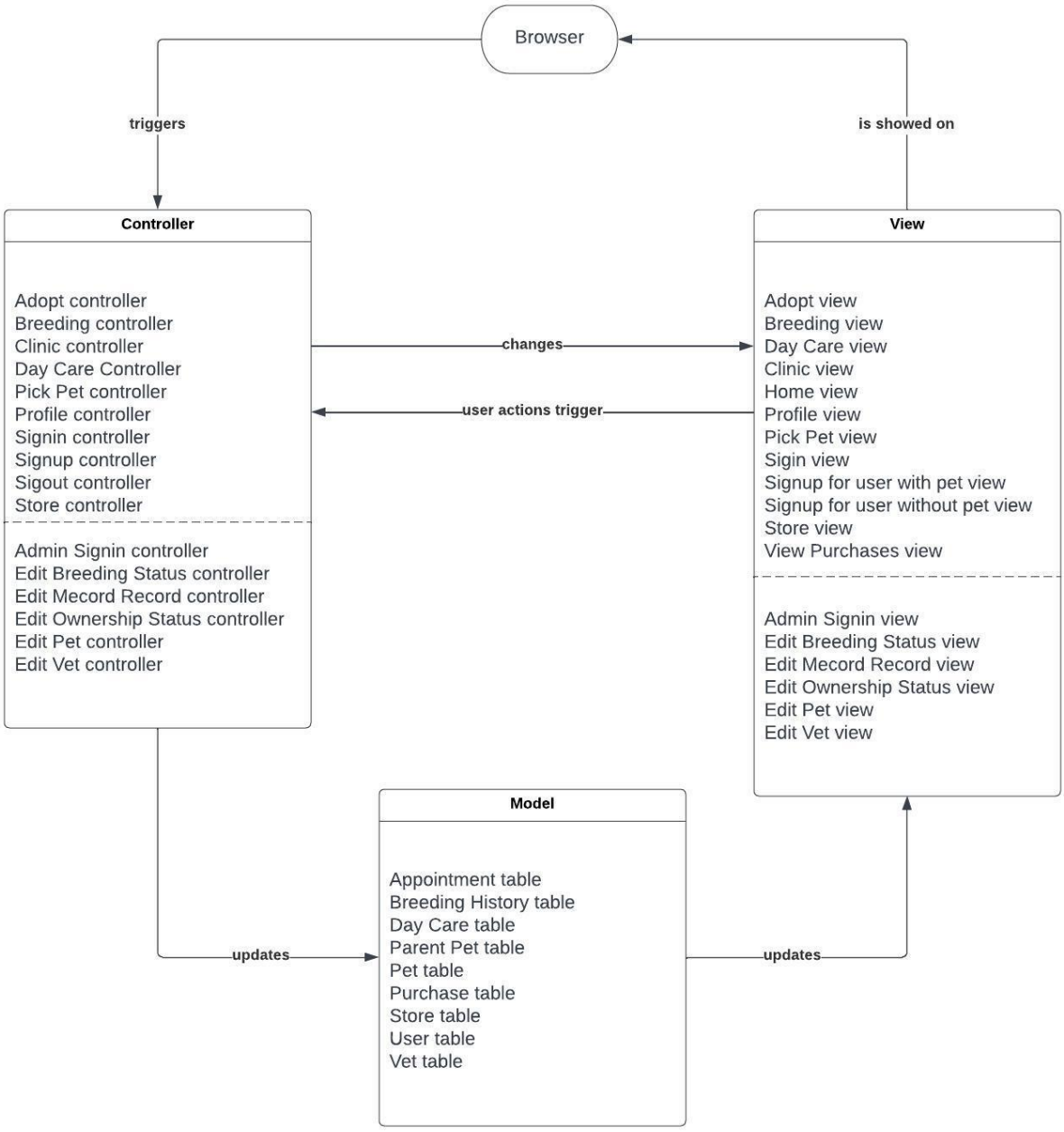
- It is a well-defined process. The waterfall method is a well-established process with a clear set of steps. This makes it easy to understand and follow, which can help to reduce errors and delays.
- It is a structured process. The waterfall method is a structured process that helps to ensure that all of the necessary steps are completed in a logical order. This can help to avoid confusion and missed steps.
- It is a predictable process. The waterfall method is a predictable process that helps to ensure that the project is completed on time and within budget. This is important for projects with a lot of moving parts, such as the pet website.

Here are some of the challenges of using waterfall architecture for the pet website:

- It is not a flexible process. The waterfall method is not a flexible process, which can make it difficult to adapt to changes in requirements or scope. This is a challenge for projects with complex requirements, such as the pet website.
- It can be time-consuming. The waterfall method can be time-consuming, especially for large or complex projects. This is a challenge for projects with tight deadlines, such as the pet website.
- It can be expensive. The waterfall method can be expensive, especially for large or complex projects. This is a challenge for projects with limited budgets, such as the pet website.

Overall, waterfall architecture is a good choice for the pet website because it is a well-defined and structured process that can help to ensure that the project is completed on time and within budget. However, it is important to be aware of the challenges of using waterfall architecture, such as the fact that it is not a flexible or agile process.

MVC MODEL


Browser
triggers
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Controller
Adopt controller
Breeding controller
Clinic controller
Day Care Controller
Pick Pet controller
Profile controller
Signin controller
Signup controller
Sigout controller
Store controller
Admin Signin controller
Edit Breeding Status controller
Edit Mecord Record controller
Edit Ownership Status controller
Edit Pet controller
Edit Vet controller
changes
user actions trigger
View
Adopt view
Breeding view
Day Care view
Clinic view
Home view
Profile view
Pick Pet view
Sigin view
Signup for user with pet view
Signup for user without pet view
Store view
View Purchases view
Admin Signin view
Edit Breeding Status view
Edit Mecord Record view
Edit Ownership Status view
Edit Pet view
Edit Vet view
Model
Appointment table
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Day Care table
Parent Pet table
Pet table
Purchase table
Store table
User table
Vet table
updates
updates

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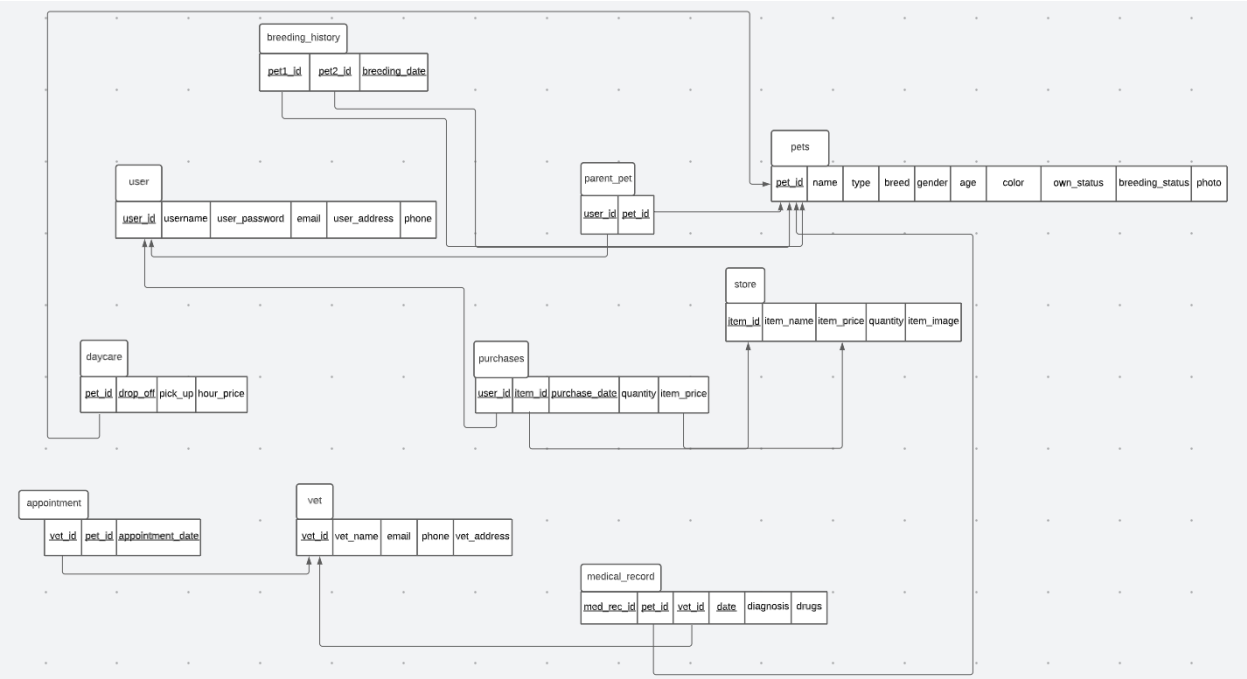

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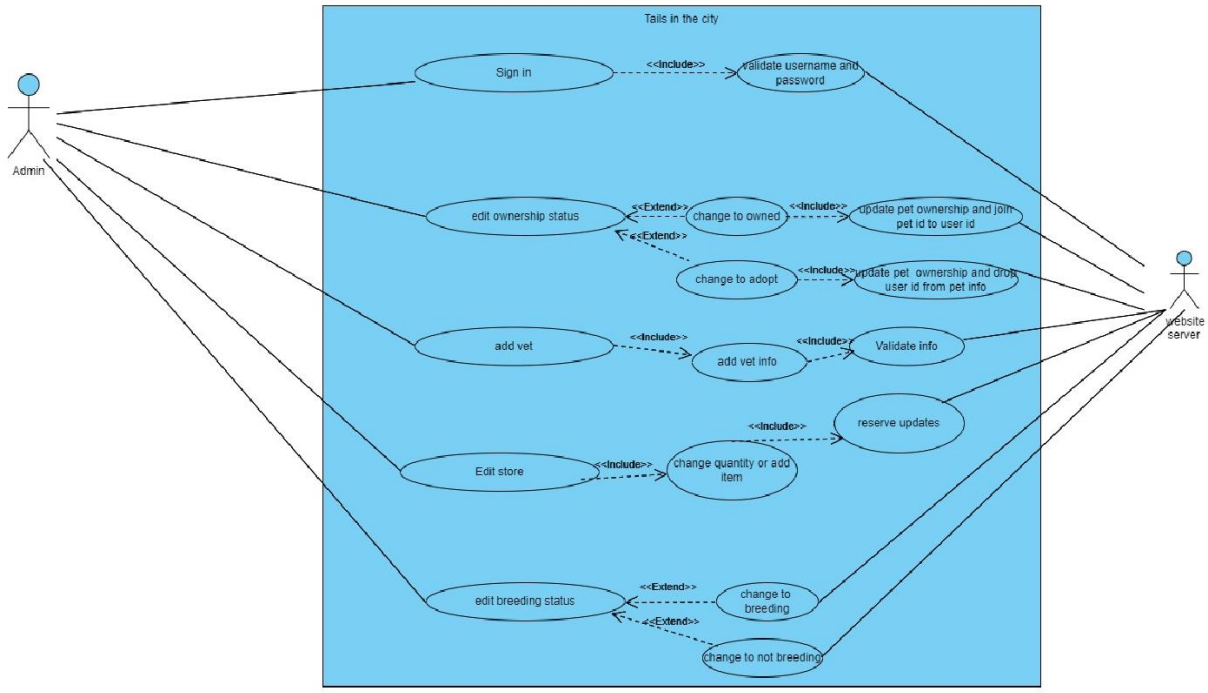

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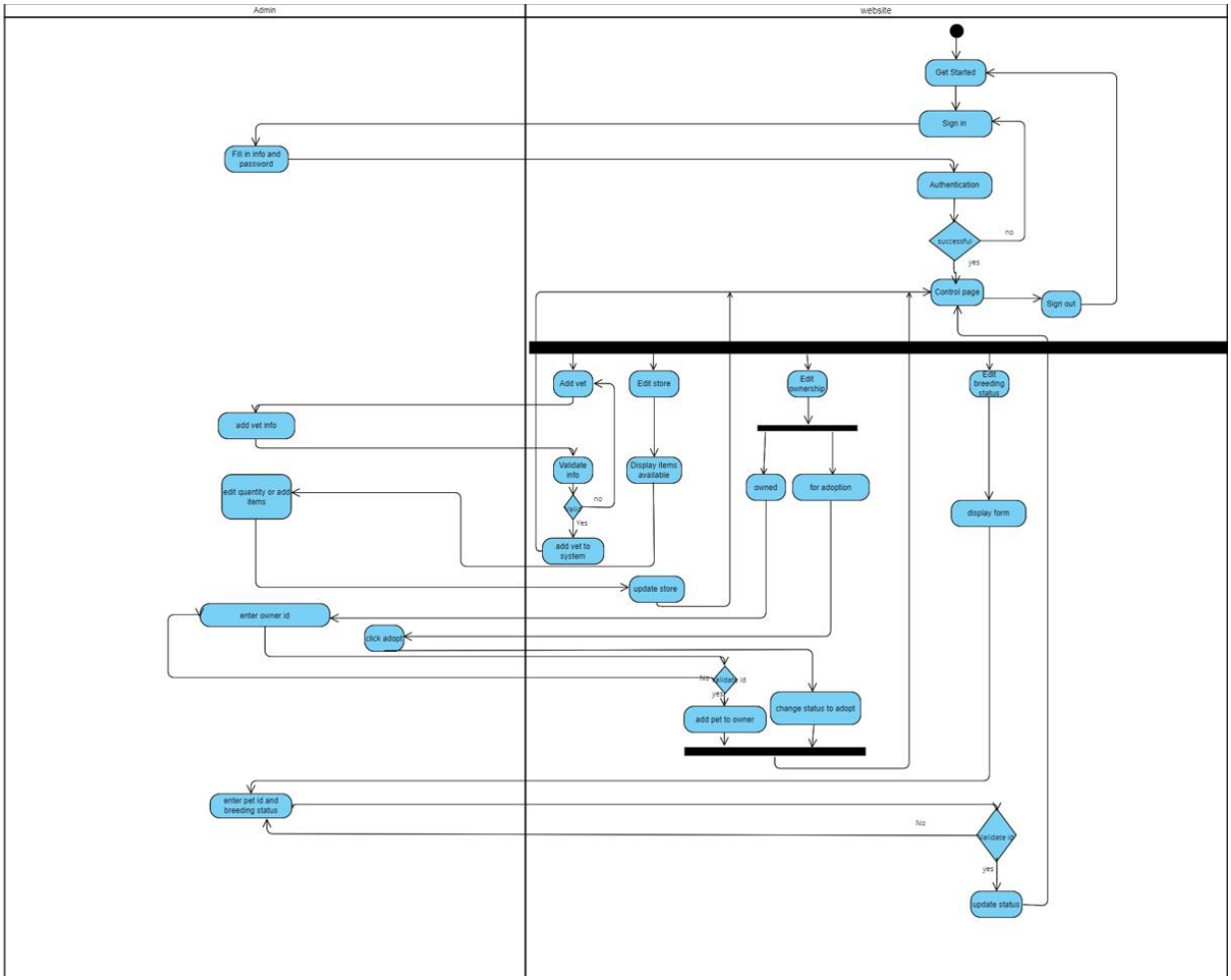

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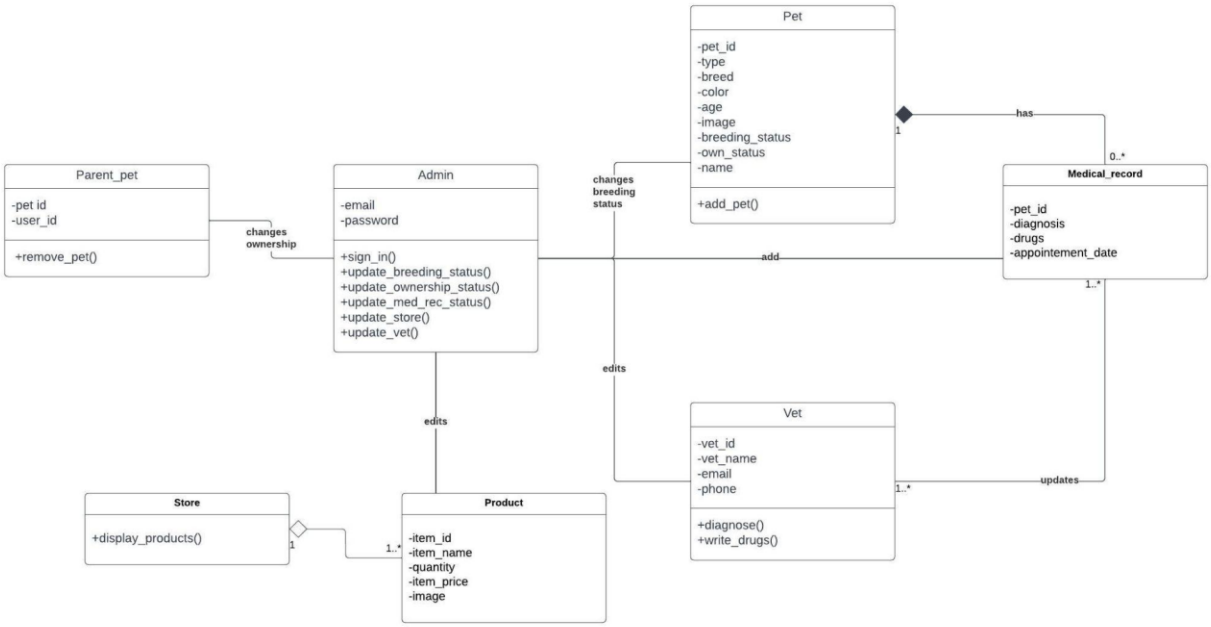

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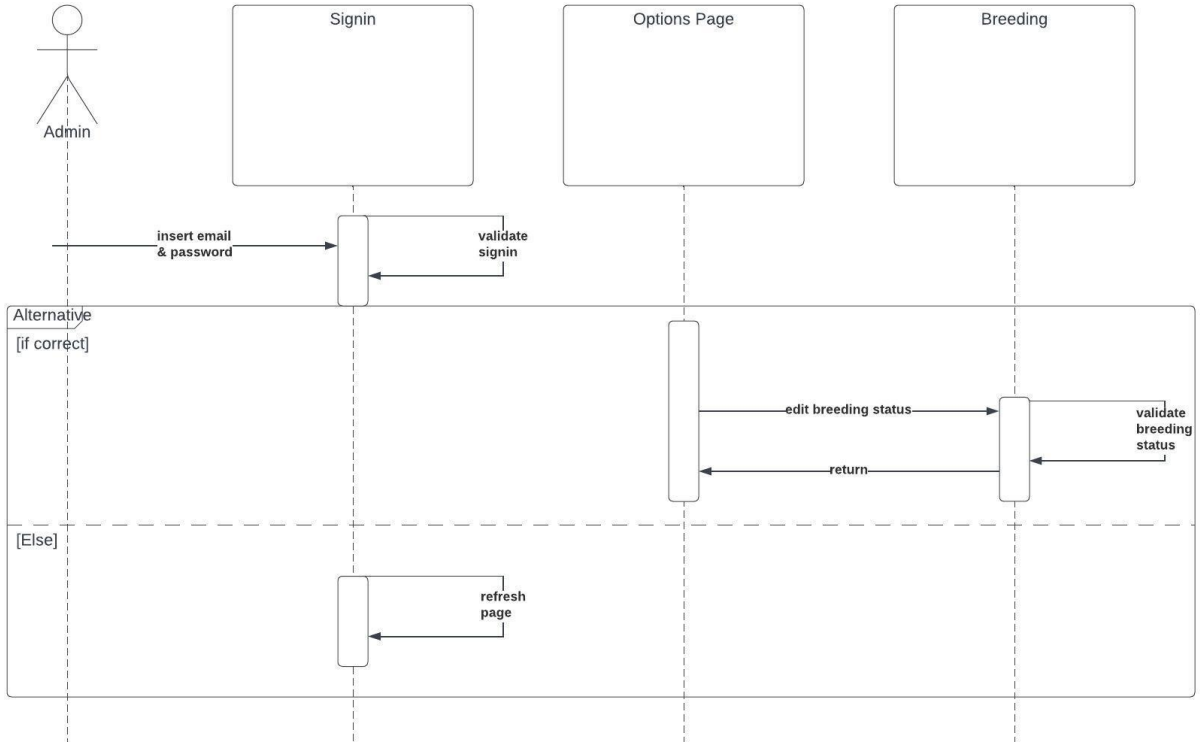

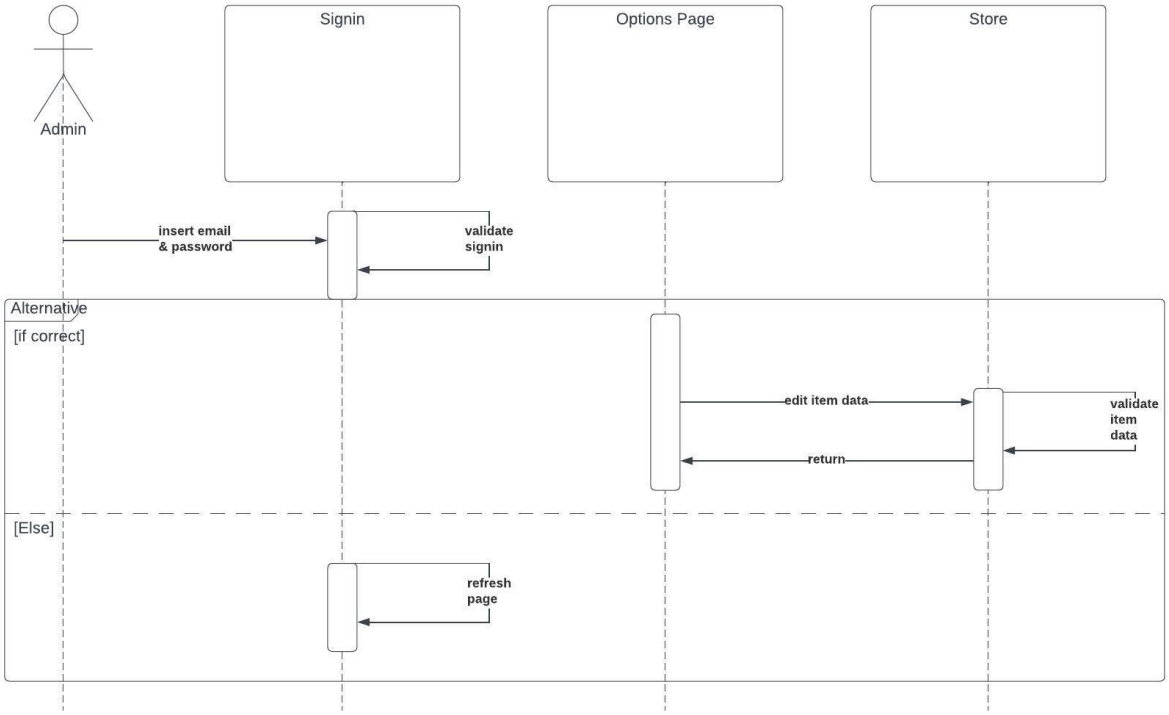
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Signin
Options Page
Store
insert email
& password
validate
signin
Alternative
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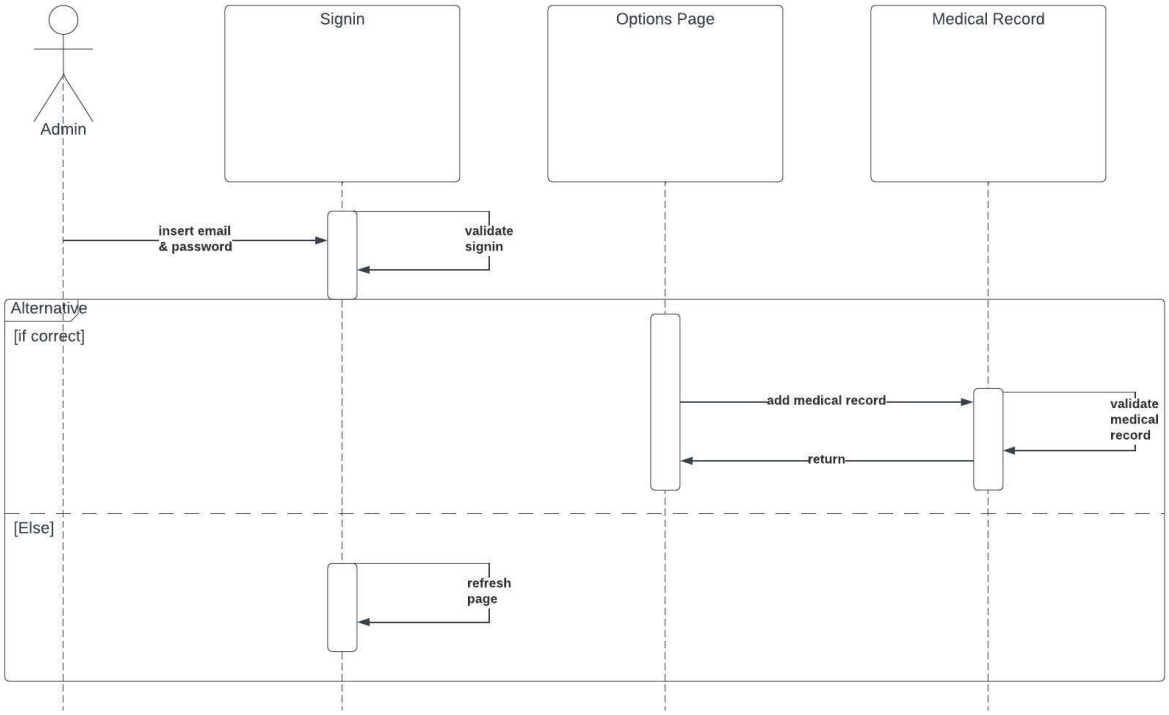
validate
item
data
return
[Else]
refresh
page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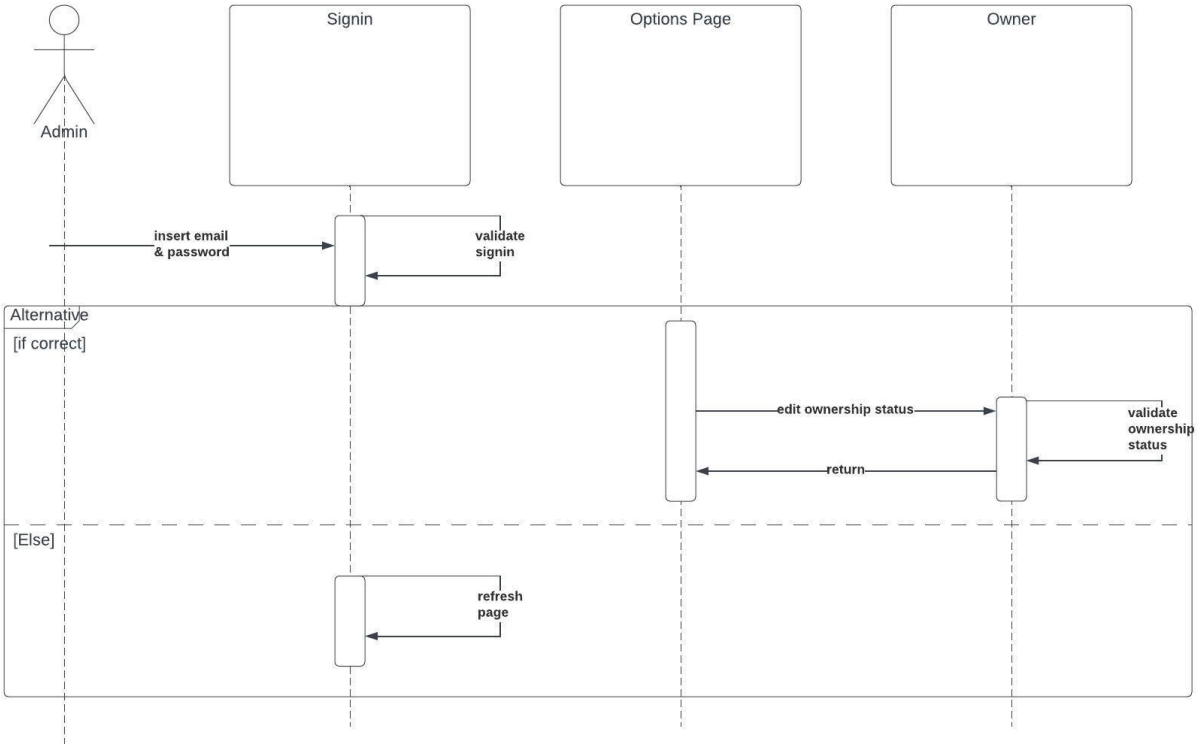
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ownership
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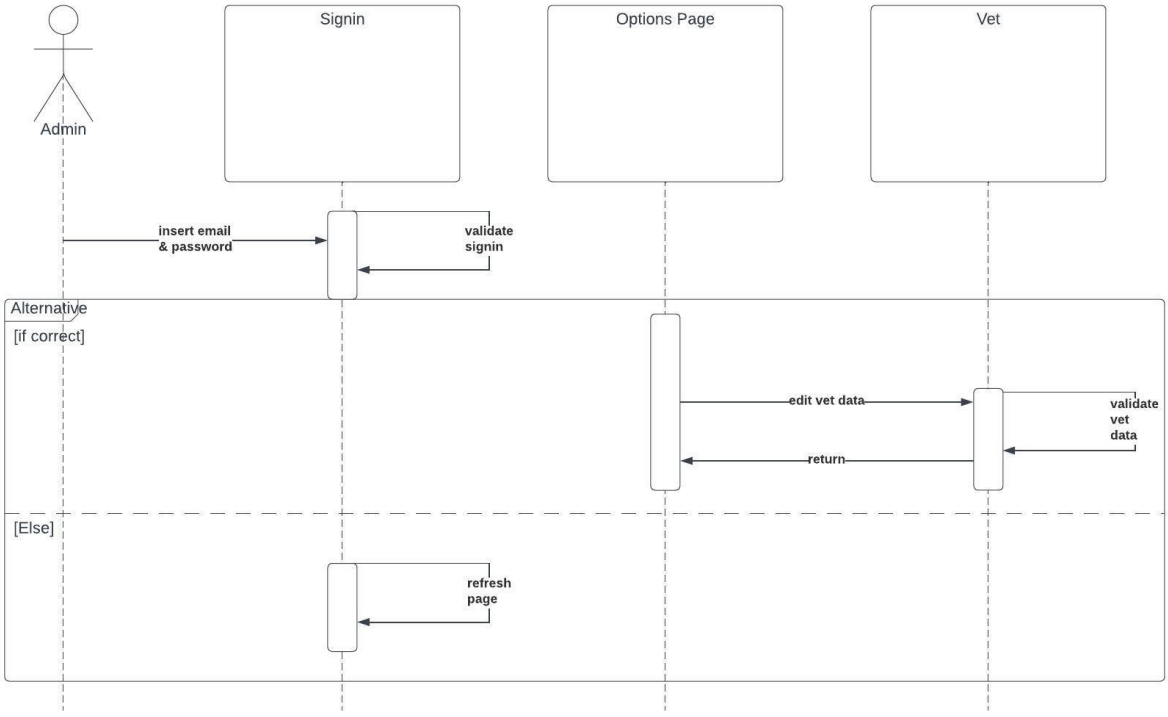
[Else]
refresh
page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Options Page
Vet
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vet
data
return
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refresh
page

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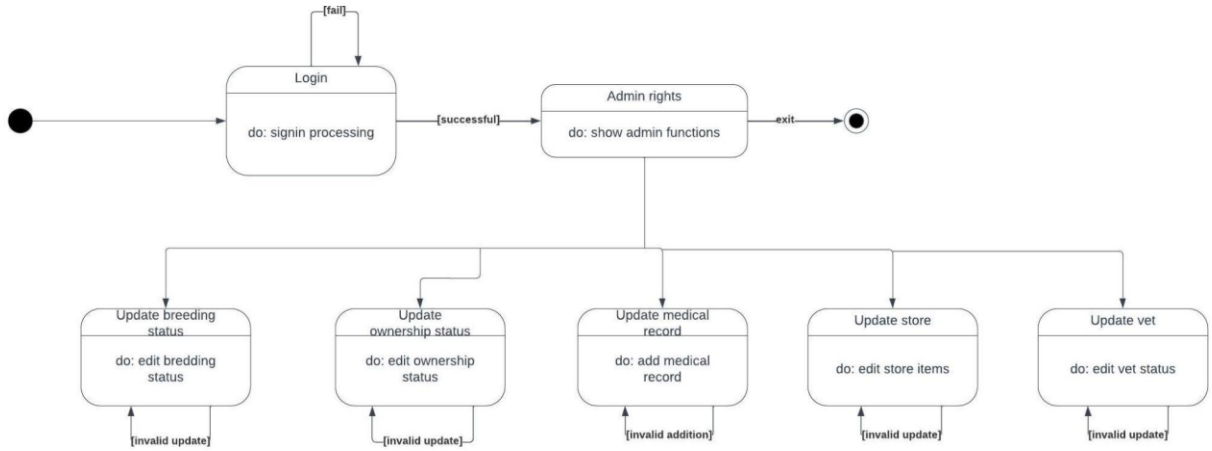

USER SIDE:

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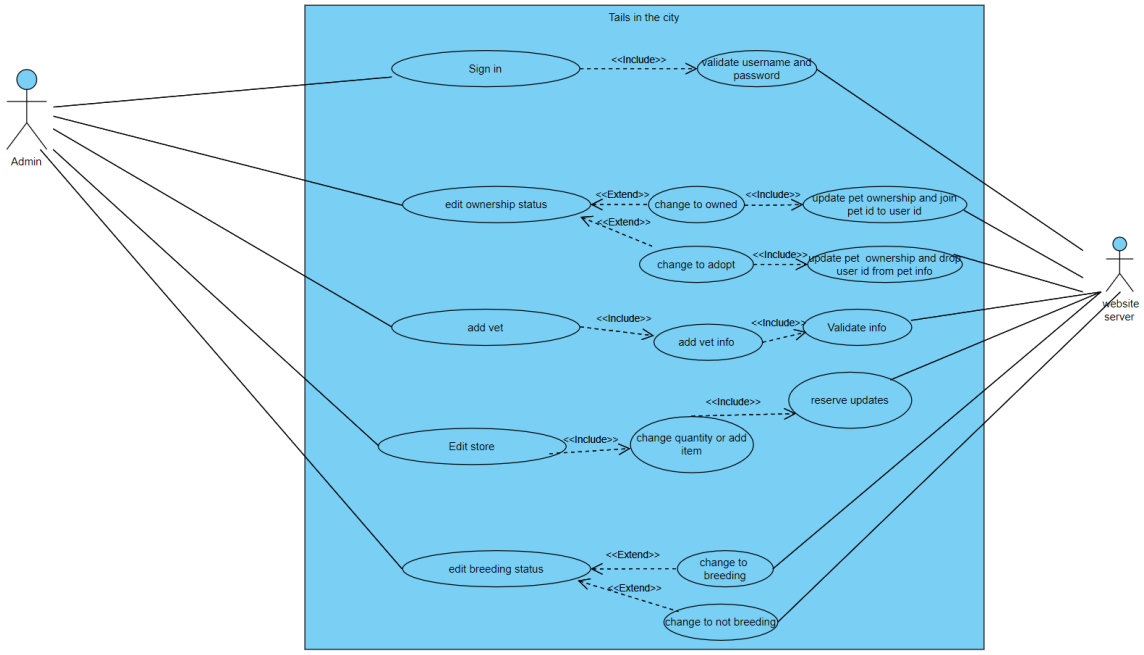

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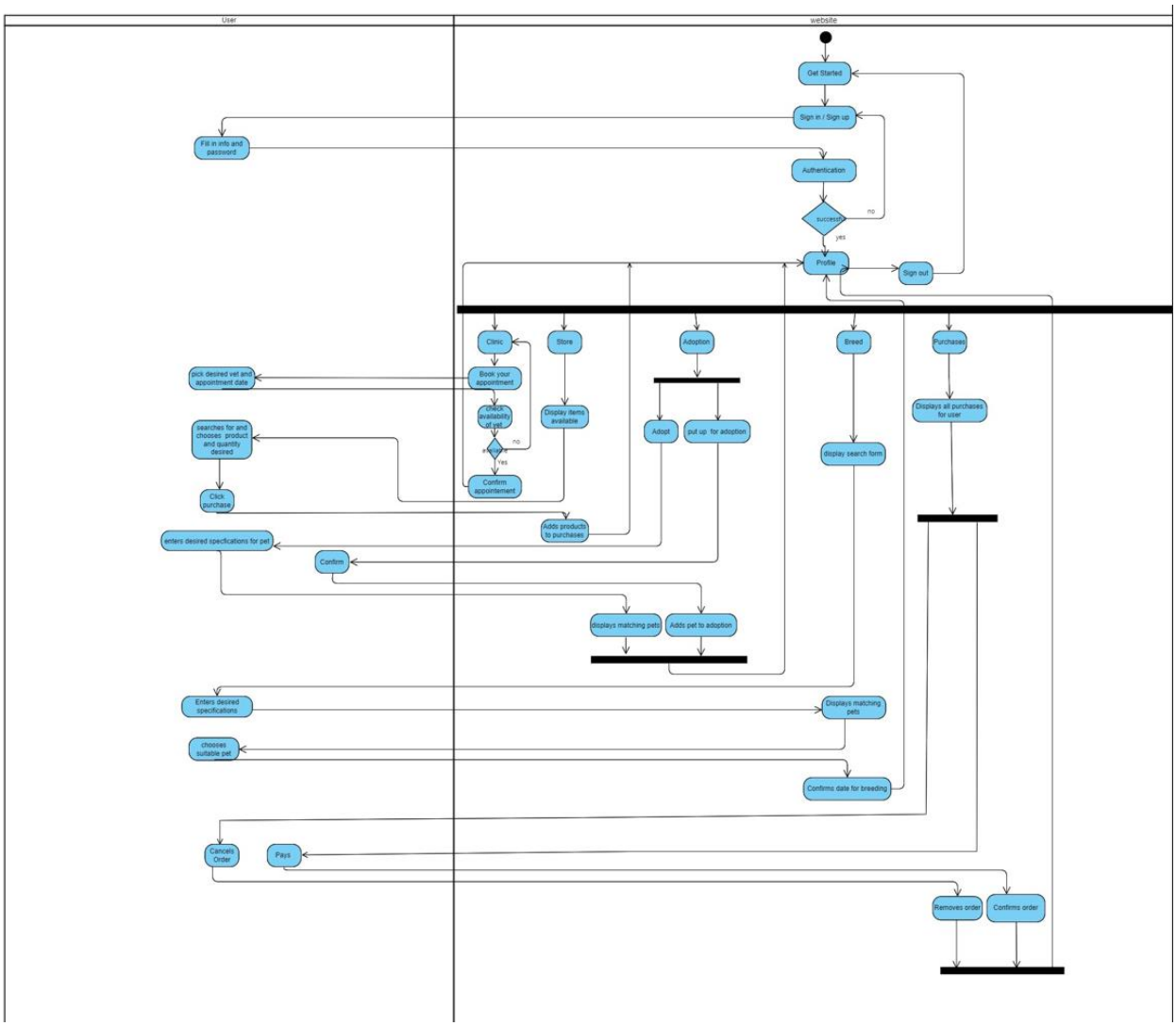

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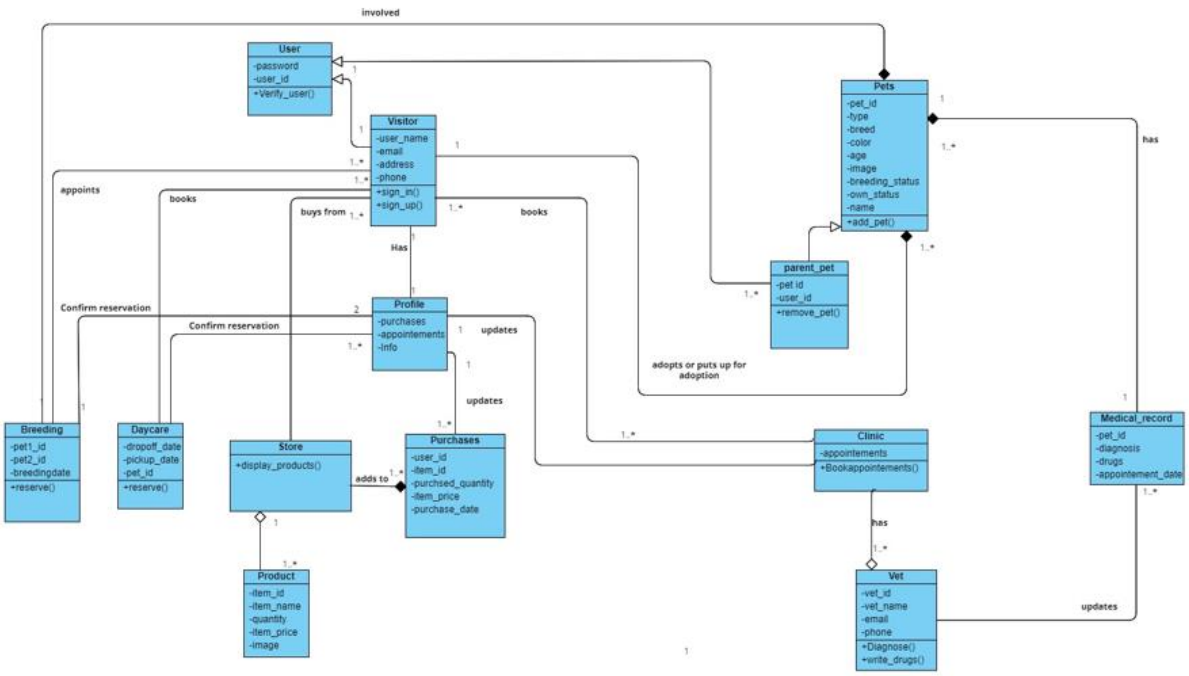

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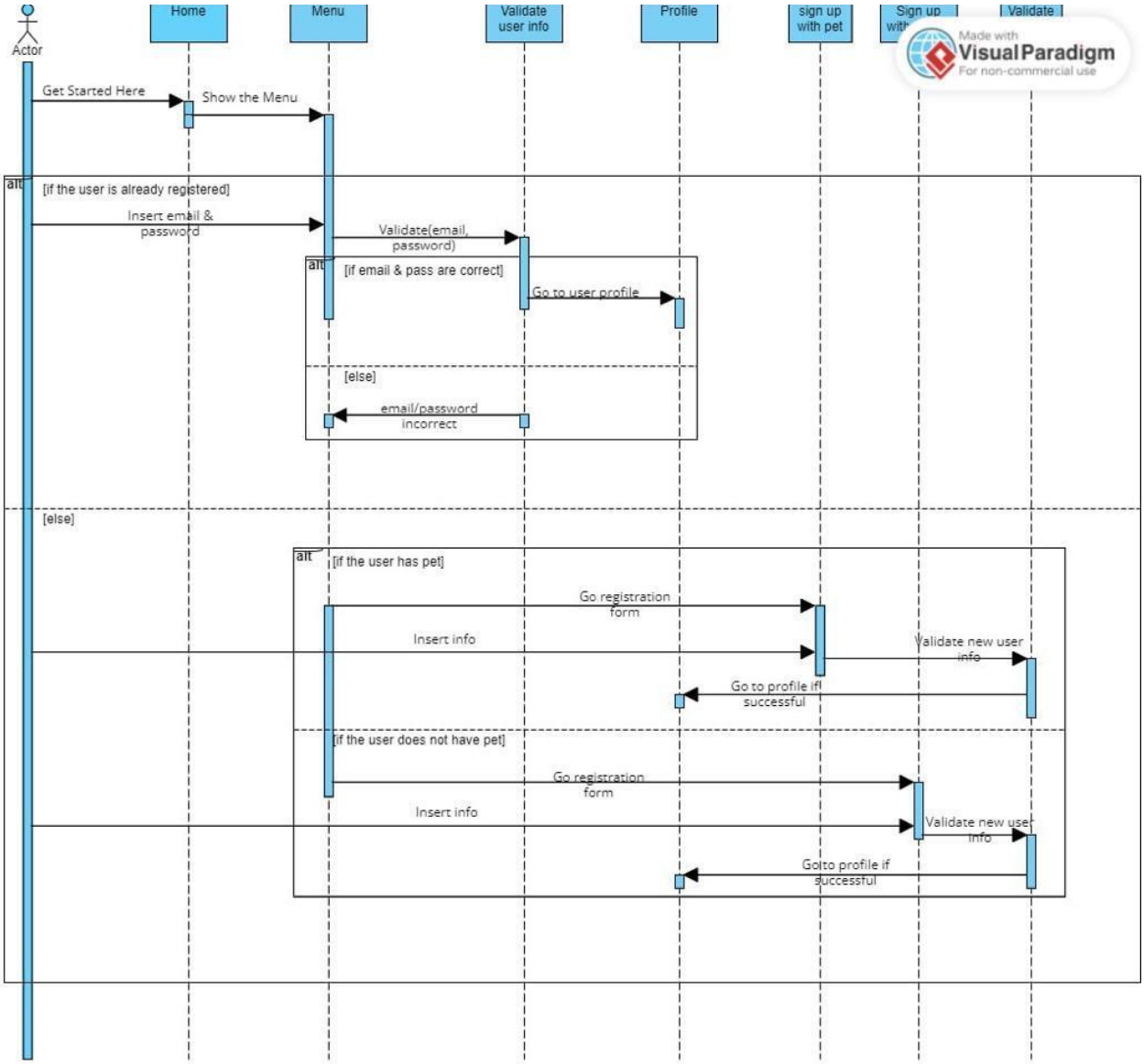
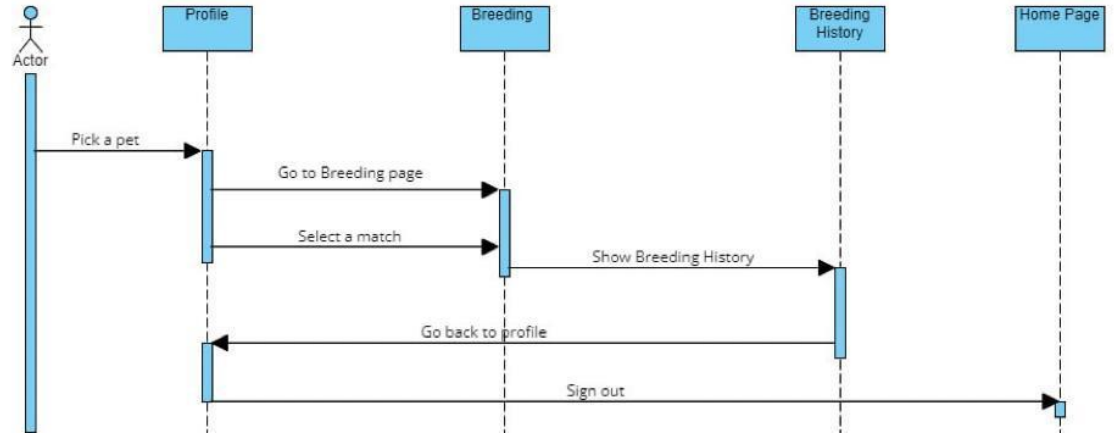
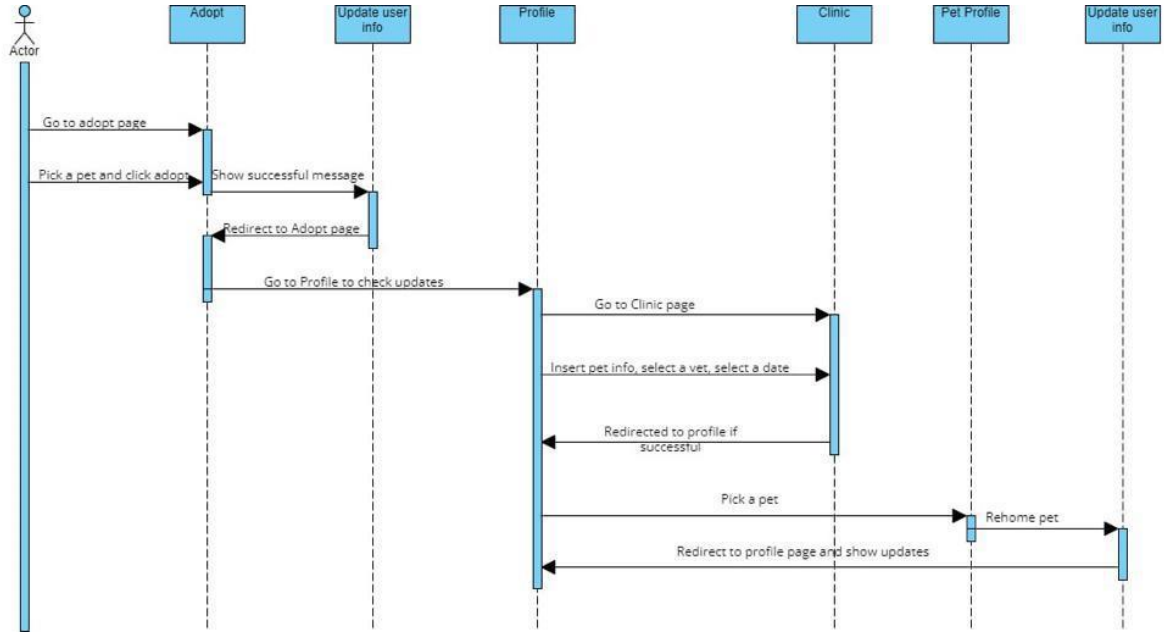
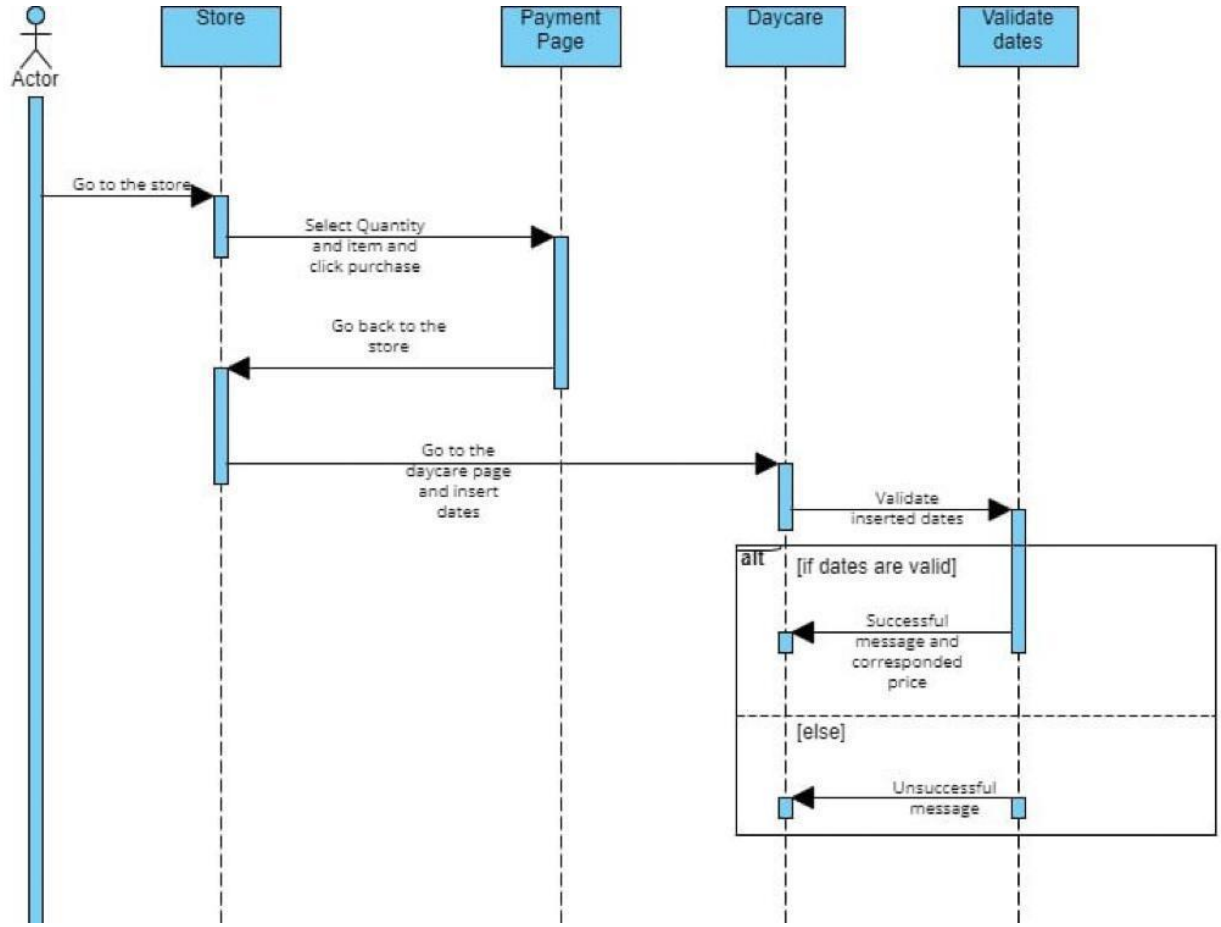



Actor
Profile
Breeding
Breeding History
Home Page
Pick a pet
Go to Breeding page
Select a match
Show Breeding History
Go back to profile
Sign out


Actor
Adopt
Update user info
Profile
Clinic
Pet Profile
Update user info
Go to adopt page
Pick a pet and click adopt
Show successful message
Redirect to Adopt page
Go to Profile to check updates
Go to Clinic page
Insert pet info, select a vet, select a date
Redirected to profile if successful
Pick a pet
Rehome pet
Redirect to profile page and show updates


Actor
Store
Payment Page
Daycare
Validate dates
Go to the store
Select Quantity and item and click purchase
Go back to the store
Go to the daycare page and insert dates
Validate inserted dates
alt
[if dates are valid]
Successful message and corresponded price
[else]
Unsuccessful message

STATE MACHINE DIAGRAM: