



# FINAL REPORT

SCS 2202 – Group Project 1

Group Number: **CS 26**

Project Title: Adoptee – An Application for Pet Adoption and Animal Support

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## LIST OF ABBREVIATIONS

<b>Abbreviation</b>	<b>Explanation</b>
API	Application Programming Interface
CORS	Cross-Origin Resource Sharing
PaaS	Platform as a Service
RCE	Remote Code Execution
RDBMS	Relational Database Management System
SDLC	Software Development Life Cycle
SLA	Service Level Agreement
SMTP	Simple Mail Transfer Protocol
SSL	Secure Sockets Layer
UI	User Interface
UML	Unified Modelling Language
XSS	Cross Site Scripting

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# 1 INTRODUCTION

## 1.1 Summery

“**Adoptee**” is a web-based platform to connect the public with animal welfare organizations from all around Sri Lanka. The system provides a convenient platform for both the parties to carry out processes such as adoptions and rescues of animals online in a smoother, faster and more transparent manner increasing the adoption rate and decreasing the death rate of animals due to accidents and ignorance.

Also, we are providing a platform for pet owners to connect with veterinary doctors through the system to make appointments and to receive medical advice.

Additionally, the system also facilitates users to directly donate to an animal welfare organization, sign up for a recurring donation (a sponsorship) or contribute to a fundraising program carried out by an organization, which will contribute to creating an animal-friendly community.

## 1.2 Project Scope

### 1.2.1 USERS

- Guest User
- Registered User
- Organization User
- Organization Admin
- Veterinary Doctor

### 1.2.2 IN-SCOPE

- Advertise pets available for adoption and send notifications to registered users.
- Searching interface for pet adopters.
- Send adoption requests to animal welfare organizations online.
- Report cases about injured/abandoned animals to animal welfare organizations and rescue animals.
- Interface for shelters to respond to adoption requests and reported cases.
- Send reminders to adopters regarding vaccinations of the adopted animals.
- Interface for adopters to post photo updates of the adopted animals.
- Interface for organizations to post photo updates of the rescued animals.
- Make donations / raise funds for animal shelters.
- Subscribe for sponsorships of animal shelters.
- Maintain separate feeds for shelters including shelter details, recent work and upcoming events.
- Portal to consult veterinarians and to make payments for consultations.
- Generate Prescriptions.
- Maintain health records of animals consulted by the veterinary doctor.
- Review shelters/organizations.
- View Statistical reports of organizations such as average adoption rate, donations received, popularity etc.

### **1.2.3 OUT OF SCOPE**

- Managing transportation of animals to their destination.
- Internal management functions/features of organizations

## **1.3 Design and Implementation Constraints**

### **1.3.1 IMPLEMENTATION CONSTRAINTS**

- Payments are simulated through a sandbox and final implementation would require getting a corporate payment gateway from a bank.
- There can be issues with reporting an animal to be rescued with location as the animal can move to another location during the time it takes the rescue team to arrive.
- Platform will not be able to guarantee the rescue of an animal reported as it is up for the organizations to do the rescue voluntarily.
- Doing veterinary consultations online may have some practical challenges involved in areas such as examining the animal due to the poor internet connection.
- Even though platform requires adoptees to post regular updates on the adopted animals, they can't be forced to do so.
- Legality of a prescription given through the system cannot be guaranteed.

### **1.3.2 DESIGN CONSTRAINTS**

- Most of the target user audience is expected to be comprised of normal non-technical savvy people, therefore the system should be easy to understand and use.
- A single organization can't cover a large area with rescue operations there for the area must be properly defined.
- Rescue requests should be accepted only from an area with a coverage of at least one organization.
- A maximum time limit should be defined, which the user must complete the adoption process or the animal shall be relisted for adoption.

## **1.4 Assumptions and Dependencies**

### **1.4.1 ASSUMPTIONS**

- All the users will have access to the internet.
- Users will provide valid information.
- When the exact date of birth of an animal is not known, an approximate date given by the user can be used to determine the age of the animal.

### **1.4.2 DEPENDENCIES**

- Google Maps API
- Payment Gateway (Sandbox) - Stripe
- Zoom API
- SMS Service - Notify.lk
- Cloud Service Provider - Google Cloud Platform

## **1.5 Document Conventions**

- This document follows UML 2.5 standard for the diagrams specifying the system requirements.
- The keywords "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in [\[RFC2119\]](#)

## **1.6 Intended Audience and Reading Suggestions**

This document is mainly intended for developers and the supervisors of this system. Chapters 2,3,4 and 7 are recommended for parties who do not have a technical knowledge (such as Clients, Users) but wish to know the process and the design of this system.

For developers and supervisors, it is recommended to refer the whole document as it contains all the technicalities of the system throughout this document

## **1.7 Revisions to the Original Diagrams**

- Merchandise Item sales for organizations have been removed from the scope therefore it and its related components have been removed from the diagrams, and the use cases 11 , 23 - 26 have also been removed.

## **1.8 References**

- [1] I. Sommerville, Software Engineering, 10 ed., Pearson, 2016.
- [2] L. Bass, P. Clements and R. Kazman, Software Architecture in Practice, 3rd ed., Addison-Wesley Professional, 2012.
- [3] J. L. Whitten, L. D. B. and D. Kevin C., Systems Analysis and Design Methods, MacGraw Hill, 2001.

## 2 REQUIREMENTS

### 2.1 Stakeholders

#### 2.1.1 GENERAL PUBLIC

The general public benefits from the system as it provides better access to potential adoptees and access to animal health care. Individuals who are interested in aiding organizations that rescue and care for animals are given the option to donate funds that are required for the organizations to operate.

- ***Unregistered/Guest User*** - This actor has the least functionality in the system. Is able to access facilities such as browsing for pets and accessing emergency contacts.
- ***Registered User*** - An Unregistered User becomes a Registered User by completing the registration process. He can access the system as an adopter and a pet owner and has respective facilities.

#### 2.1.2 ANIMAL SHELTERS

Organizations that care for injured and/or abandoned animals until they find adopters, have been identified as animal shelters. Their operations include animal rescues, adoptions, accepting donation of funds for the organization and healthcare requirements of sheltered animals.

- ***Organization User*** - A user that accesses the system on behalf of an animal shelter and handles operations that deal with their external stakeholders. Has lower authority than organization admin.
- ***Organization Admin*** - Has all the functionalities of an Organization User, in addition to creating and handling Organization User accounts and subscription tiers.

#### 2.1.3 VETERINARY DOCTORS

Delivers veterinary services to animals through registered users, organization users and admins. Provides consultation by messaging, audio and video calls. Accepts consultation requests from organizations upon being provided proof in advance that funds are available as consultation fee.

## 2.2 Use Cases and Use Case Diagrams

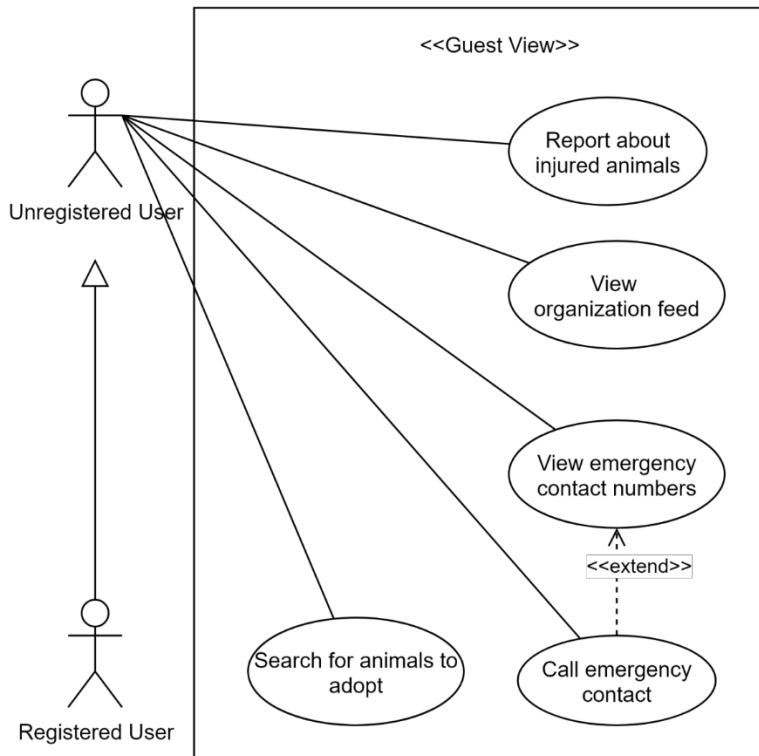


Figure 2.1: Use Case Diagram - Guest User

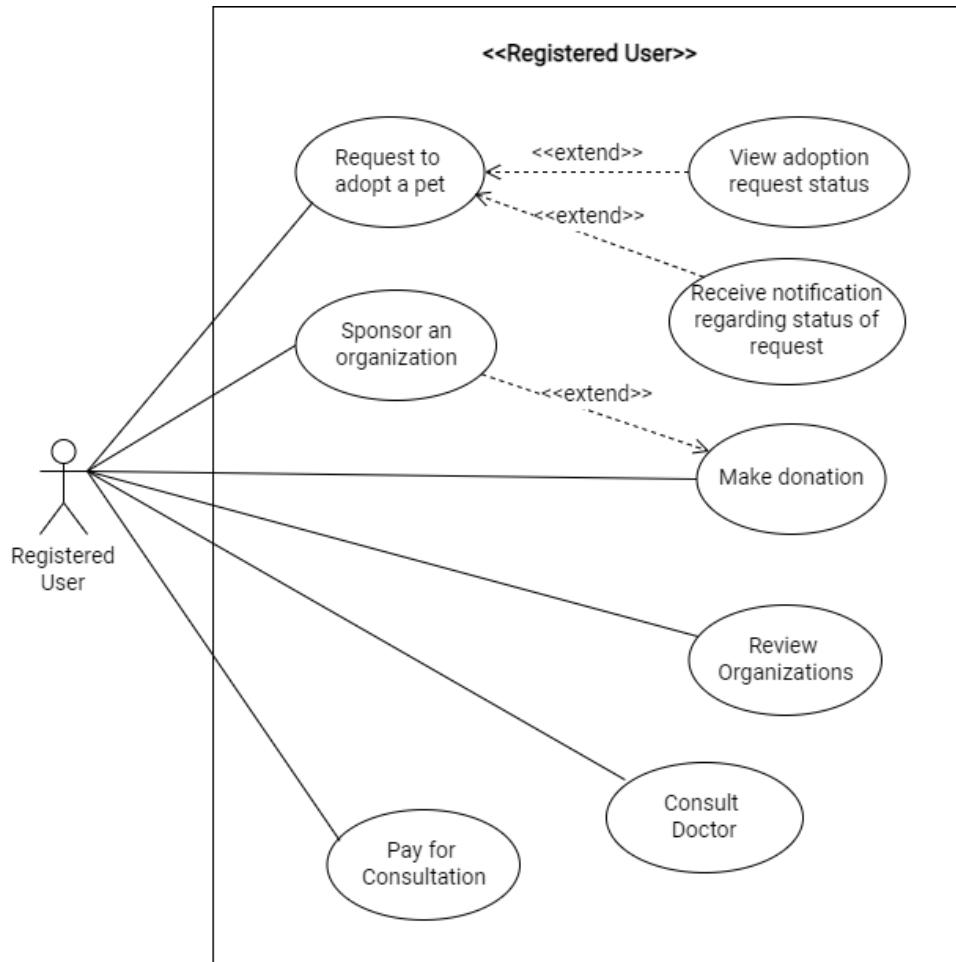


Figure 2.2: Use Case Diagram - Registered User

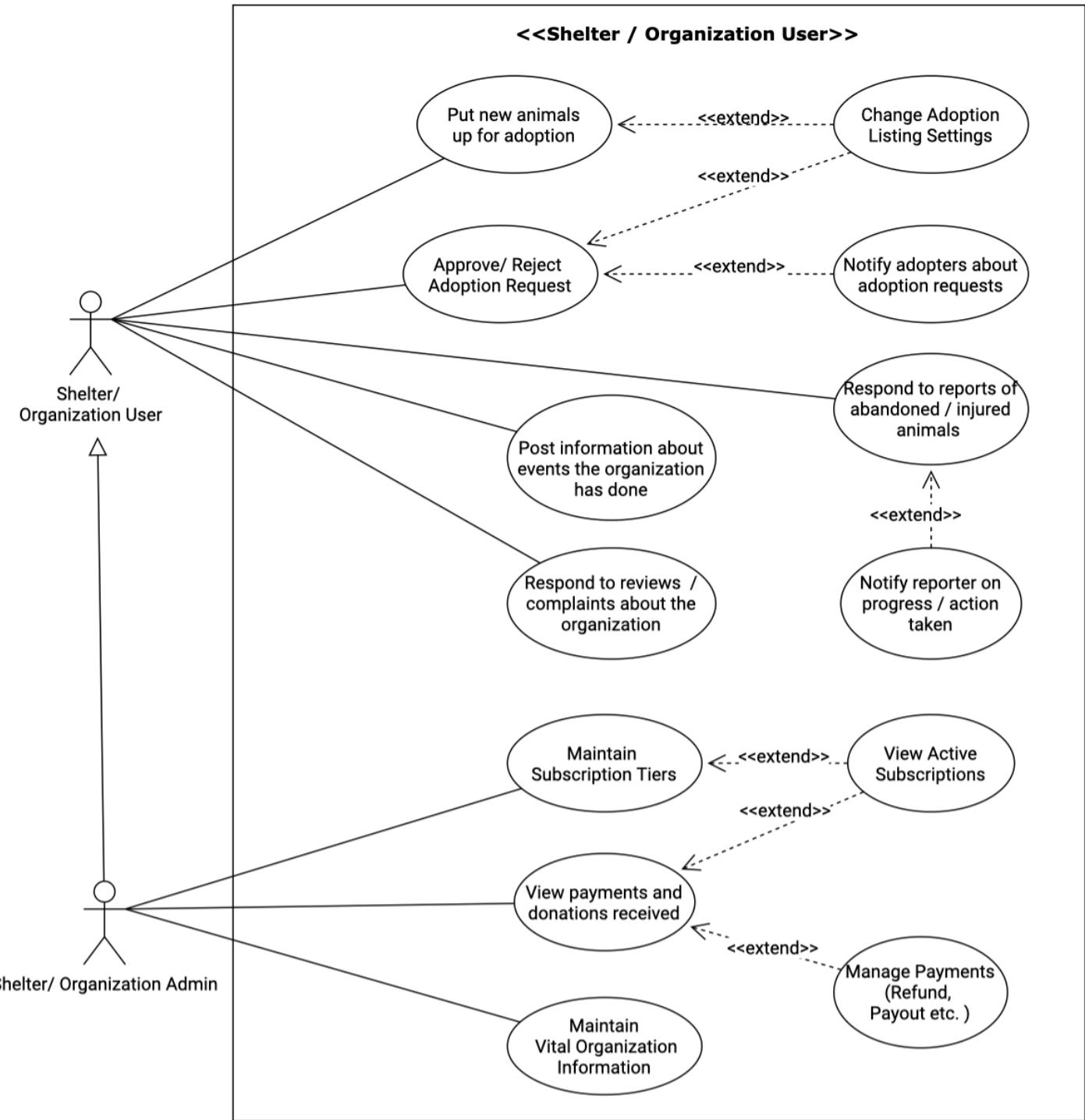


Figure 2.3: Use Case Diagram - Organization User

## Adoptee - An Application for Pet Adoption and Animal Support

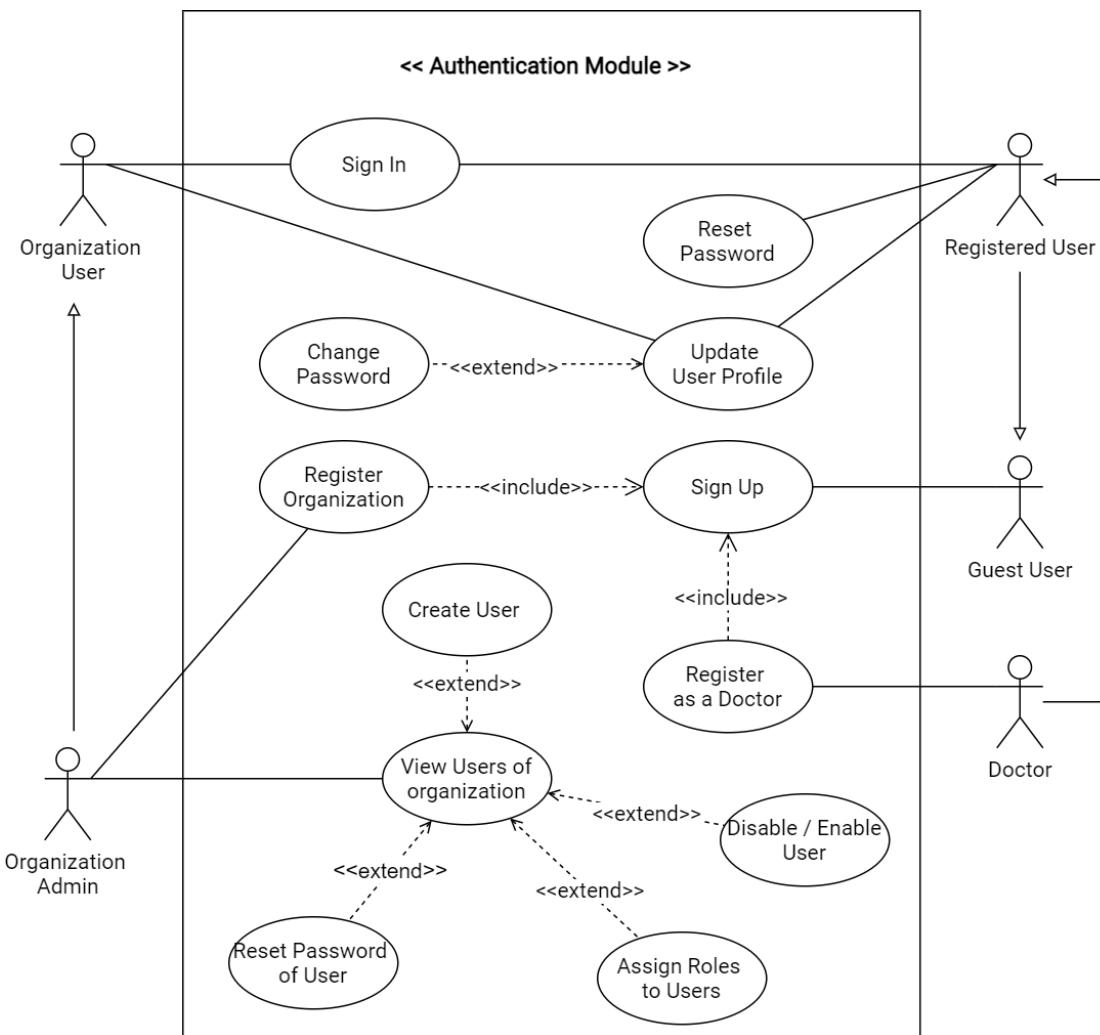


Figure 2.4: Use Case Diagram - Authentication Module

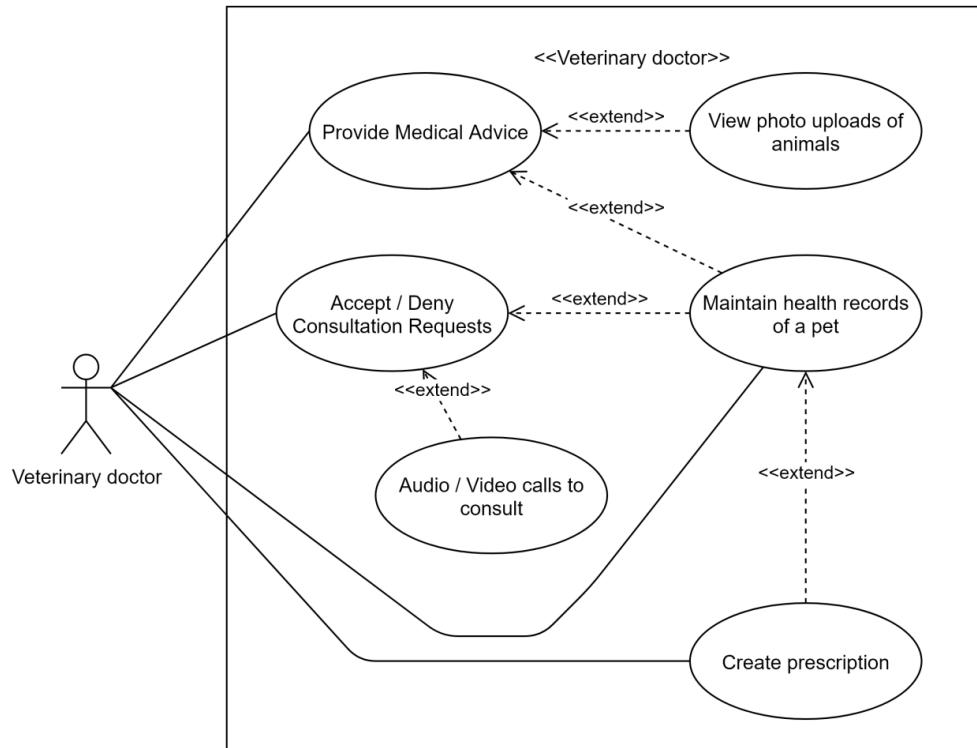


Figure 2.5: Use Case Diagram - Veterinary Doctor

## 2.3 Use Case Narratives

### 2.3.1 GUEST USER

*Table 1: Use Case Narrative #1 - Search for animals to adopt*

Use Case ID	<b>1</b>
Use Case Name	<b>Search for animals to adopt</b>
Primary Actor/s	Guest User
Description	Users can filter and shortlist the available animals based on their preferences.
Pre-Conditions	There should be animals available to adopt.
Main Scenario	<ul style="list-style-type: none"> <li>• Visit the website</li> <li>• Filter by age, color, type, gender or organization</li> <li>• Search by keywords</li> <li>• View details of an interested animal.</li> <li>• Filter breeds, type to view breed-relevant information</li> </ul>
Exceptions	User can select a pet to adopt during the process or even before applying any filters.
Post-Conditions	<ul style="list-style-type: none"> <li>• Correct results for the filters &amp; keywords are displayed.</li> <li>• Filters will reset for subsequent visits.</li> </ul>

*Table 2: Use Case Narrative #2 - View emergency contact numbers*

Use Case ID	<b>2</b>
Use Case Name	<b>View emergency contact numbers</b>
Primary Actor/s	Guest User
Description	User can use emergency contacts which are available
Pre-Conditions	There must be emergency at least one contact number added by the organization
Main Scenario	<ul style="list-style-type: none"> <li>• Visit site home/ rescue report page</li> <li>• Go to emergency contacts numbers</li> <li>• Select view emergency numbers</li> </ul>
Exceptions	User can choose to call the emergency contact without viewing numbers.
Post-Conditions	<ul style="list-style-type: none"> <li>• The contact numbers were displayed correctly.</li> <li>• User can copy or call a selected number</li> </ul>

*Table 3: Use Case Narrative #3 - Call emergency contact*

Use Case ID	<b>3</b>
Use Case Name	<b>Call emergency contact</b>
Primary Actor/s	Guest User
Description	User has access to call the emergency contacts
Pre-Conditions	Each emergency numbers must view with some details of the contact
Main Scenario	<ul style="list-style-type: none"> <li>• User views site home/ rescue report page</li> <li>• Select and call a preferable contact</li> <li>• System automatically dials up the number through user's device</li> </ul>
Exceptions	<ul style="list-style-type: none"> <li>• User must be browsing from a mobile phone or another compatible device in order for the automatic dialup to work.</li> <li>• Otherwise, user will have to follow an alternative method.</li> <li>• Some numbers may be unavailable.</li> </ul>
Post-Conditions	Call gets dialed up correctly

*Table 4: Use Case Narrative #4 - View Organization Profile / Feed*

Use Case ID	<b>4</b>
Use Case Name	<b>View Organization Profile / Feed</b>
Primary Actor/s	Guest User
Description	Organizations can maintain a profile and a timeline of their events. Users can view these after selecting an organization
Pre-Conditions	
Main Scenario	<ul style="list-style-type: none"> <li>• Browse organizations</li> <li>• Select an organization from the available list</li> <li>• View Profile</li> </ul>
Exceptions	<ul style="list-style-type: none"> <li>• User can donate to the organization or subscribe for a sponsorship</li> <li>• Can submit a review about the organization</li> </ul>
Post-Conditions	

*Table 5: Use Case Narrative #5 - Report about injured animals*

Use Case ID	<b>5</b>
Use Case Name	<b>Report about injured animals</b>
Primary Actor/s	Guest User
Description	When someone finds an injured/abandoned animal on the road or somewhere else they can report it through the system.
Pre-Conditions	The user should have a photo, the location and other relevant information of the animal
Main Scenario	<ul style="list-style-type: none"> <li>• Input description</li> <li>• Upload a Picture</li> <li>• Provide location data or input location manually</li> <li>• Submit</li> </ul>
Exceptions	User can choose to directly call instead of reporting.
Post-Conditions	<ul style="list-style-type: none"> <li>• A report is created containing all required data.</li> <li>• A notification is sent to the organization</li> </ul>

### 2.3.2 REGISTERED USER

*Table 6: Use Case Narrative #6 - Request to Adopt a pet*

Use Case ID	<b>6</b>
Use Case Name	<b>Request to Adopt a pet</b>
Primary Actor/s	Registered User
Description	User submits a request to adopt a pet from the relevant organization
Pre-Conditions	Pet should be one that is available for adoption - not already adopted
Main Scenario	<ul style="list-style-type: none"> <li>• Visit website</li> <li>• Search for pets</li> <li>• Select Request to Adopt for required pet</li> </ul>
Exceptions	<ul style="list-style-type: none"> <li>• If user has 2 pending requests, he cannot request more pets</li> <li>• If user adopted a pet within the last 7 days, then he cannot request a pet</li> </ul>
Post-Conditions	<ul style="list-style-type: none"> <li>• Organization user is notified of adoption request</li> <li>• Organization user receives contact details of adopter</li> <li>• The requested pet will be visible as "Request Pending" for registered user who requested</li> </ul>

*Table 7: Use Case Narrative #7 - View adoption request status*

Use Case ID	<b>7</b>
Use Case Name	<b>View adoption request status</b>
Primary Actor/s	Registered User
Description	User can see if the request is still pending, rejected or approved
Pre-Conditions	An Adoption request must have been made by the user
Main Scenario	<ul style="list-style-type: none"> <li>• Sign in</li> <li>• View pets up for adoption</li> <li>• Select requested pet</li> <li>• View request status</li> </ul>
Exceptions	Request will not be displayed if the relevant animal has been adopted or is not available for adoption any longer
Post-Conditions	Current state of the pending requests was displayed correctly

*Table 8: Use Case Narrative #8 - Receive notification regarding the status of an adoption request*

Use Case ID	<b>8</b>
Use Case Name	<b>Receive notification regarding the status of an adoption request</b>
Primary Actor/s	Registered User
Description	User receives a notification that says if request was rejected or approved
Pre-Conditions	Organization user must check the notification of adoption request
Main Scenario	<ul style="list-style-type: none"> <li>• Organization User approves or rejects the registered user's adoption request</li> <li>• User receives notification</li> <li>• Check if request was accepted or rejected</li> </ul>
Exceptions	Organization user does not respond to request at all
Post-Conditions	

*Table 9: Use Case Narrative #9 - Make donation*

Use Case ID	<b>9</b>
Use Case Name	<b>Make donation</b>
Primary Actor/s	Registered User
Description	User donates monetary funds to an organization or a particular pet of an organization
Pre-Conditions	Organization must be open for funding Organization must put up a pet in need of funds
Main Scenario	<ul style="list-style-type: none"> <li>• User visits an organization's page</li> <li>• Select Donate option</li> <li>• Enter amount and select/ skip option to send name and email</li> <li>• Be directed to payment gateway</li> <li>• Enter payment details</li> <li>• System credits the amount to the organization's account</li> <li>• Updates the user's payment history</li> <li>• Generate receipt</li> </ul>
Exceptions	<ul style="list-style-type: none"> <li>• User enters invalid payment details</li> <li>• Amount entered is lower than the minimum accepted by the payment gateway</li> </ul>
Post-Conditions	Show confirmation of successful payment

*Table 10: Use Case Narrative #10 - Subscribe to a sponsorship of an organization*

Use Case ID	<b>10</b>
Use Case Name	<b>Subscribe to a sponsorship of an organization</b>
Primary Actor/s	Registered User
Description	User agrees to donates periodically to a specific organization or pet
Pre-Conditions	<ul style="list-style-type: none"> <li>• Organization must be open for funding</li> <li>• Organization must put up a pet in need of funds</li> </ul>
Main Scenario	<ul style="list-style-type: none"> <li>• User visits an organization's page</li> <li>• View sponsorship tiers open for subscription</li> <li>• Select Subscribe/ Unsubscribe option</li> <li>• Enter payment details</li> <li>• System updates user's subscriptions</li> </ul>
Exceptions	
Post-Conditions	

*Table 11: Use Case Narrative #12 - Review organizations*

Use Case ID	<b>12</b>
Use Case Name	<b>Review organizations</b>
Primary Actor/s	Registered User
Description	User comments on the performance of organizations
Pre-Conditions	
Main Scenario	<ul style="list-style-type: none"> <li>• User visits an organization's page</li> <li>• Selects "Review organization" option</li> <li>• Enters comments and selects / skips option to send name and email</li> </ul>
Exceptions	
Post-Conditions	

*Table 12: Use Case Narrative #13 - Consult doctor*

Use Case ID	<b>13</b>
Use Case Name	<b>Consult doctor</b>
Primary Actor/s	Registered User
Description	User consults a veterinary doctor about their pet's health conditions
Pre-Conditions	A doctor must be available for online consultation in real time or later
Main Scenario	<ul style="list-style-type: none"> <li>• User searches for doctors</li> <li>• Views available doctors</li> <li>• Selects doctor, date, time, pet and books appointment for pet</li> <li>• Makes payment</li> <li>• Receives consultation</li> <li>• Doctor create prescription</li> </ul>
Exceptions	<ul style="list-style-type: none"> <li>• There are no appointment time slots available</li> <li>• An uploaded picture is not viewed by the doctor</li> <li>• An uploaded picture is removed by the user before receiving consultation</li> </ul>
Post-Conditions	Prescription is downloaded

*Table 13: Use Case Narrative #14 - Pay for consultation*

Use Case ID	<b>14</b>
Use Case Name	<b>Pay for consultation</b>
Primary Actor/s	Registered User
Description	User pays the veterinary doctor for consulting on their pet's health
Pre-Conditions	Doctor must declare that the consultation is one that requires payment
Main Scenario	<ul style="list-style-type: none"> <li>• User makes an appointment for a pet</li> <li>• Be directed to payment gateway</li> <li>• Enter payment details</li> <li>• System credits the amount to the organization's account</li> <li>• Updates the user's payment history</li> <li>• Generate receipt</li> </ul>
Exceptions	Invalid payment details entered
Post-Conditions	<ul style="list-style-type: none"> <li>• User receives confirmation of successful payment</li> <li>• Doctor receives confirmation of successful payment</li> </ul>

*Table 14: Use Case Narrative #50 - View Purchase, Donation & Sponsorship History*

Use Case ID	50
<b>Use Case Name</b>	<b>View Donation &amp; Sponsorship History</b>
Primary Actor/s	Registered User
Description	User can view their past payments and donations
Pre-Conditions	
Main Scenario	<ul style="list-style-type: none"> <li>• User visits website</li> <li>• Signs in</li> <li>• Visit's profile</li> <li>• Selects payment history</li> <li>• View past donations, subscriptions</li> </ul>
Exceptions	If there haven't been any transactions, the content will be empty
Post-Conditions	

### 2.3.3 ORGANIZATION USER

*Table 15: Use Case Narrative #15 - Put new animals up for adoption*

Use Case ID	<b>15</b>
Use Case Name	<b>Put new animals up for adoption</b>
Primary Actor/s	Organization User
Description	Organization User adds details about new animals to be adopted to the system
Pre-Conditions	
Main Scenario	<ul style="list-style-type: none"> <li>• Organization User navigates to "Animals for Adoption" section</li> <li>• Selects "Add new animal for adoption"</li> <li>• Add relevant details about the animal</li> <li>• Confirm the details</li> </ul>
Exceptions	
Post-Conditions	<ul style="list-style-type: none"> <li>• The new opportunity will be displayed in the system.</li> <li>• Registered Users receive a notification on the newly added opportunity.</li> </ul>

*Table 16: Use Case Narrative #16 - Change Adoption Listing Settings*

Use Case ID	<b>16</b>
Use Case Name	<b>Change Adoption Listing Settings</b>
Primary Actor/s	Organization User
Description	Organization User can change listing setting of the adoption opportunities to hide or view relevant opportunities
Pre-Conditions	
Main Scenario	<ul style="list-style-type: none"> <li>• Organization User navigates to "Settings" section</li> <li>• View's listing settings</li> <li>• Select listing option</li> </ul>
Exceptions	
Post-Conditions	Listing settings of relevant adoption opportunities will change accordingly in the UI

*Table 17: Use Case Narrative #17 - Approve/ Reject Adoption Request*

Use Case ID	<b>17</b>
Use Case Name	<b>Approve/ Reject Adoption Request</b>
Primary Actor/s	Organization User
Description	Organization User approves or rejects the adoption requests sent by registered users
Pre-Conditions	
Main Scenario	<ul style="list-style-type: none"> <li>• Organization User selects adoption requests</li> <li>• Change the status to "Approved/Rejected"</li> </ul>
Exceptions	
Post-Conditions	Requested user will get a notification on the status change Opportunity status will be changed accordingly

*Table 18: Use Case Narrative #18 - Notify adopters about adoption requests*

Use Case ID	<b>18</b>
Use Case Name	<b>Notify adopters about adoption requests</b>
Primary Actor/s	Organization User
Description	Once the organization user selects an adoption request from the list and change its status, a notification will be sent to the registered user who requested indicating the status of it.
Pre-Conditions	
Main Scenario	<ul style="list-style-type: none"> <li>• Organization User selects adoption requests</li> <li>• Change the status to "Approved/Rejected"</li> </ul>
Exceptions	Incorrect contact details entered
Post-Conditions	Requested user will get a notification on the status change.

*Table 19: Use Case Narrative #19 - Respond to reports of abandoned / injured animals*

Use Case ID	<b>19</b>
Use Case Name	<b>Respond to reports of abandoned / injured animals</b>
Primary Actor/s	Organization User
Description	Organization will view, respond and handle the cases reported by users
Pre-Conditions	
Main Scenario	<ul style="list-style-type: none"> <li>• Organization will view reported cases</li> <li>• Select the case to be taken care of</li> <li>• Changes its status to 'Allocated'</li> </ul>
Exceptions	Case reported being fake
Post-Conditions	<ul style="list-style-type: none"> <li>• Reported user will get a notification on the status change</li> <li>• Case status will be changed accordingly</li> </ul>

*Table 20: Use Case Narrative #20 - Notify reporter on progress / action taken*

Use Case ID	<b>20</b>
Use Case Name	<b>Notify reporter on progress / action taken</b>
Primary Actor/s	Organization User
Description	Organization will add further updates on the process and actions taken regarding the reported case.
Pre-Conditions	The relevant case has to be taken care of by the same organization
Main Scenario	<ul style="list-style-type: none"> <li>• Organization will view reported cases</li> <li>• Select the case to be updated</li> <li>• Adds an update on the process / actions taken</li> <li>• Add photo proof for updates</li> </ul>
Exceptions	Case reported being fake
Post-Conditions	Update notification on the case will be sent to the reported user

*Table 21: Use Case Narrative #21 - Post information about events the organization has done*

Use Case ID	<b>21</b>
Use Case Name	<b>Post information about events the organization has done</b>
Primary Actor/s	Organization User
Description	Organization User will post about past events conducted by the organization and upcoming events to be conducted
Pre-Conditions	
Main Scenario	<ul style="list-style-type: none"> <li>• Organization user will view existing events</li> <li>• Select an option from modify event / remove event / create event (Past Event / Upcoming Event)</li> </ul>
Exceptions	
Post-Conditions	Event information will be posted in the system

*Table 22: Use Case Narrative #52 - Add new updates about rescued animals*

Use Case ID	<b>52</b>
Use Case Name	<b>Add new updates about rescued animals</b>
Primary Actor/s	Organization User
Description	Organization User can update the reporter on the progress on the rescue report.
Pre-Conditions	Rescue request must be reported.
Main Scenario	<ul style="list-style-type: none"> <li>• View Rescue reports</li> <li>• Provide progress information</li> <li>• Save</li> </ul>
Exceptions	
Post-Conditions	<ul style="list-style-type: none"> <li>• Update persisted under the rescue report.</li> <li>• Reporter notified</li> </ul>

### 2.3.4 ORGANIZATION ADMIN

*Table 23: Use Case Narrative #22 - Respond to reviews / complaints about the organization*

Use Case ID	<b>22</b>
Use Case Name	<b>Respond to reviews / complaints about the organization</b>
Primary Actor/s	Organization User
Description	Organization User will view and respond to reviews given by users
Pre-Conditions	
Main Scenario	<ul style="list-style-type: none"> <li>• Organization will view reviews</li> <li>• Give responses to reviews</li> </ul>
Exceptions	
Post-Conditions	<ul style="list-style-type: none"> <li>• Reviewer will be notifying on the responses</li> <li>• Responses will be displayed in the system</li> </ul>

*Table 24: Use Case Narrative #27 - Maintain Sponsorship Tiers*

Use Case ID	<b>27</b>
Use Case Name	<b>Maintain Sponsorship Tiers</b>
Primary Actor/s	Organization Admin
Description	Each organization is different and they will have different requirements. So, organizations can decide on the details of sponsorships (prices, benefits) tiers themselves.
Pre-Conditions	
Main Scenario	<ul style="list-style-type: none"> <li>• Create new sponsorship tier</li> <li>• or modify an existing tier</li> <li>• or Remove a Tier from the system</li> </ul>
Exceptions	<ul style="list-style-type: none"> <li>• Tier modifications (amount changes) will not affect existing subscriptions</li> <li>• When a tier is removed user can migrate existing subscriptions to a lower or equal tier</li> </ul>
Post-Conditions	

*Table 25: Use Case Narrative #28 - View Active Sponsorships*

Use Case ID	<b>28</b>
Use Case Name	<b>View Active Sponsorships</b>
Primary Actor/s	Organization Admin
Description	An organization can have multiple active sponsorships. It is crucial to know the people sponsoring the organization and the amounts.
Pre-Conditions	
Main Scenario	<ul style="list-style-type: none"> <li>• Navigate to Organization Dashboard</li> <li>• View Sponsorships</li> <li>• View Active Sponsorship Details</li> <li>• View Summery</li> </ul>
Exceptions	
Post-Conditions	

*Table 26: Use Case Narrative #29 - View payments and donations received*

Use Case ID	<b>29</b>
Use Case Name	<b>View payments and donations received</b>
Primary Actor/s	Organization Admin
Description	Being able to view payments and donations is important to planning and other management tasks. this will also provide an analytical view into the donations received.
Pre-Conditions	
Main Scenario	<ul style="list-style-type: none"> <li>• Navigate to Organization Dashboard</li> <li>• View Payments</li> <li>• Apply Filters</li> <li>• View Details of specific a payment / donation (Date, user, type)</li> </ul>
Exceptions	If the organization doesn't have received any donations or payments an empty list will be displayed
Post-Conditions	

*Table 27: Use Case Narrative #30 - Refund Payment*

Use Case ID	<b>30</b>
Use Case Name	<b>Refund Payment</b>
Primary Actor/s	Organization Admin
Description	Payments received by the organization have to be refunded sometimes this has to be notified to the user with relevant transaction details
Pre-Conditions	
Main Scenario	<ul style="list-style-type: none"> <li>• View Payments &amp; Select a Payment</li> <li>• Select "Refund Payment"</li> <li>• Provide a Reason</li> <li>• View Transaction details</li> </ul>
Exceptions	A payment can be refunded only within the permitted refund duration of the payment method (eg:90 days).
Post-Conditions	A Notification must be generated and sent to the user who made the payment

*Table 28: Use Case Narrative #31 - Maintain Vital Organization Information*

Use Case ID	<b>31</b>
Use Case Name	<b>Maintain Vital Organization Information</b>
Primary Actor/s	Organization Admin
Description	Organizations have key vital information such as Names, Addresses contact numbers etc. Admin can modify and update those.
Pre-Conditions	
Main Scenario	<ul style="list-style-type: none"> <li>• Go to Organization Settings</li> <li>• Select "Edit Organization Profile"</li> <li>• Update fields as required.</li> <li>• Save</li> </ul>
Exceptions	User can choose to discard the changes without saving
Post-Conditions	Details are updated and presented correctly

*Table 29: Use Case Narrative #45 - View users of an organization*

Use Case ID	<b>45</b>
Use Case Name	<b>View users of an organization</b>
Primary Actor/s	Organization Admin
Description	Organization admin can view who are the users in his/her organization and their details such as email, status (Enabled or Disabled) and the assigned role.
Pre-Conditions	
Main Scenario	<ul style="list-style-type: none"> <li>• Go to Organization Settings</li> <li>• Select "Users &amp; Roles"</li> <li>• View users and perform any tasks required.</li> </ul>
Exceptions	Admin can choose to perform other tasks from this screen such as password reset and role assignment.
Post-Conditions	

*Table 30: Use Case Narrative #46 - Create an Organization User*

Use Case ID	<b>46</b>
Use Case Name	<b>Create an Organization User</b>
Primary Actor/s	Organization Admin, Organization User
Description	The addition of a new user to an organization can be done only by the admin of that organization.
Pre-Conditions	Admin should have the required information to create a user (an email address, username)
Main Scenario	<ul style="list-style-type: none"> <li>• Navigate to "Organization Settings"</li> <li>• Select "Users &amp; Roles" -&gt; New User</li> <li>• Input User details (Name, email, role, password)</li> <li>• Submit</li> </ul>
Exceptions	
Post-Conditions	<ul style="list-style-type: none"> <li>• User is created successfully</li> <li>• A notification email is sent to the created user.</li> </ul>

*Table 31: Use Case Narrative #47 - Disable / Enable User*

Use Case ID	<b>47</b>
Use Case Name	<b>Disable / Enable User</b>
Primary Actor/s	Organization Admin
Description	Temporarily disabling a user and enabling back can be done only by the admin
Pre-Conditions	
Main Scenario	<ul style="list-style-type: none"> <li>• Choose a user from the available users</li> <li>• Choose either to enable or disable</li> <li>• Submit</li> </ul>
Exceptions	User cannot disable his/her self.
Post-Conditions	<ul style="list-style-type: none"> <li>• Respective user is disabled or enabled as required</li> <li>• If the user is disabled and user is currently signed in, he/she should be signed out immediately</li> </ul>

*Table 32: Use Case Narrative #48 - Assign Roles to Users*

Use Case ID	<b>48</b>
Use Case Name	<b>Assign Roles to Users</b>
Primary Actor/s	Organization Admin
Description	Organization admin can decide on which users are admins and which users are normal users
Pre-Conditions	Organization needs to have more than one user
Main Scenario	<ul style="list-style-type: none"> <li>• Choose a user from the available users</li> <li>• Select the required user role</li> <li>• Submit</li> </ul>
Exceptions	User can't change his/her assigned role
Post-Conditions	Role change must affect immediately without the related user having to re-authenticate

*Table 33: Use Case Narrative #49 - Reset Password of Organization User*

Use Case ID	49
<b>Use Case Name</b>	<b>Reset Password of Organization User</b>
Primary Actor/s	Organization Admin, Organization User
Description	If an organization user needs to reset his/her password they can ask the admin to generate a reset link for them. (They cannot reset the password through normal flow)
Pre-Conditions	
Main Scenario	<ul style="list-style-type: none"> <li>• Choose a user from the available users</li> <li>• Generate an email containing a password reset link</li> <li>• Organization user navigates to the link</li> <li>• Enter a new password (with confirmation)</li> <li>• Submit</li> </ul>
Exceptions	<ul style="list-style-type: none"> <li>• The respective user account has to be active in order to reset the password.</li> <li>• Reset link expires 2 hours after generation and will also expire after use.</li> <li>• If the user doesn't have access to the email, admin can also directly access the reset link.</li> </ul>
Post-Conditions	User password is changed User can sign in using the new password

### 2.3.5 VETERINARY DOCTOR

*Table 34: Use Case Narrative #32 - Provide Medical Advice*

Use Case ID	<b>32</b>
Use Case Name	<b>Provide Medical Advice</b>
Primary Actor/s	Veterinary Doctor
Description	A doctor provides medical advice to the pet requested by the user
Pre-Conditions	There must be a call with the relevant accessed user or uploaded a photo of the pet
Main Scenario	<ul style="list-style-type: none"> <li>• The doctor accepts the request</li> <li>• View the uploaded photo of the pet</li> <li>• make audio or video calls</li> <li>• Give consultations</li> </ul>
Exceptions	
Post-Conditions	

*Table 35: Use Case Narrative #33 - View photo uploads of animals*

Use Case ID	33
Use Case Name	<b>View photo uploads of animals</b>
Primary Actor/s	Veterinary Doctor
Description	The doctor views photos of the pet uploaded by users to decide conditions
Pre-Conditions	The doctor must accept the request of the user, User must have the facility to upload a photo
Main Scenario	Go to the relevant user page View the photo of the relevant pet
Exceptions	The doctor may be viewing an unclear photo, The user deletes the photo before the doctor sees the photo
Post-Conditions	Show photos as viewed

*Table 36: Use Case Narrative #34 - Accept / Deny Consultation Requests*

Use Case ID	<b>34</b>
Use Case Name	<b>Accept / Deny Consultation Requests</b>
Primary Actor/s	Veterinary Doctor
Description	The doctor can accept/deny the requests made by the user
Pre-Conditions	The doctor has no other consultations during this time
Main Scenario	<ul style="list-style-type: none"> <li>• Go to the doctor's page</li> <li>• Accept /deny the consultation</li> </ul>
Exceptions	The doctor maybe gets more than one requests at the same time
Post-Conditions	Confirmation of “Request Accepted”

*Table 37: Use Case Narrative #35 - Audio / Video calls to consult*

Use Case ID	<b>35</b>
Use Case Name	<b>Audio / Video calls to consult</b>
Primary Actor/s	Veterinary Doctor
Description	The veterinary doctor can make audio/video calls with the accepted user to give consultation about the pet's health
Pre-Conditions	The user must have a working phone number.
Main Scenario	<ul style="list-style-type: none"> <li>• Go to the user info and make calls</li> <li>• Get answered for calls from accepted user</li> </ul>
Exceptions	<ul style="list-style-type: none"> <li>• There may be a working phone number.</li> <li>• May be face to networks error during the calls</li> </ul>
Post-Conditions	

*Table 38: Use Case Narrative #36 - Maintain health records of a pet*

Use Case ID	<b>36</b>
Use Case Name	<b>Maintain health records of a pet</b>
Primary Actor/s	Veterinary Doctor
Description	The doctor should maintain a health record of each consulted pets by updating the records or creating new records
Pre-Conditions	The doctor must check whether each relevant pet has a previous health record
Main Scenario	<ul style="list-style-type: none"> <li>• Go to the health records</li> <li>• Update or add new records</li> </ul>
Exceptions	It may be incorrect previous records
Post-Conditions	The show health record is updated or created by time

*Table 39: Use Case Narrative #37 - Create prescription*

Use Case ID	<b>37</b>
Use Case Name	<b>Create prescription</b>
Primary Actor/s	Veterinary Doctor
Description	Doctor issues a prescription for consulted pets
Pre-Conditions	
Main Scenario	<ul style="list-style-type: none"> <li>• Go to create prescription</li> <li>• Create prescription, Send it to the relevant user</li> </ul>
Exceptions	
Post-Conditions	Make it available for the user to download

*Table 40: Use Case Narrative #51 - Request Pay-out*

Use Case ID	<b>51</b>
<b>Use Case Name</b>	<b>Request Payout</b>
Primary Actor/s	Organization Admin, Veterinary Doctor
Description	Users can request to transfer the payments they have received to their own account.
Pre-Conditions	Organization or Doctor must have a positive balance of the payments received.
Main Scenario	<ul style="list-style-type: none"> <li>• View available balance</li> <li>• Click and request payout</li> <li>• Continue in the payment gateway.</li> <li>• Balance deducted and money transferred.</li> </ul>
Exceptions	Error occurred in the payment gateway and transaction reversed.
Post-Conditions	Transaction amount deducted from the account.

### 2.3.6 AUTHENTICATION MODULE

*Table 41: Use Case Narrative #38 - Sign In*

Use Case ID	<b>38</b>
Use Case Name	<b>Sign In</b>
Primary Actor/s	Registered User, Organization User, Organization Admin, Veterinary Doctor
Description	User signs into their profile
Pre-Conditions	Account must already be signed up
Main Scenario	<ul style="list-style-type: none"> <li>• User visits the website</li> <li>• Selects "Sign in" option</li> <li>• Enters username</li> <li>• Enters password</li> </ul>
Exceptions	<ul style="list-style-type: none"> <li>• Username is incorrect</li> <li>• Password is incorrect</li> <li>• User is already signed in</li> <li>• User entered the incorrect password more than 5 times</li> </ul>
Post-Conditions	User is signed in

*Table 42: Use Case Narrative #39 - Sign Up*

Use Case ID	<b>39</b>
Use Case Name	<b>Sign Up</b>
Primary Actor/s	Guest User, Organization Admin, Veterinary Doctor
Description	User creates an account on the platform
Pre-Conditions	
Main Scenario	<ul style="list-style-type: none"> <li>• User visits the website</li> <li>• Selects "Sign Up" option</li> <li>• Creates unique username</li> <li>• Creates password</li> </ul>
Exceptions	<ul style="list-style-type: none"> <li>• Username is one that already exists</li> <li>• Password doesn't contain at least one number and one special character</li> <li>• Password is too short</li> </ul>
Post-Conditions	New user account is added

*Table 43: Use Case Narrative #40 - Update User Profile*

Use Case ID	<b>40</b>
Use Case Name	<b>Update User Profile</b>
Primary Actor/s	Registered User, Organization User, Organization Admin, Veterinary Doctor
Description	User edits their personal details on their profile
Pre-Conditions	User must be signed in
Main Scenario	<ul style="list-style-type: none"> <li>• User signs in</li> <li>• Visits profile</li> <li>• Selects "Edit Profile"</li> <li>• Edits personal information</li> </ul>
Exceptions	
Post-Conditions	User data is changed

*Table 44: Use Case Narrative #41 - Change Password*

Use Case ID	<b>41</b>
Use Case Name	<b>Change Password</b>
Primary Actor/s	Registered User, Organization User, Organization Admin, Veterinary Doctor
Description	User changes the existing password to a new one
Pre-Conditions	
Main Scenario	<ul style="list-style-type: none"> <li>• User visits website</li> <li>• Goes to sign in page</li> <li>• Selects "Change Password" option</li> <li>• Enters username</li> <li>• Enters old password</li> <li>• Enters new password</li> </ul>
Exceptions	<ul style="list-style-type: none"> <li>• Password doesn't contain at least one number and one special character</li> <li>• Password is too short</li> <li>• Change password link expires 2 hours after generation and will also expire after use</li> </ul>
Post-Conditions	Account password is changed

*Table 45: Use Case Narrative #42 - Reset Password*

Use Case ID	<b>42</b>
Use Case Name	<b>Reset Password</b>
Primary Actor/s	Registered User, Organization Admin, Veterinary Doctor
Description	Account password is changed to the one that was available when creating the account initially
Pre-Conditions	
Main Scenario	<ul style="list-style-type: none"> <li>• User visits website</li> <li>• Goes to sign in page</li> <li>• Selects "Forgot Password" option</li> <li>• Enters email address</li> <li>• Clicks on “reset password” link in email</li> <li>• Enter new password</li> </ul>
Exceptions	Reset link expires 2 hours after generation and will also expire after use
Post-Conditions	Account password is reset

*Table 46: Use Case Narrative #43 - Register Organization*

Use Case ID	<b>43</b>
Use Case Name	<b>Register Organization</b>
Primary Actor/s	Organization Admin
Description	Organizations have to register in the system to list animals, respond to reports and perform other tasks.
Pre-Conditions	The user must have a working phone number and an email address
Main Scenario	<ul style="list-style-type: none"> <li>• Go to Registration Page</li> <li>• Sign Up as a user</li> <li>• Provide Information of organization - organization name, address, telephone</li> <li>• Verify email address and telephone</li> </ul>
Exceptions	
Post-Conditions	<ul style="list-style-type: none"> <li>• Organization is created and activated</li> <li>• Admin can sign in with his/her credentials.</li> </ul>

*Table 47: Use Case Narrative #44 - Register as a Doctor*

Use Case ID	<b>44</b>
Use Case Name	<b>Register as a Doctor</b>
Primary Actor/s	Veterinary Doctor
Description	Doctors should register in this system to do their tasks
Pre-Conditions	The doctor must have valid qualifications and working phone number and email
Main Scenario	<ul style="list-style-type: none"> <li>• Go to Registration Page</li> <li>• Sign Up as a Doctor, Provide Information name, address, telephone, email address, and qualifications</li> </ul>
Exceptions	There may be Incorrect information of the doctor
Post-Conditions	<ul style="list-style-type: none"> <li>• The profile is created and confirmation of successful registration</li> <li>• Get access to the tasks</li> </ul>

## **2.4 Functional Requirements**

The following requirements were derived after contacting animal welfare organizations and veterinary doctors. Also, the responses received for the public survey were used to identify public user requirements.

### **2.4.1 PET ADOPTION**

- Organizations shall be able to list the animal available for adoption.
- Organizations shall be able to view and edit details of animals listed for adoption.
- Organizations shall be able to remove animals listed for adoption.
- Organizations shall be able to view animals who have been adopted.
- Users shall be able to apply filters when browsing for pets.
- Users shall be able to select a pet to adopt.
- A registered user shall be able to request to adopt a pet.
- Organizations shall be able to view adoption requests.
- Organizations shall be able to view contact details of potential adopters who have submitted adoption requests.
- Organizations shall be able to accept or reject an adoption request.
- Users shall be able to send updates about their adoptee to the organization.

### **2.4.2 ANIMAL RESCUES**

- Users shall be able to report about an injured or abandoned animal.
- Organizations shall be able to view pending reports in the nearby vicinity.
- An organization shall be able to take responsibility to take care of or reject a reported incident.
- Organizations shall be able to view animals rescued by them.
- Users shall be able to view emergency contact numbers.
- Users shall be able to contact an organization in an emergency through the system.
- Organizations shall be able to provide updates on a report and the user who submitted the report shall be able to view them.

### **2.4.3 ANIMAL WELFARE ORGANIZATIONS**

- Organizations shall be able to post updates about their welfare work.
- Users shall be able to view the work that an organization has done.
- Users shall be able to provide feedback & complaints to organizations.
- Organizations shall be able to ask for and accept donations.
- Users shall be able to donate to organizations.
- Organization administrators shall be able to create sponsorship tiers.
- Organization administrators shall be able to view, edit and remove sponsorship tiers.
- Users shall be able to subscribe to sponsor an amount to an organization periodically.
- Users shall be able to opt out of the sponsorship.
- Organization administrators shall be able to active and cancelled sponsorships.
- Users shall be able to review organizations and choose to receive a response by the organization by email.
- Organizations shall be able to view reviews about themselves.
- Organizations shall be able to respond to reviews through email.
- Organizations shall be able to have multiple users managing the organization.
- Organization administrators shall be able to add, view and remove organization users.
- Organization administrators shall be able to view payments received.

- Organization administrators shall be able to update organization information.

#### **2.4.4 VETERINARY CONSULTATIONS**

- Users shall be able to message a doctor for consultation for their pet.
- Doctors shall be able to view messages requiring consultation and reply to them.
- Doctor shall be able to view weekly schedule.
- Doctors shall be able to select time slots available for consultation.
- Users shall be able to request an appointment for audio or video consultation with a doctor.
- Doctor shall be able to view and accept or reject an appointment request.
- Doctors shall be able to give audio and video consultation for a user.
- Doctors shall be able to create and send a prescription to the user through the system.
- Doctors shall be able to see the medical records of the animal in previous consultations.
- Doctor shall be able to view details of consulted pets.
- Doctor shall be able to update medical records of a consulted pet.
- Users shall be able to pay for the consultations.

## 2.5 Activity Diagrams

### 2.5.1 GUEST USER

Use Case 1 – Search for animals to adopt

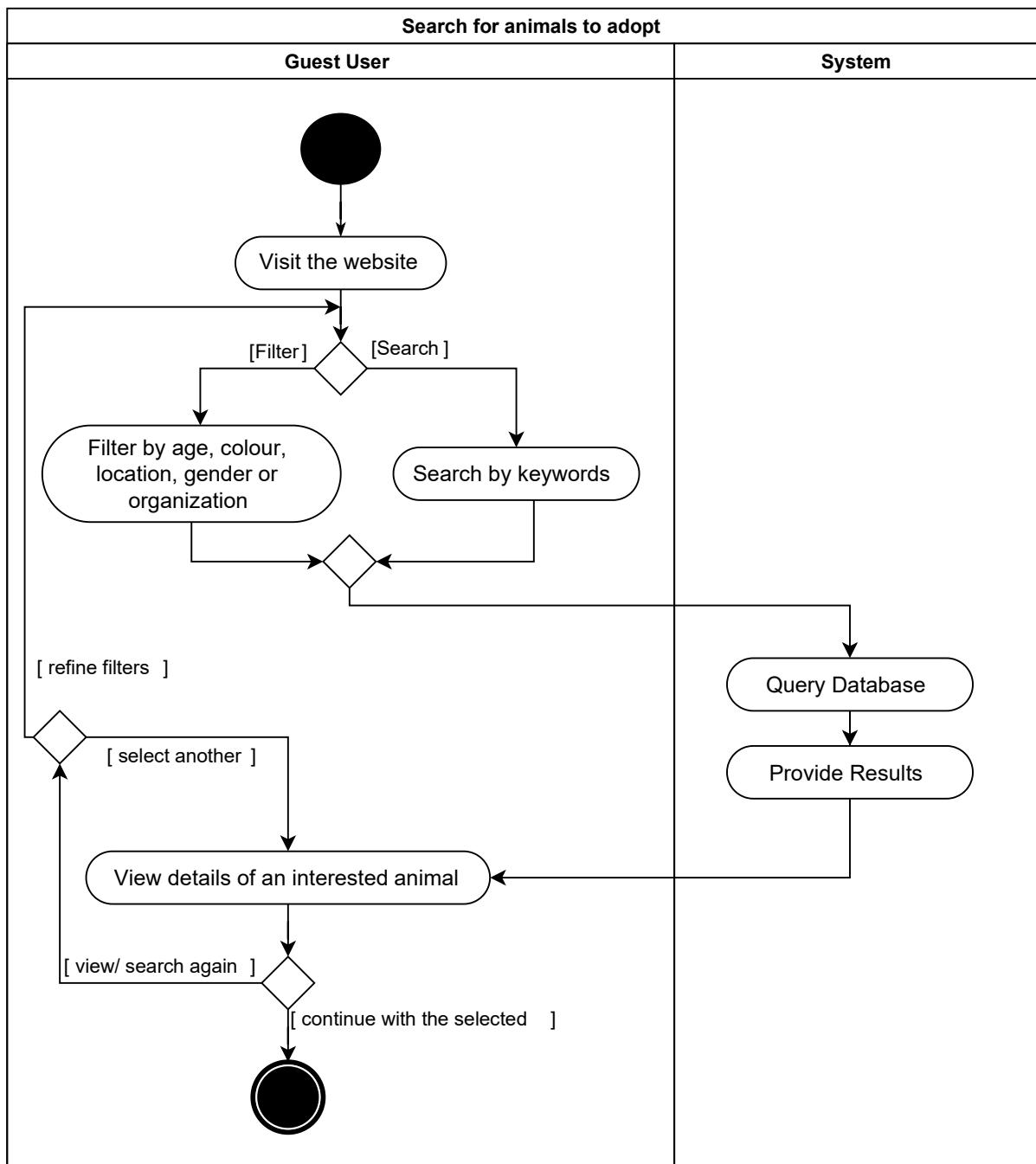


Figure 2.6 : Activity Diagram - Search for Animals to Adopt

## Use Case 2 - View emergency contact numbers

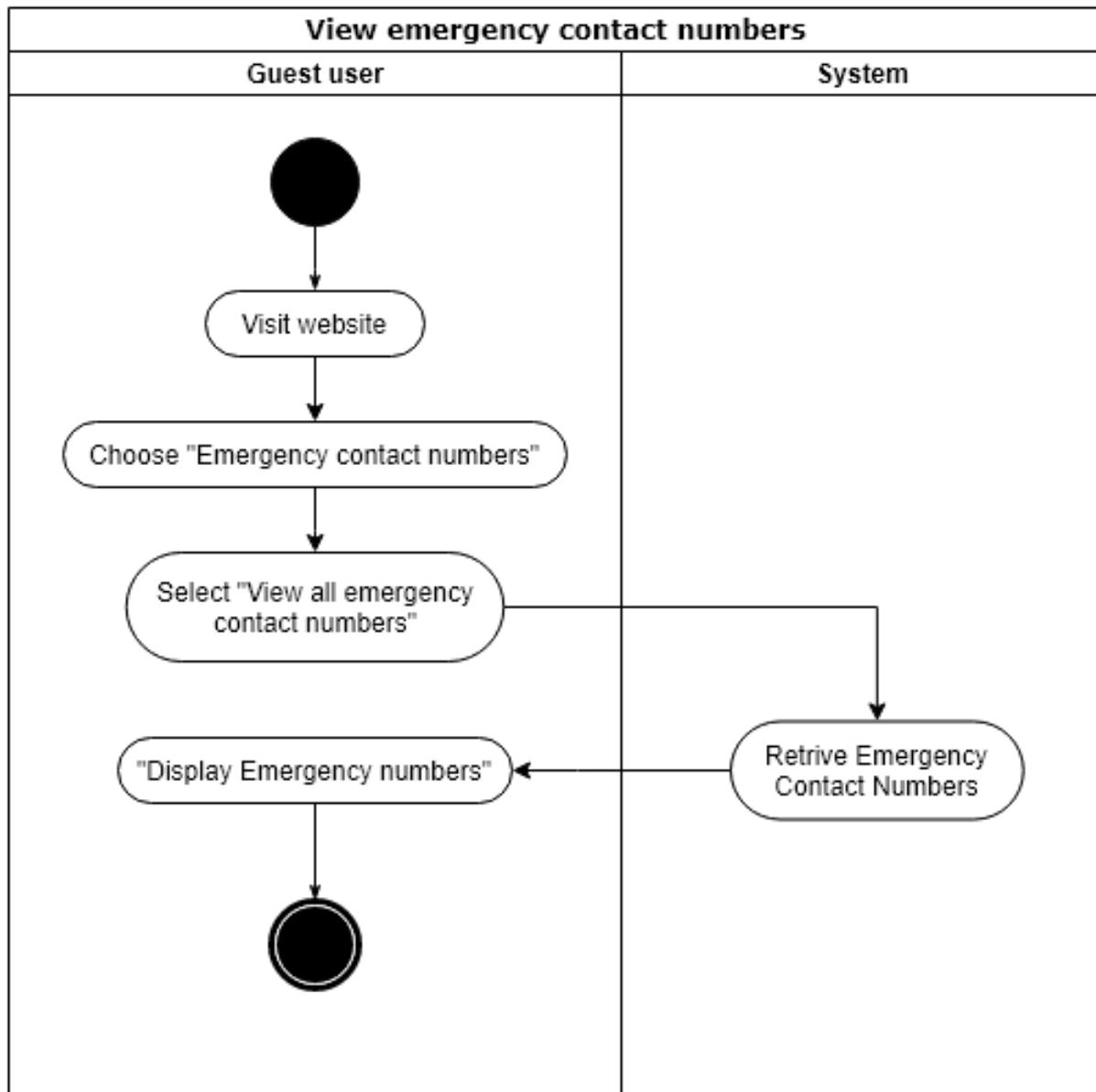


Figure 2.7: Activity Diagram - View Emergency Contact Numbers

## Use Case 3 – Call Emergency Contact

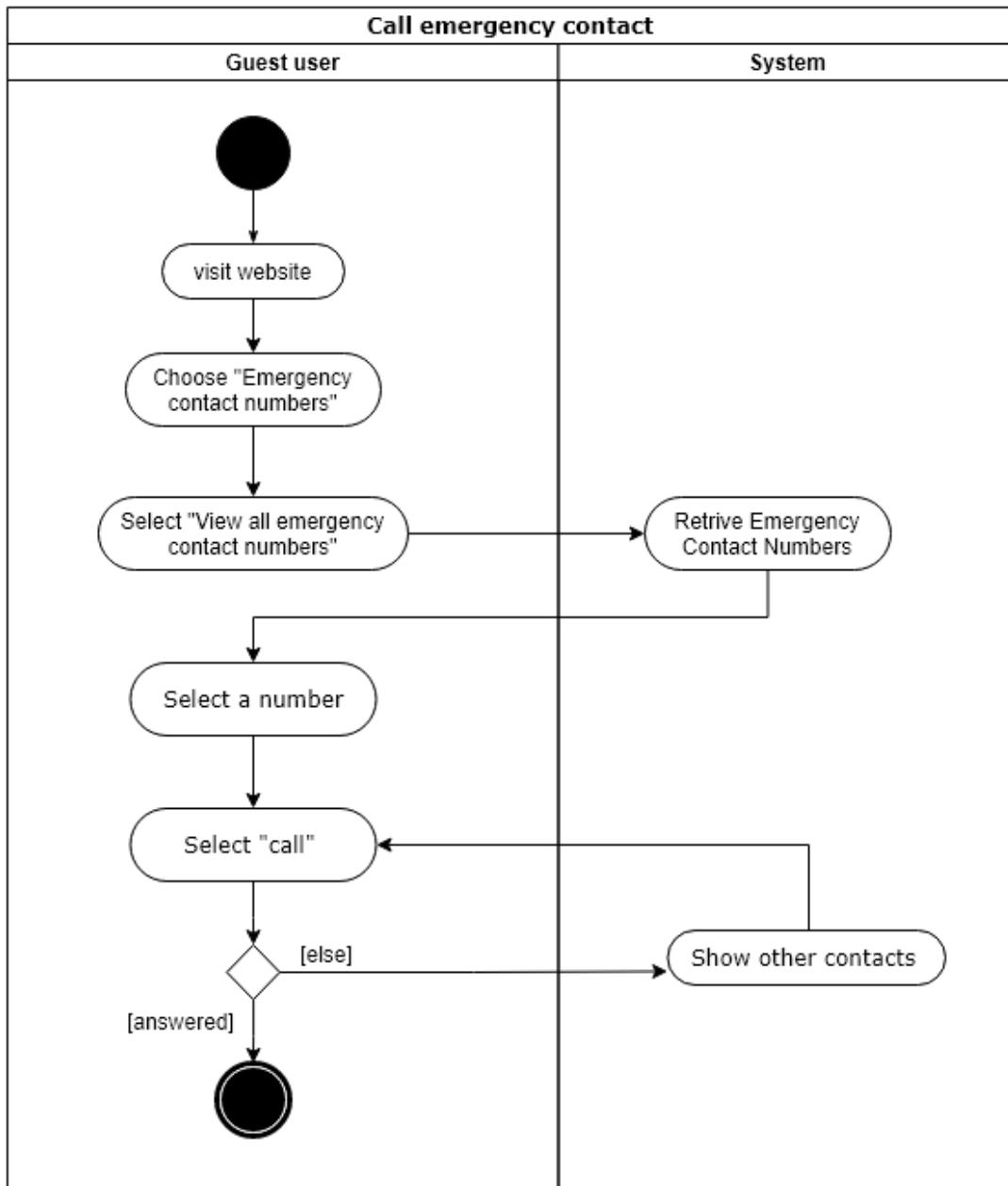


Figure 2.8: Activity Diagram - Call Emergency Contact

## Use Case 4 - View Organization Profile / Feed

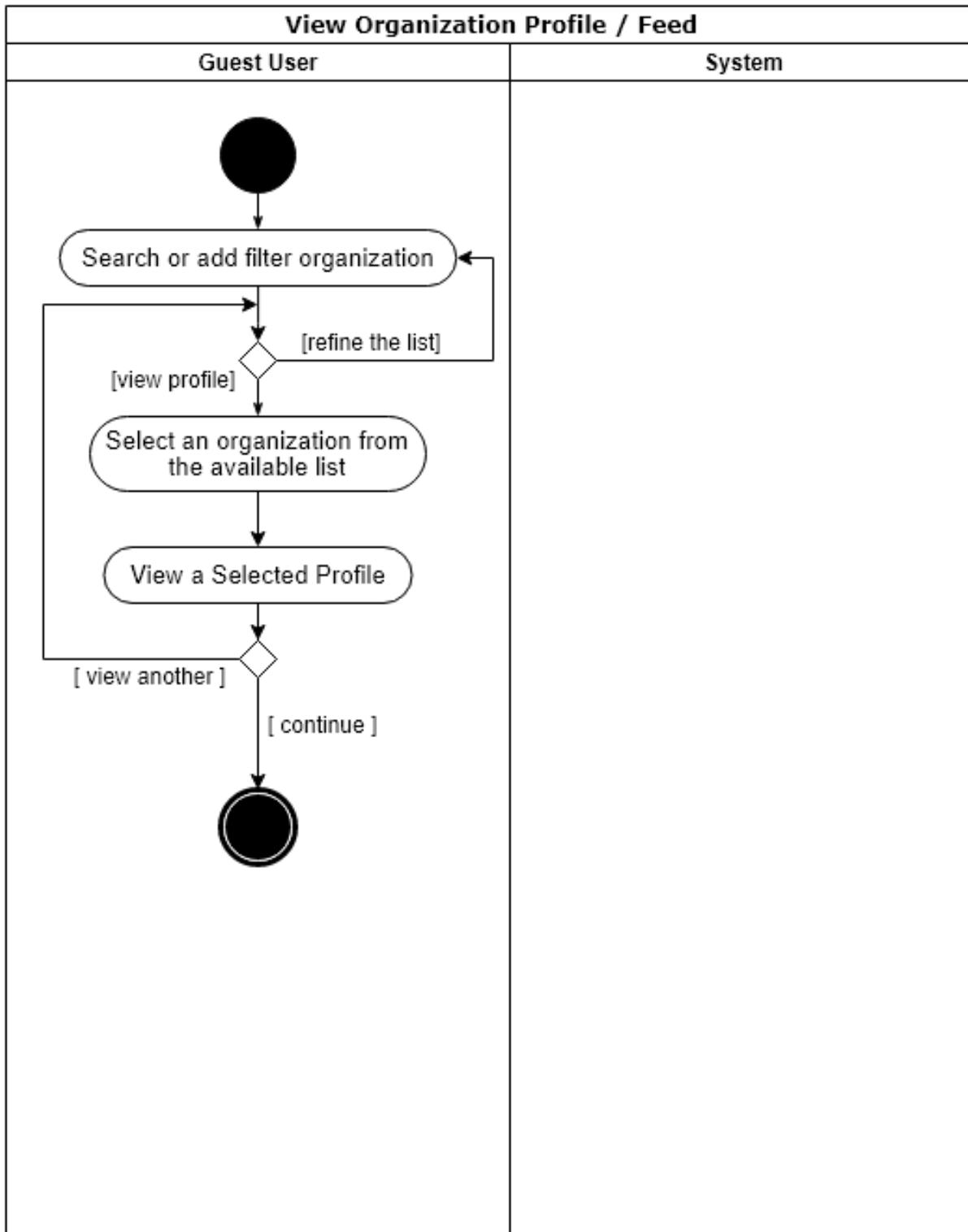


Figure 2.9: Activity Diagram - View Organization Profile / Feed

## Use Case 5 - Report about injured animals

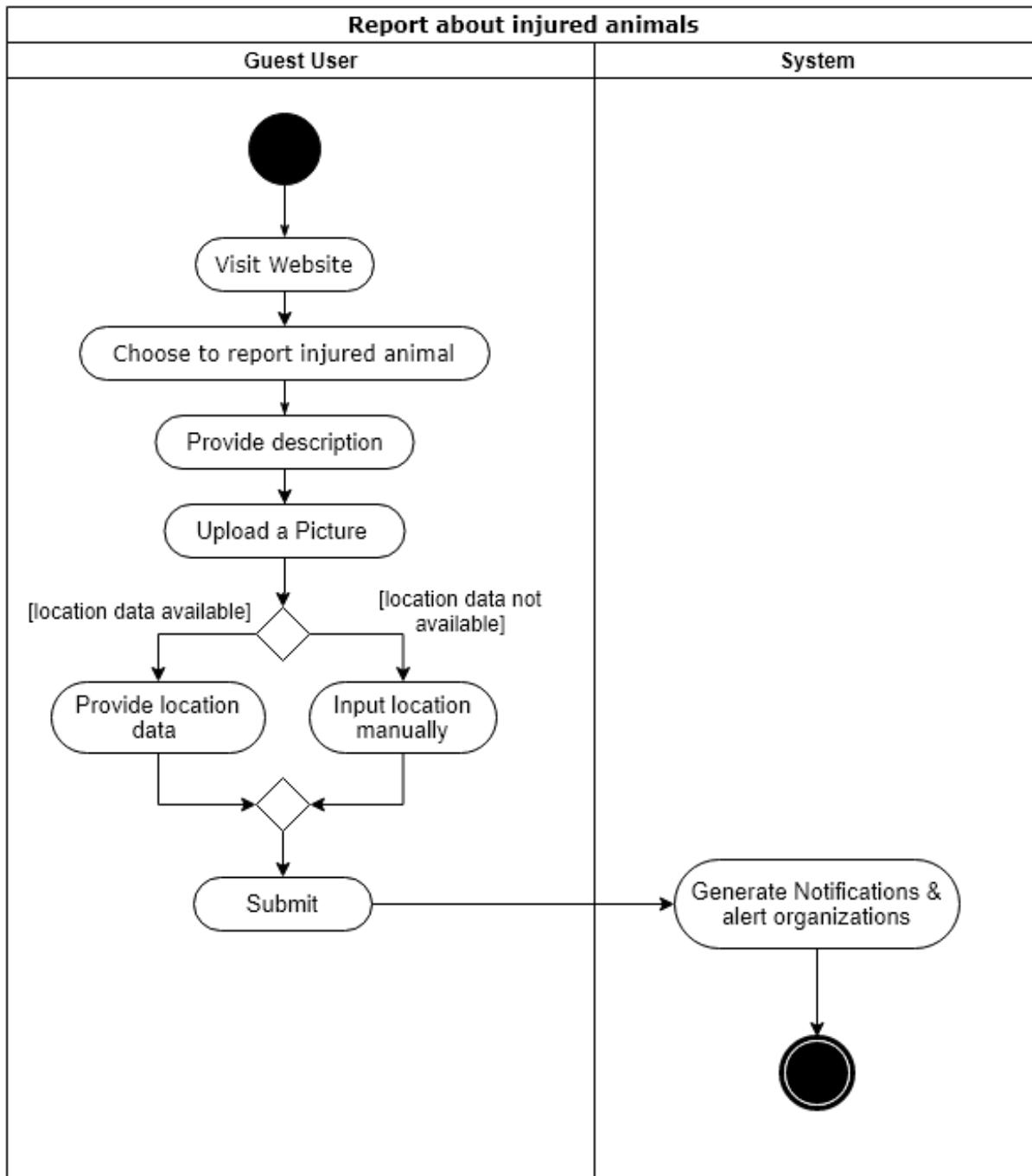


Figure 2.10: Activity Diagram - Report about injured animals

## 2.5.2 REGISTERED USER

Use Case 6 - Request to Adopt a pet

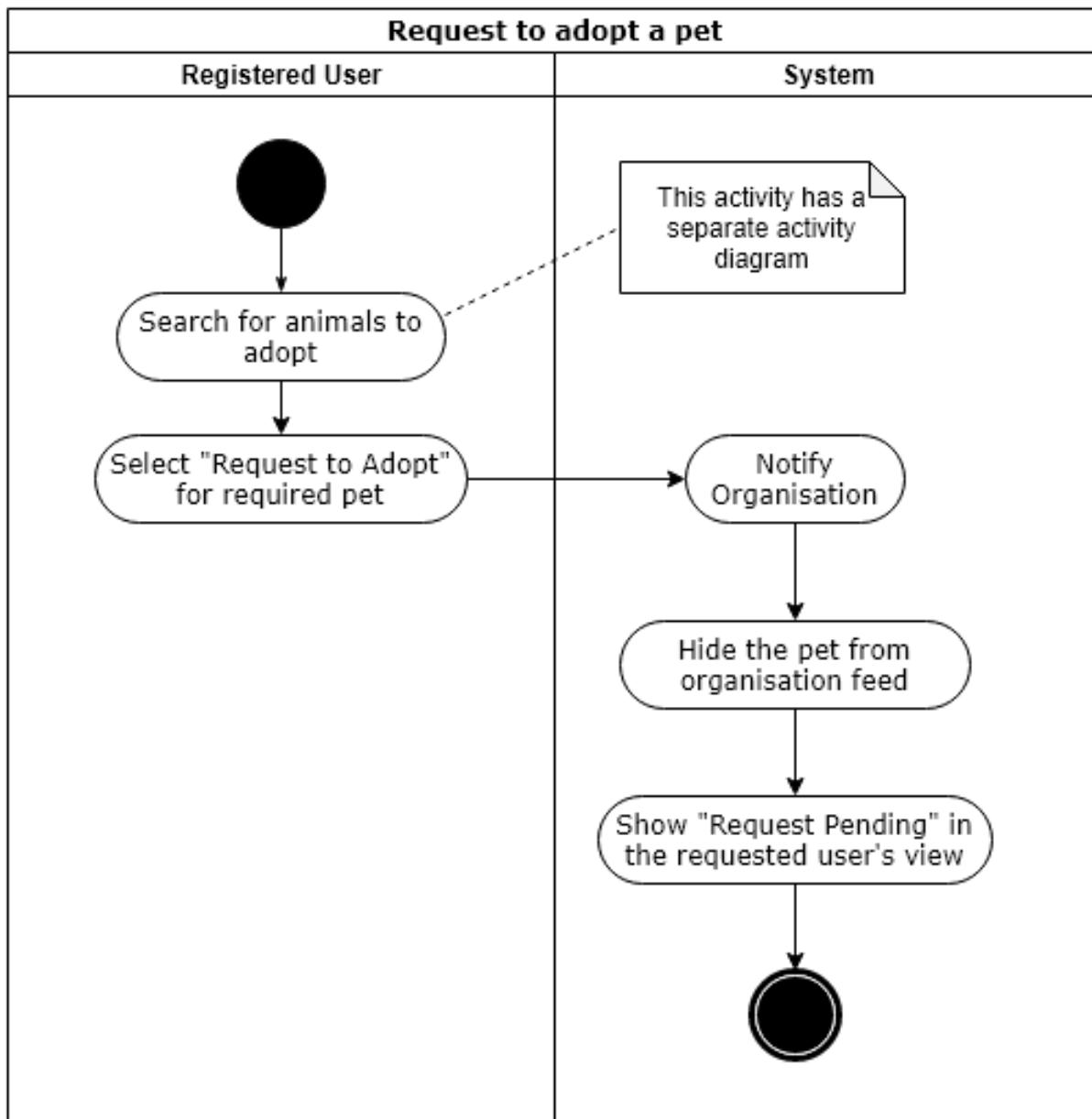


Figure 2.11: Activity Diagram - Request to Adopt a pet

## Use Case 7 - View adoption request status

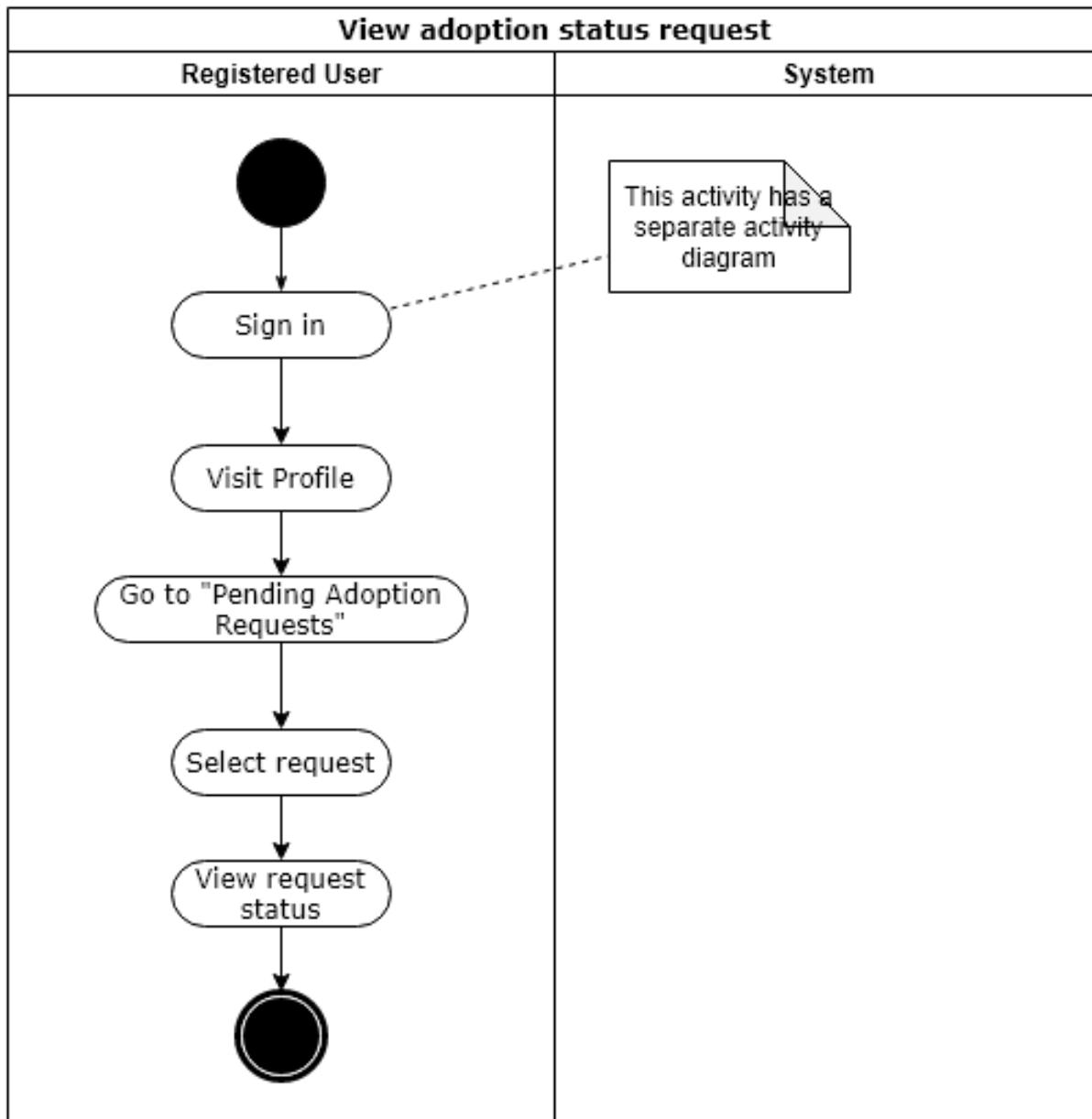


Figure 2.12: Activity Diagram - View adoption request status

Use Case 8 - Receive notification regarding the status of an adoption request

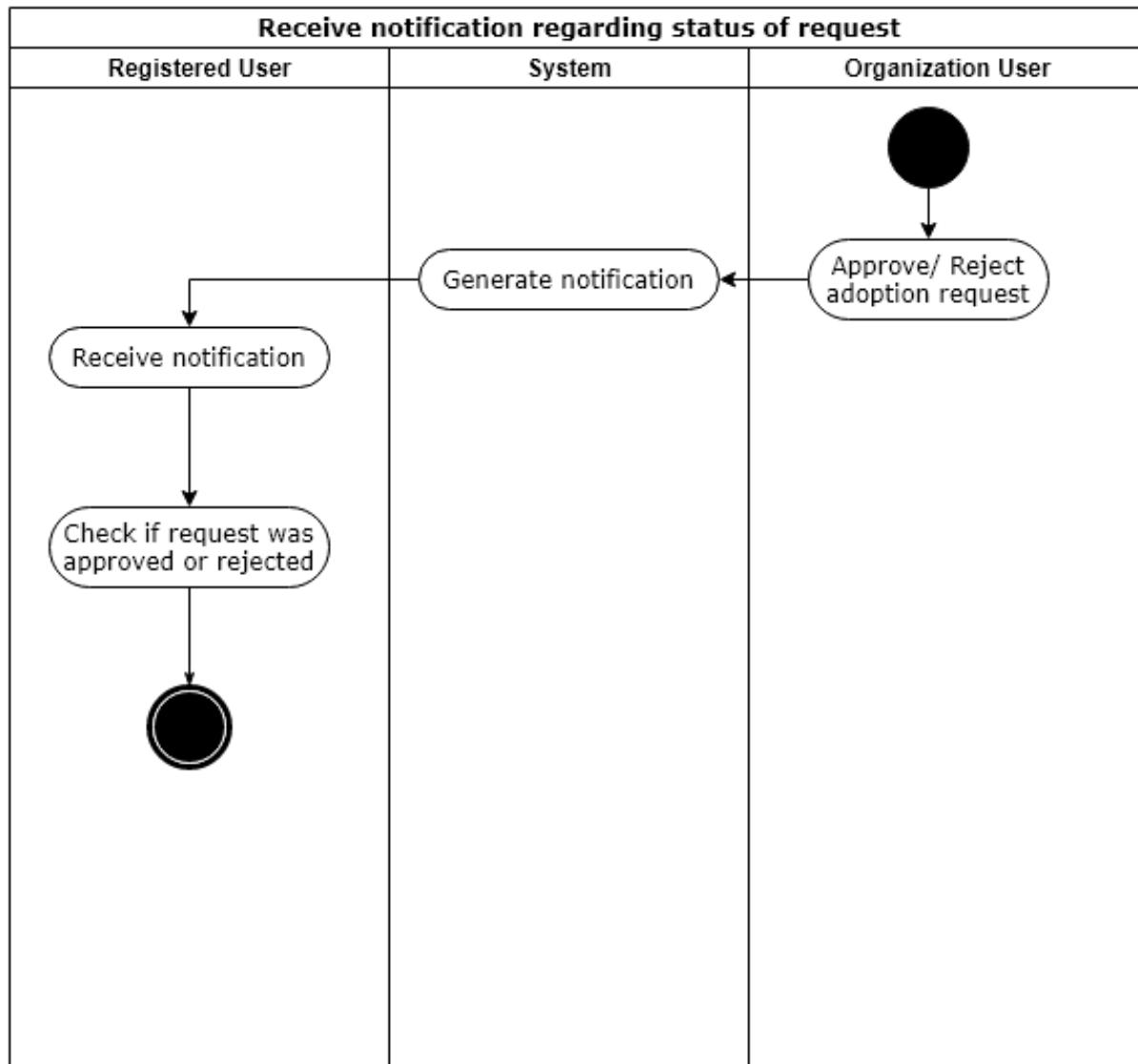


Figure 2.13: Activity Diagram - Receive notification regarding the status of an adoption request

## Use Case 9 - Make donation

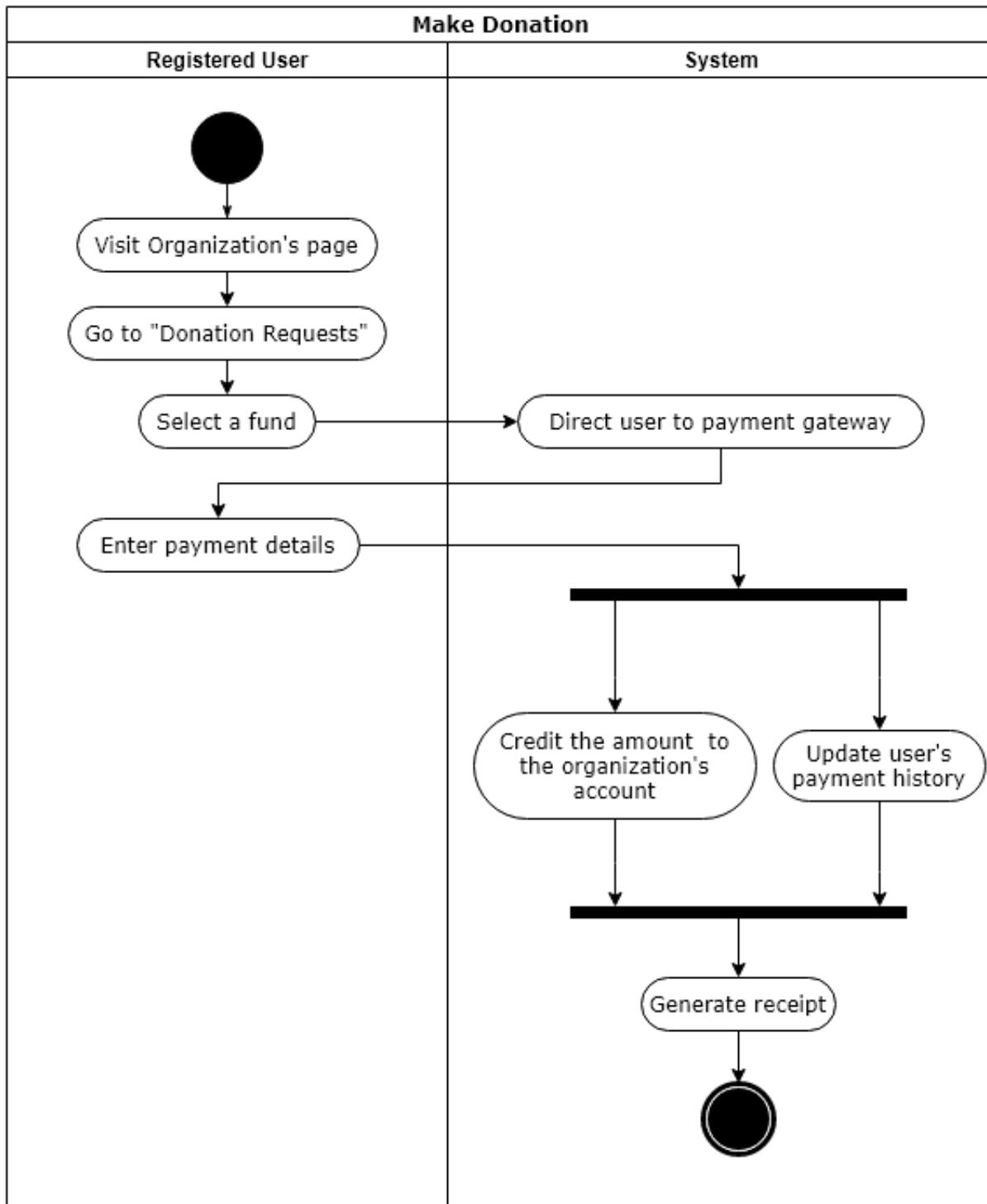


Figure 2.14: Activity Diagram - Make donation

## Use Case 10 - Subscribe to a sponsorship of an organization

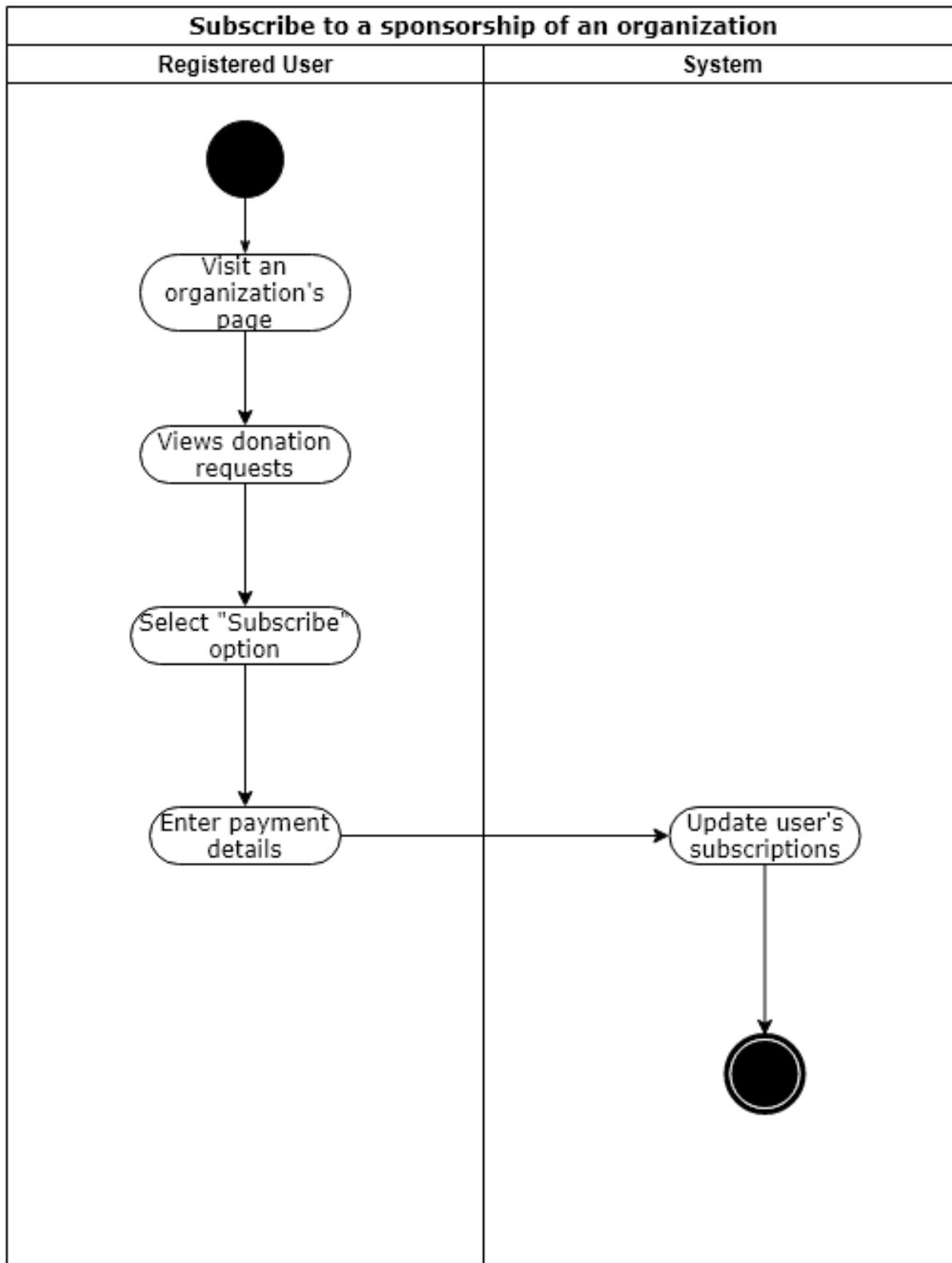


Figure 2.15: Activity Diagram - Subscribe to a sponsorship of an organization

## Use Case 12 - Review organizations

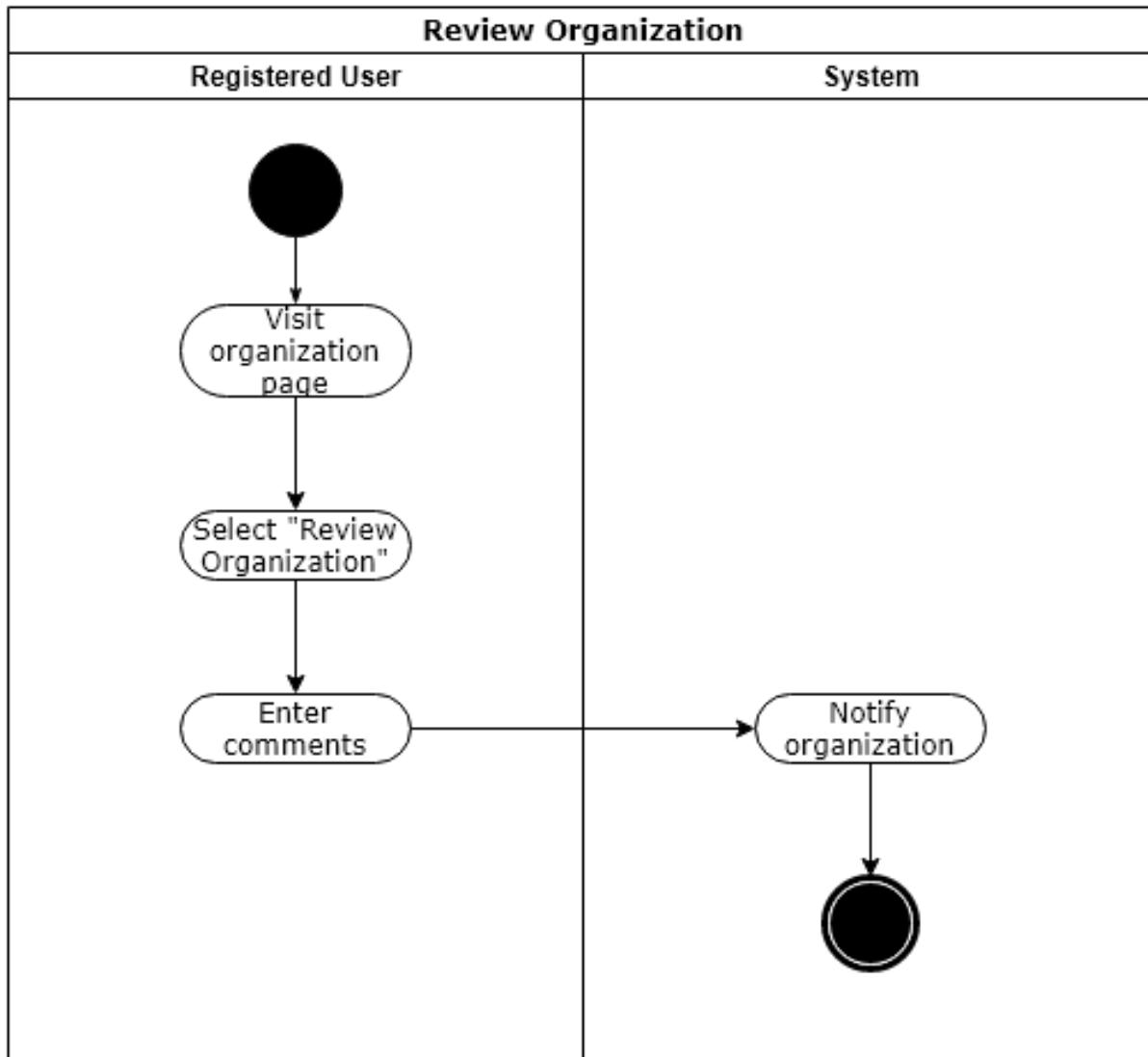


Figure 2.16: Activity Diagram - Review organizations

Use Case 13 - Consult doctor

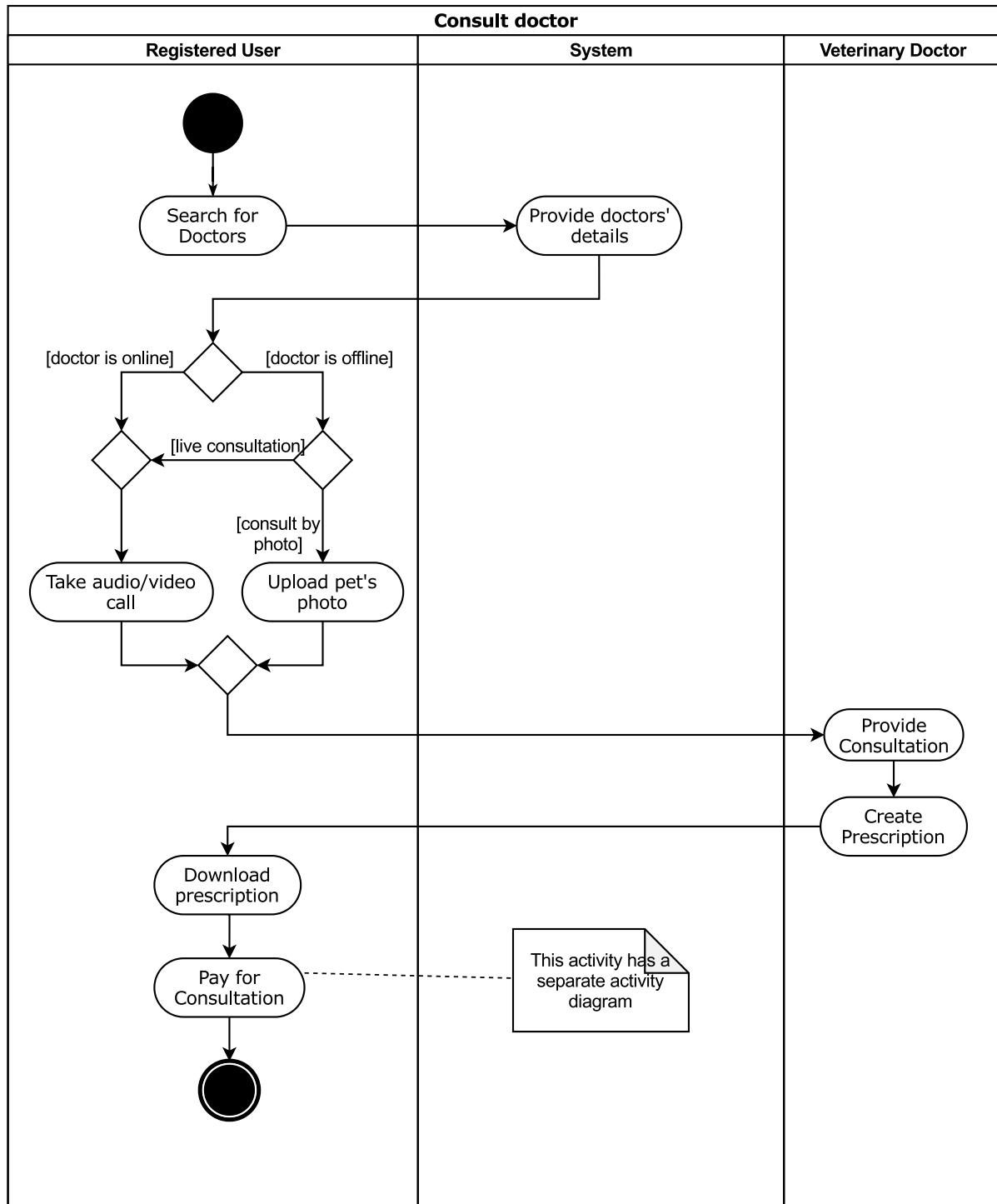


Figure 2.17: Activity Diagram - Consult doctor

## Use Case 14 - Pay for consultation

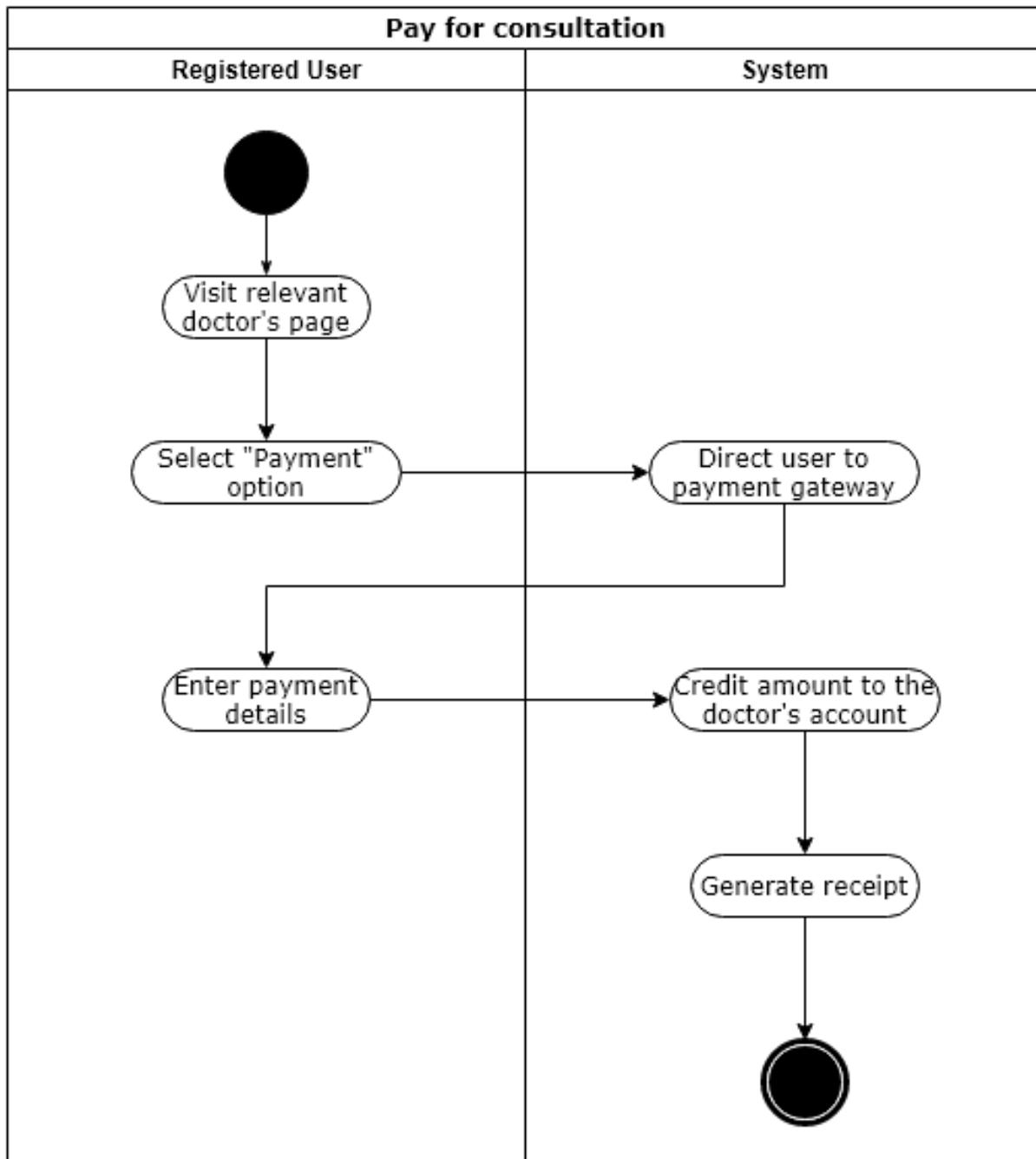


Figure 2.18: Activity Diagram - Pay for consultation

### 2.5.3 ORGANIZATION USER

Use Case 15 - Put new animals up for adoption

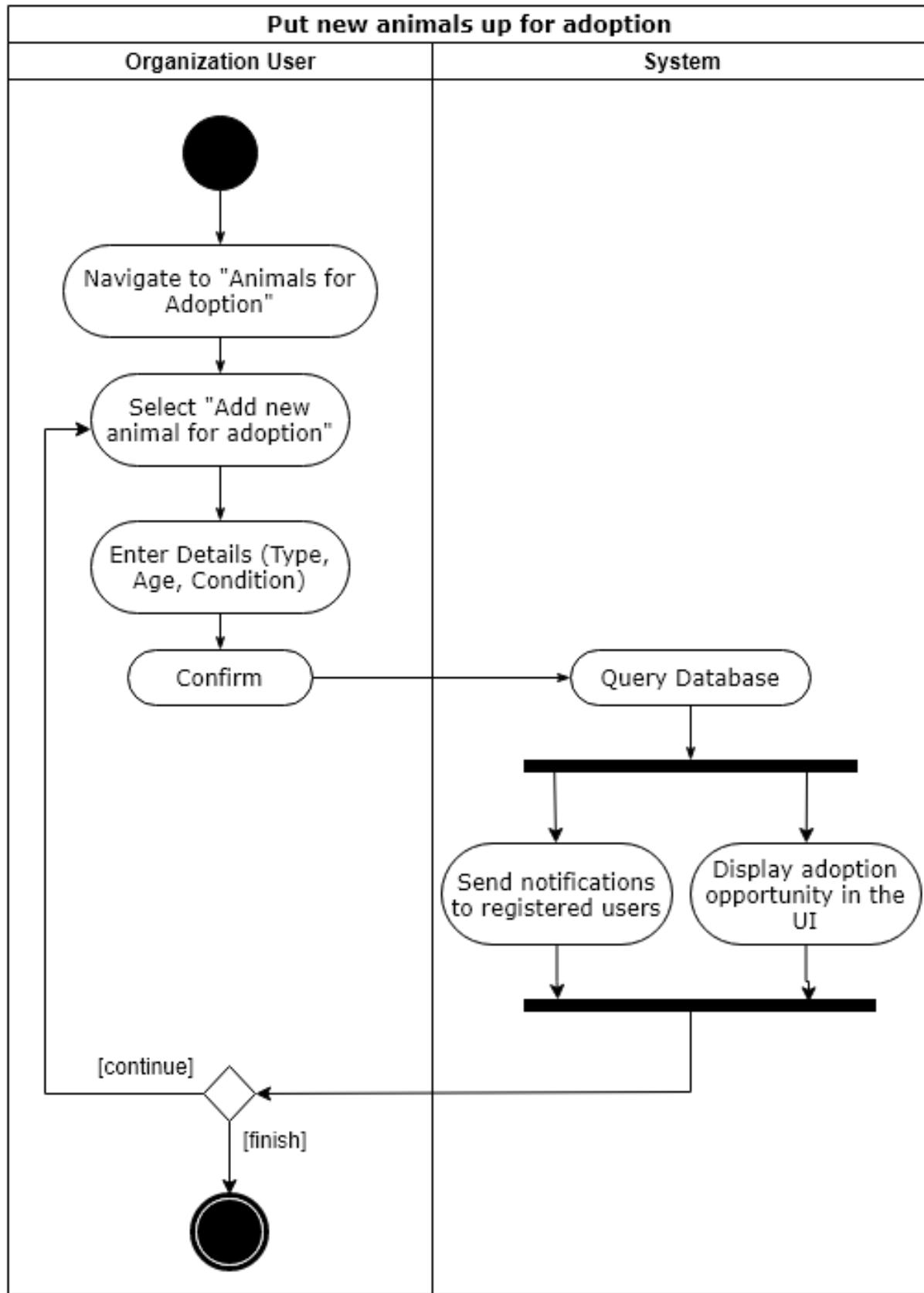


Figure 2.19: Activity Diagram - Put new animals up for adoption

Use Case 16 - Change Adoption Listing Settings

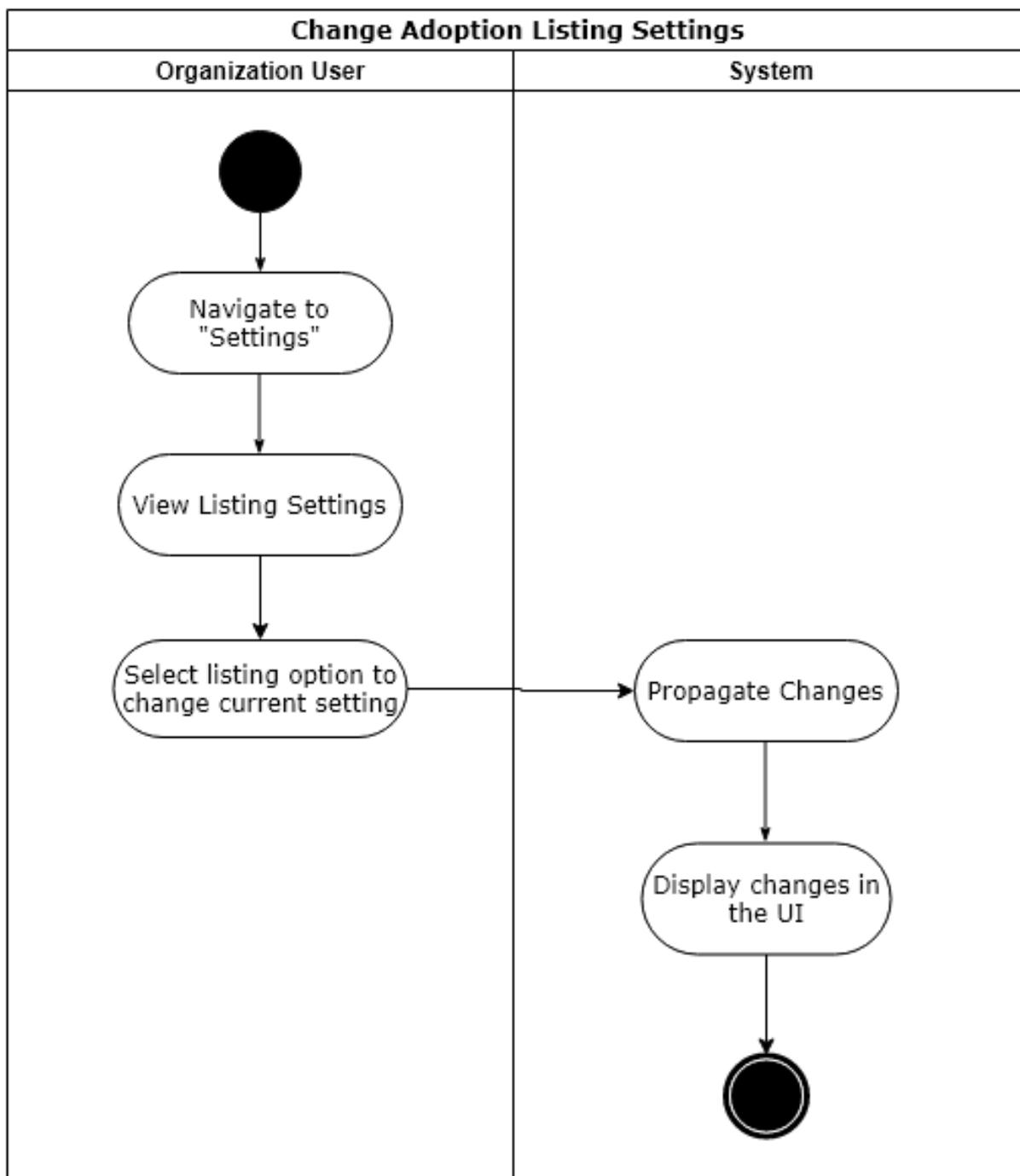


Figure 2.20: Activity Diagram - Change Adoption Listing Settings

## Use Case 17 - Approve/ Reject Adoption Request

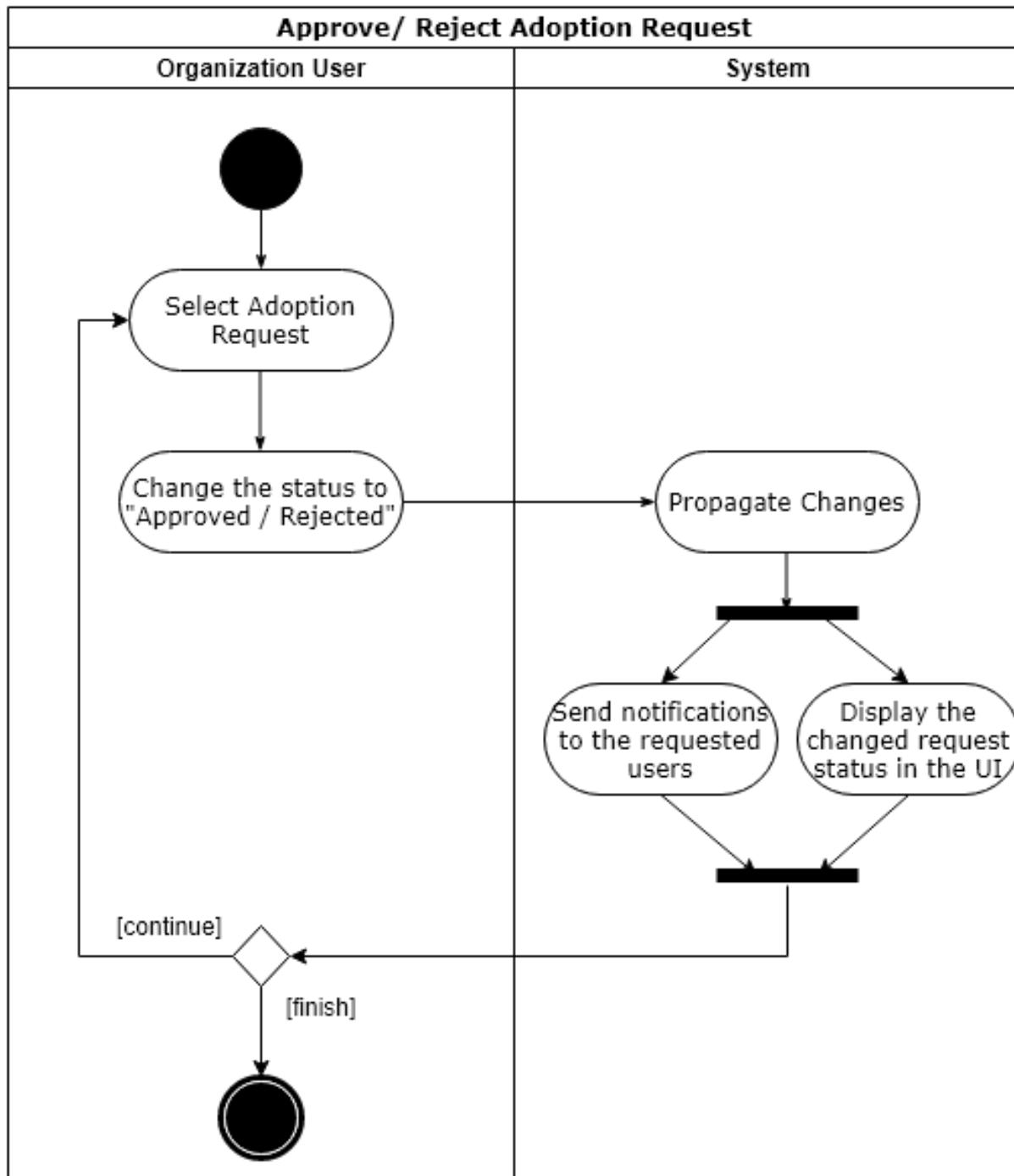


Figure 2.21: Activity Diagram - Approve/ Reject Adoption Request

## Use Case 18 - Notify adopters about adoption requests

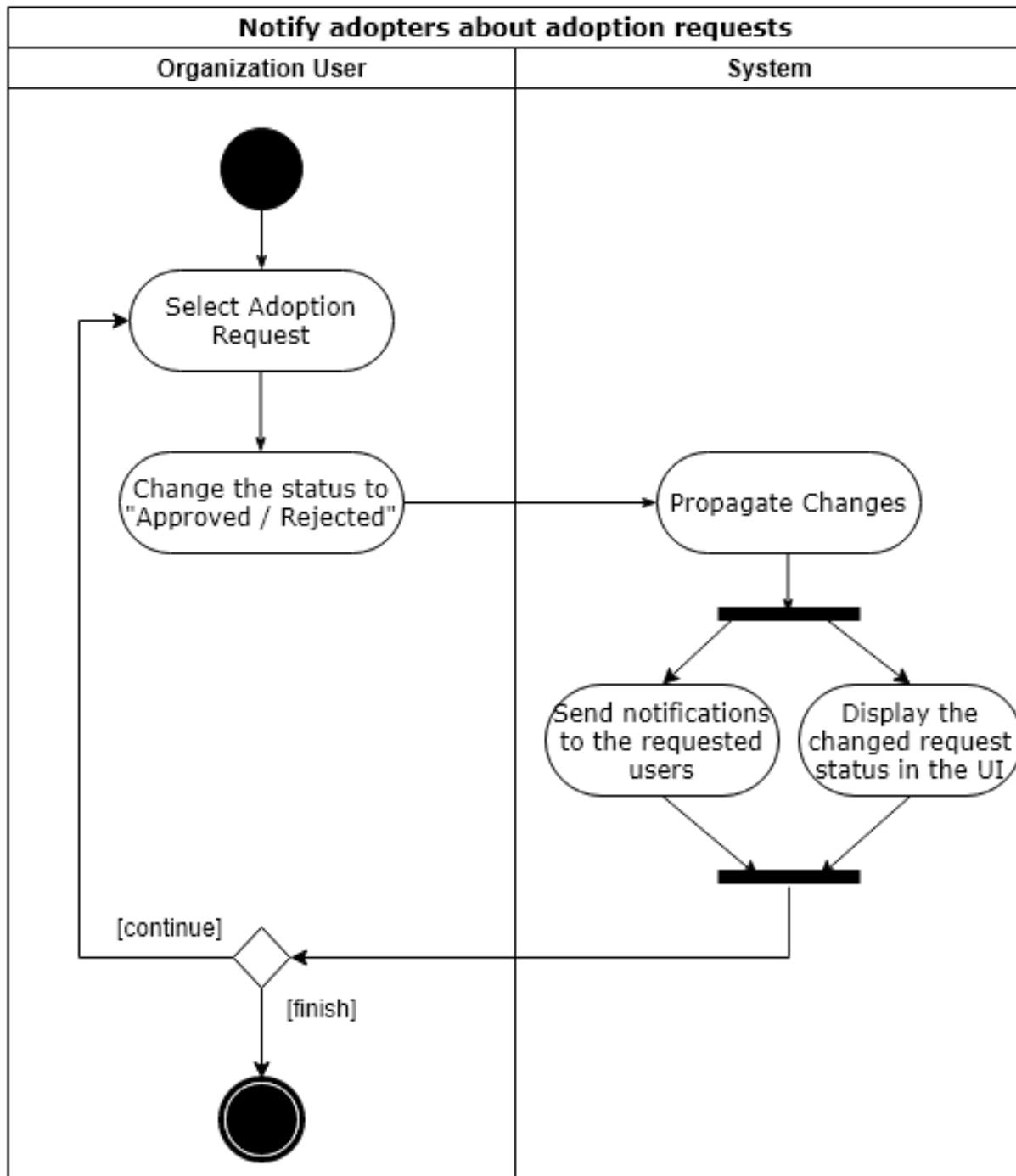


Figure 2.22: Activity Diagram - Notify adopters about adoption requests

## Use Case 19 - Respond to reports of abandoned / injured animals

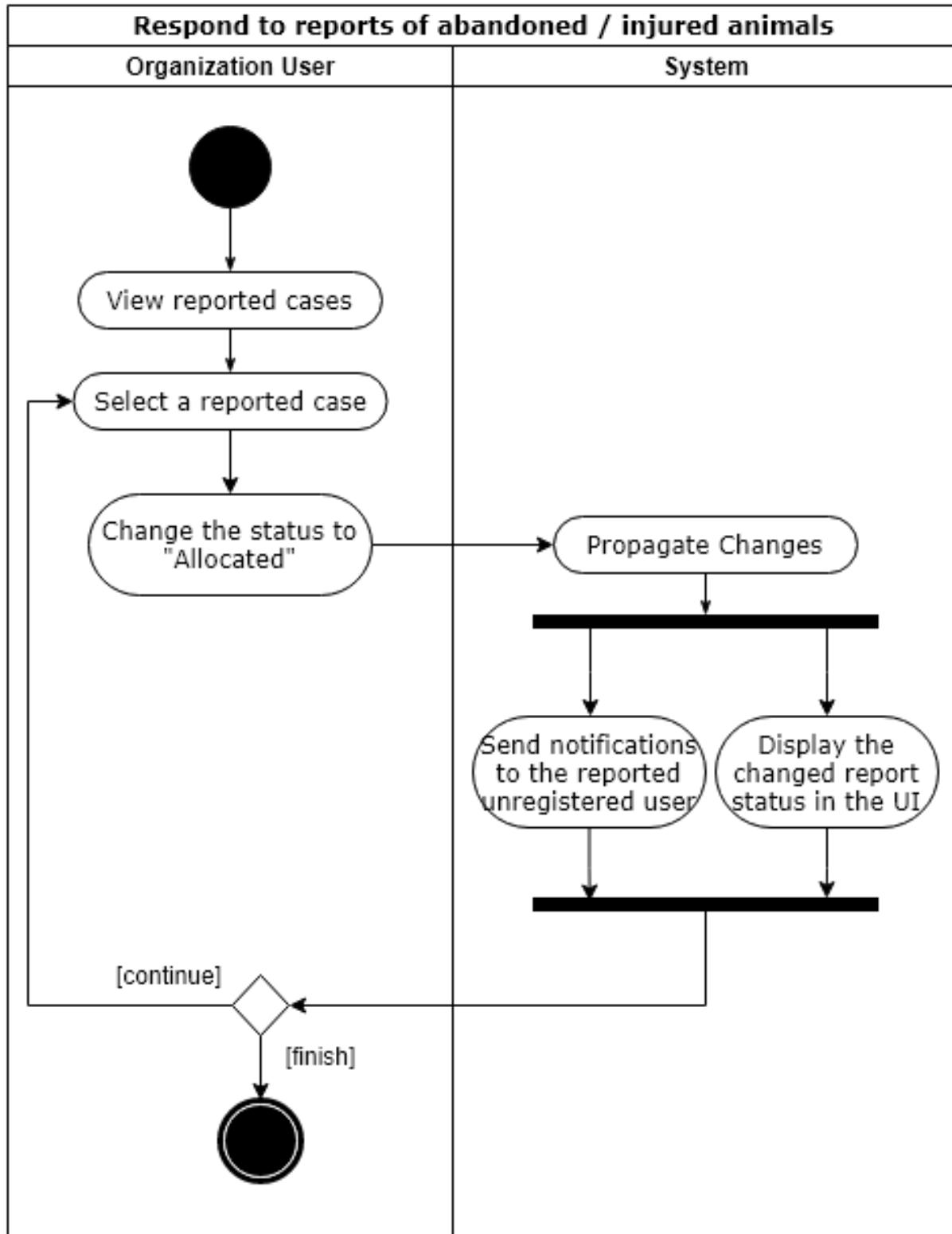
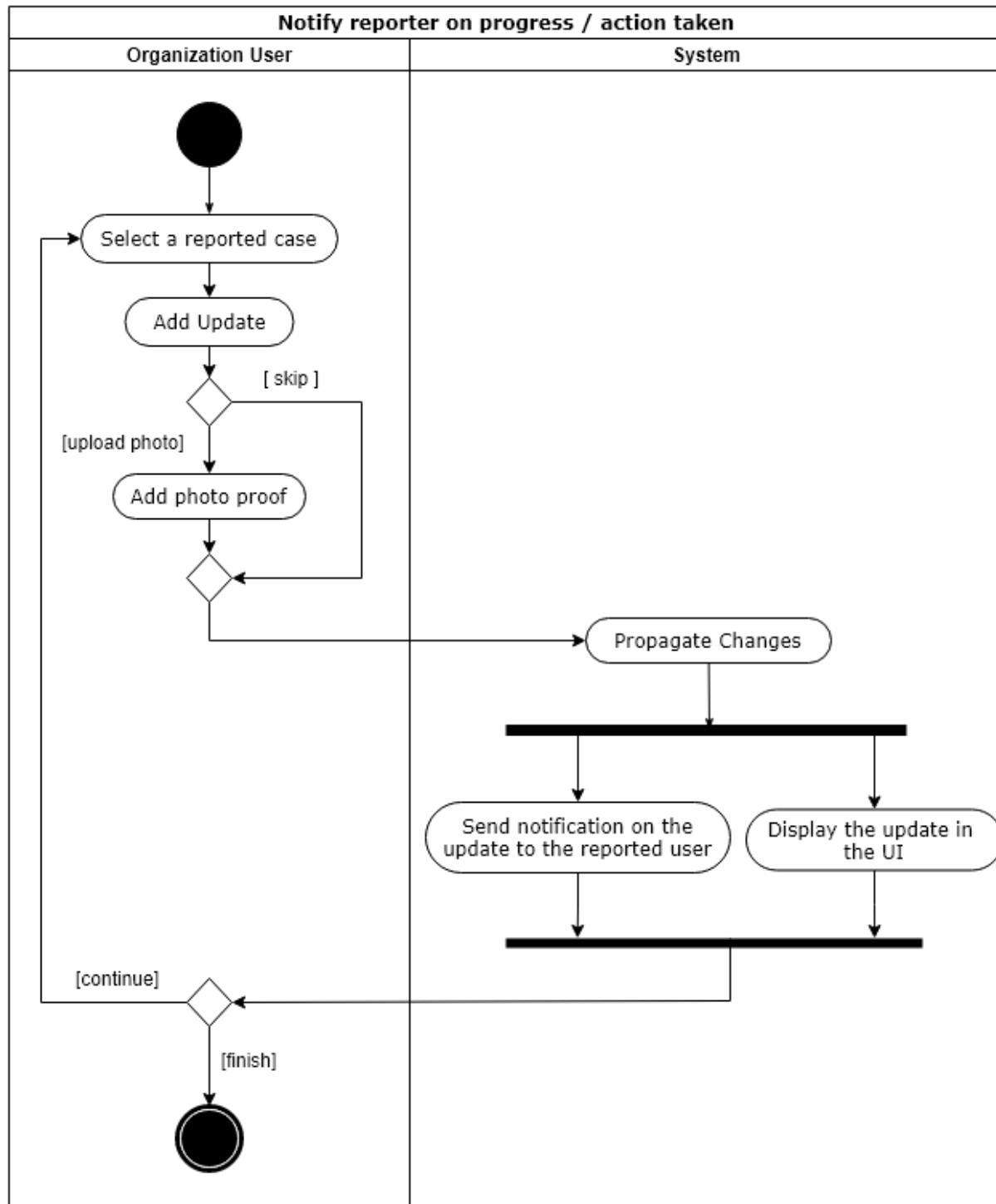


Figure 2.23: Activity Diagram - Respond to reports of abandoned / injured animals

## Use Case 20 - Notify reporter on progress / action taken



*Figure 2.24: Activity Diagram - Notify reporter on progress / action taken*

Use Case 21 - Post information about events the organization has done

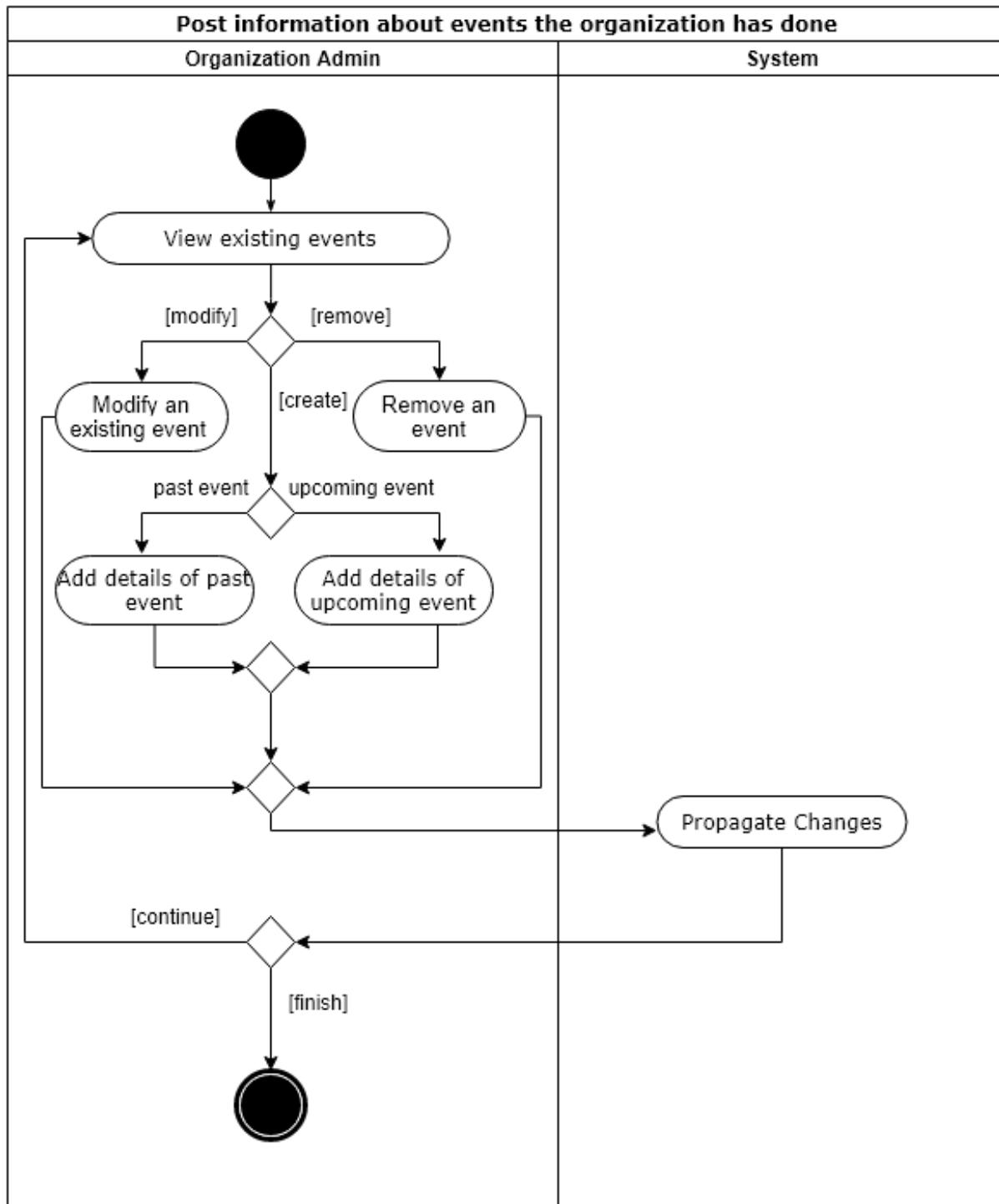


Figure 2.25: Activity Diagram - Post information about events the organization has done

### 2.5.4 ORGANIZATION ADMIN

Use Case 22 - Respond to reviews / complaints about the organization

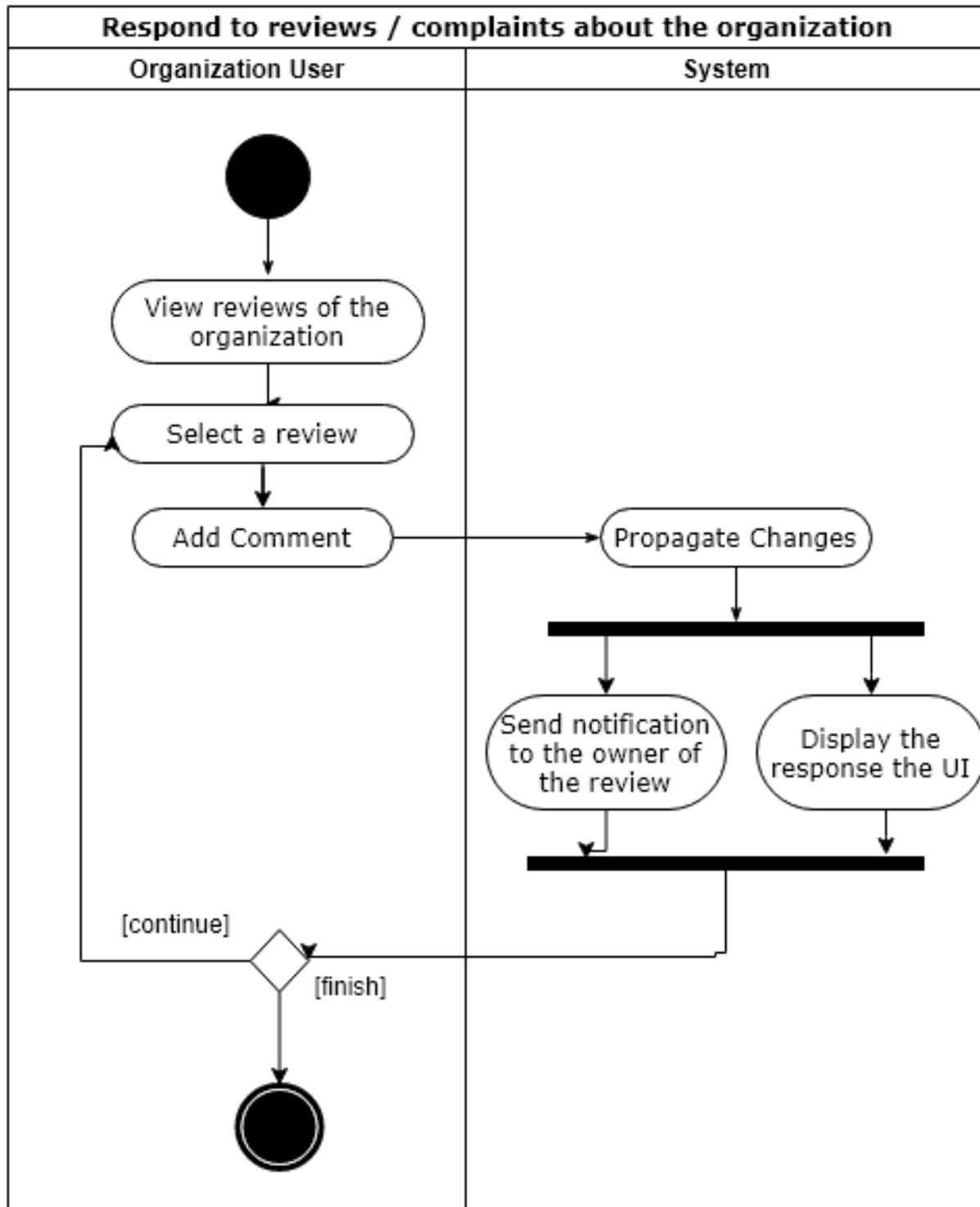


Figure 2.26: Activity Diagram - Respond to reviews / complaints about the organization

## Use Case 27 - Maintain Sponsorship Tiers

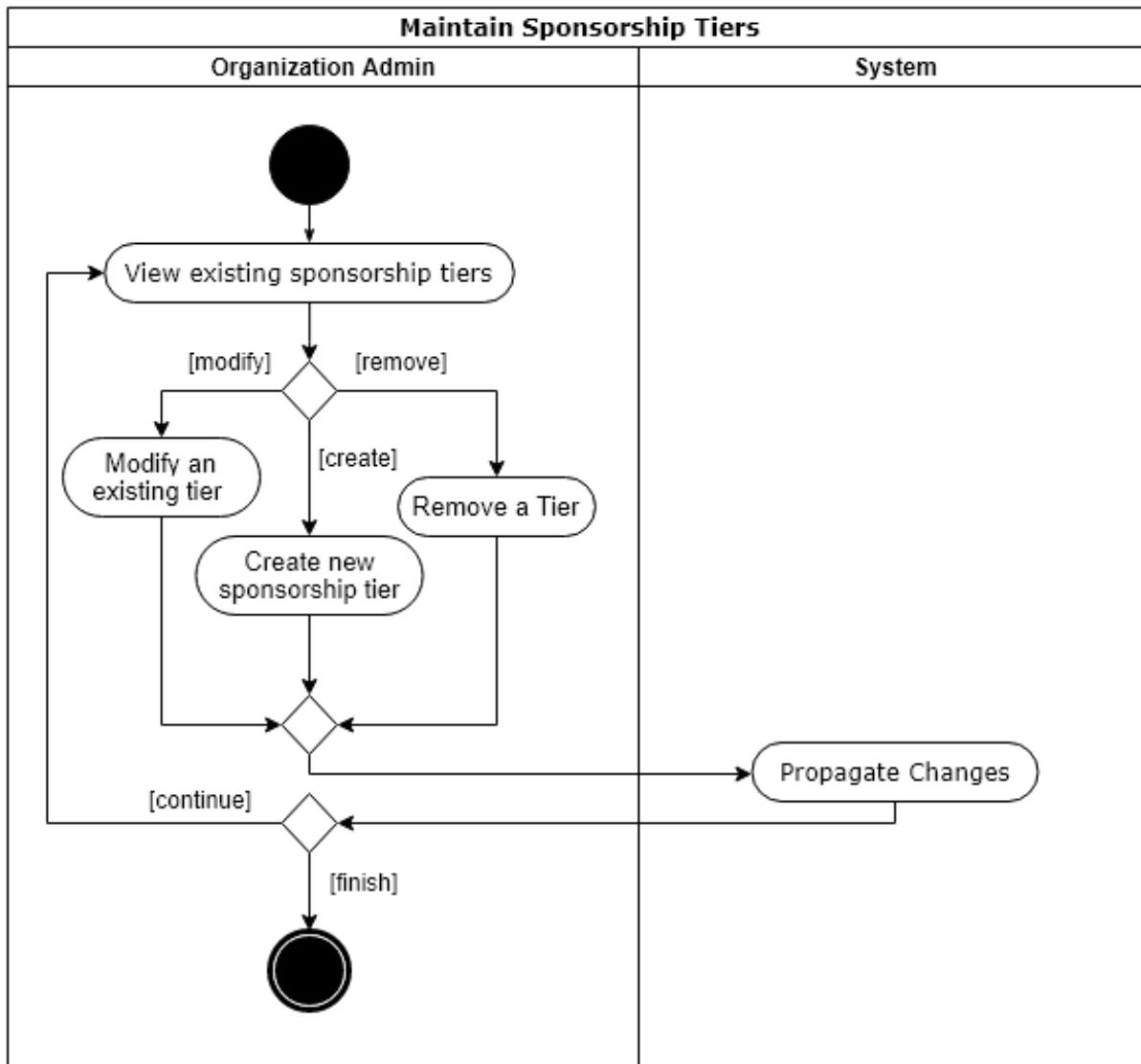


Figure 2.27: Activity Diagram - Maintain Sponsorship Tiers

## Use Case 28 - View Active Sponsorships

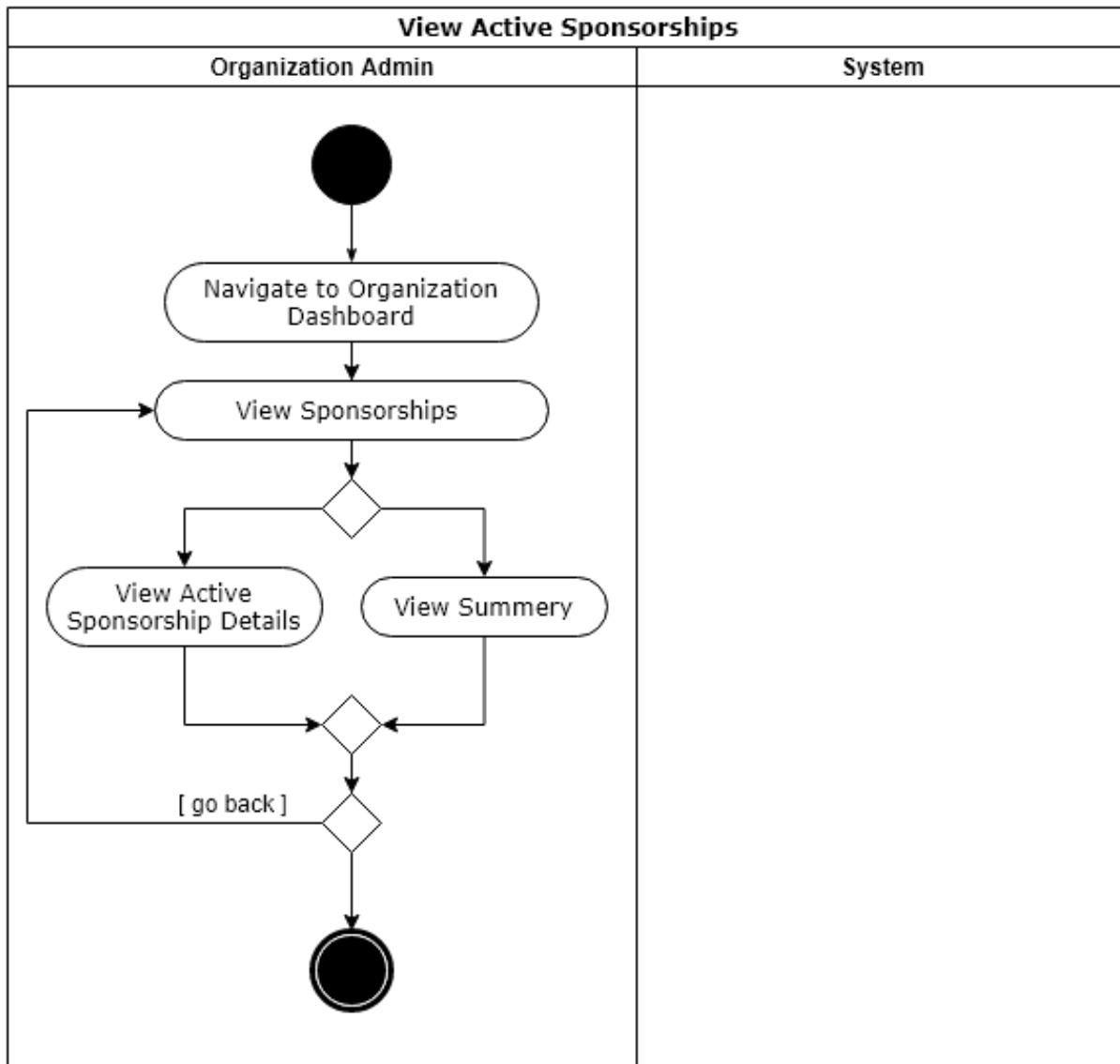


Figure 2.28: Activity Diagram - View Active Sponsorships

## Use Case 29 - View payments and donations received

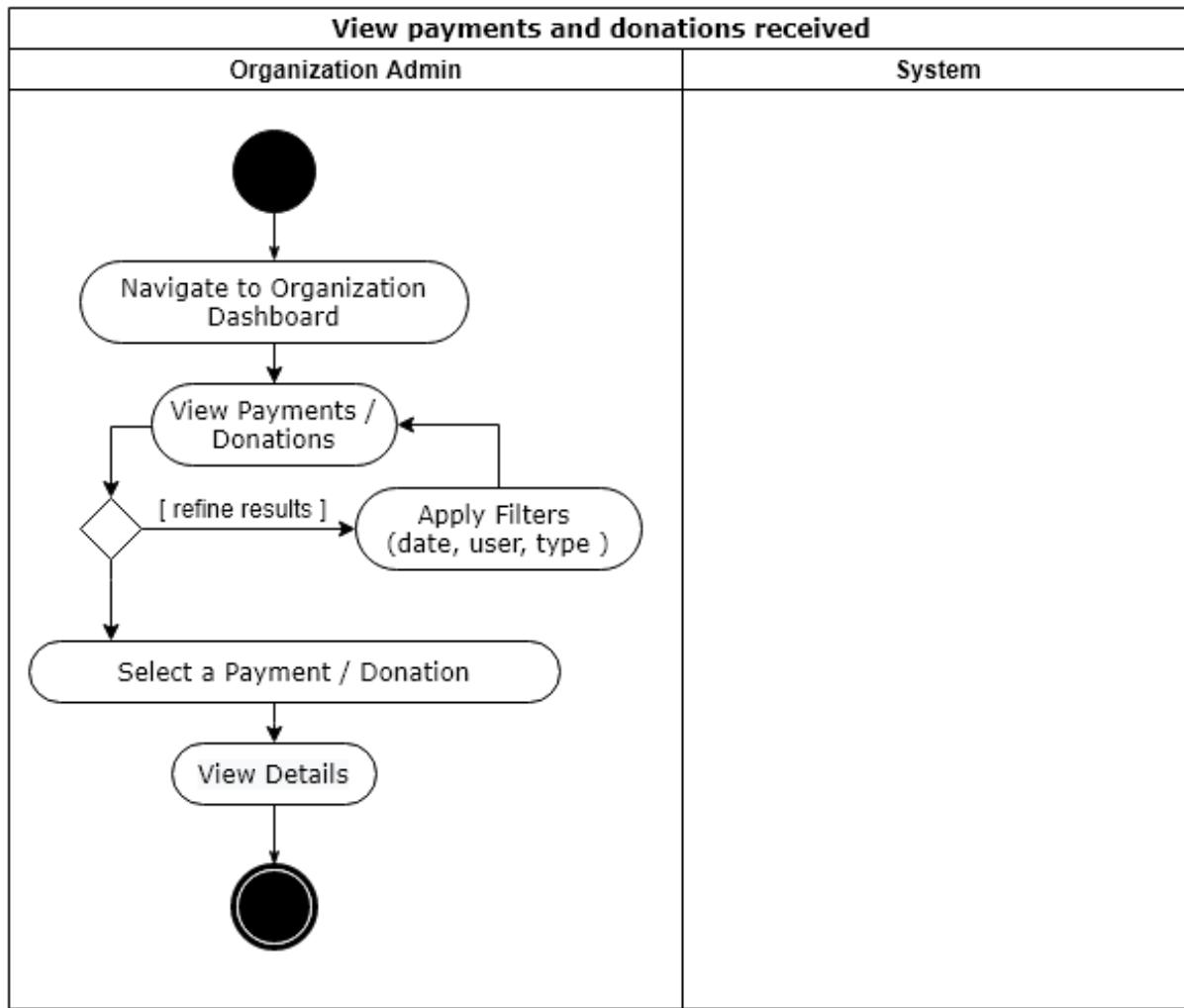


Figure 2.29: Activity Diagram - View payments and donations received

## Use Case 30 - Refund Payment

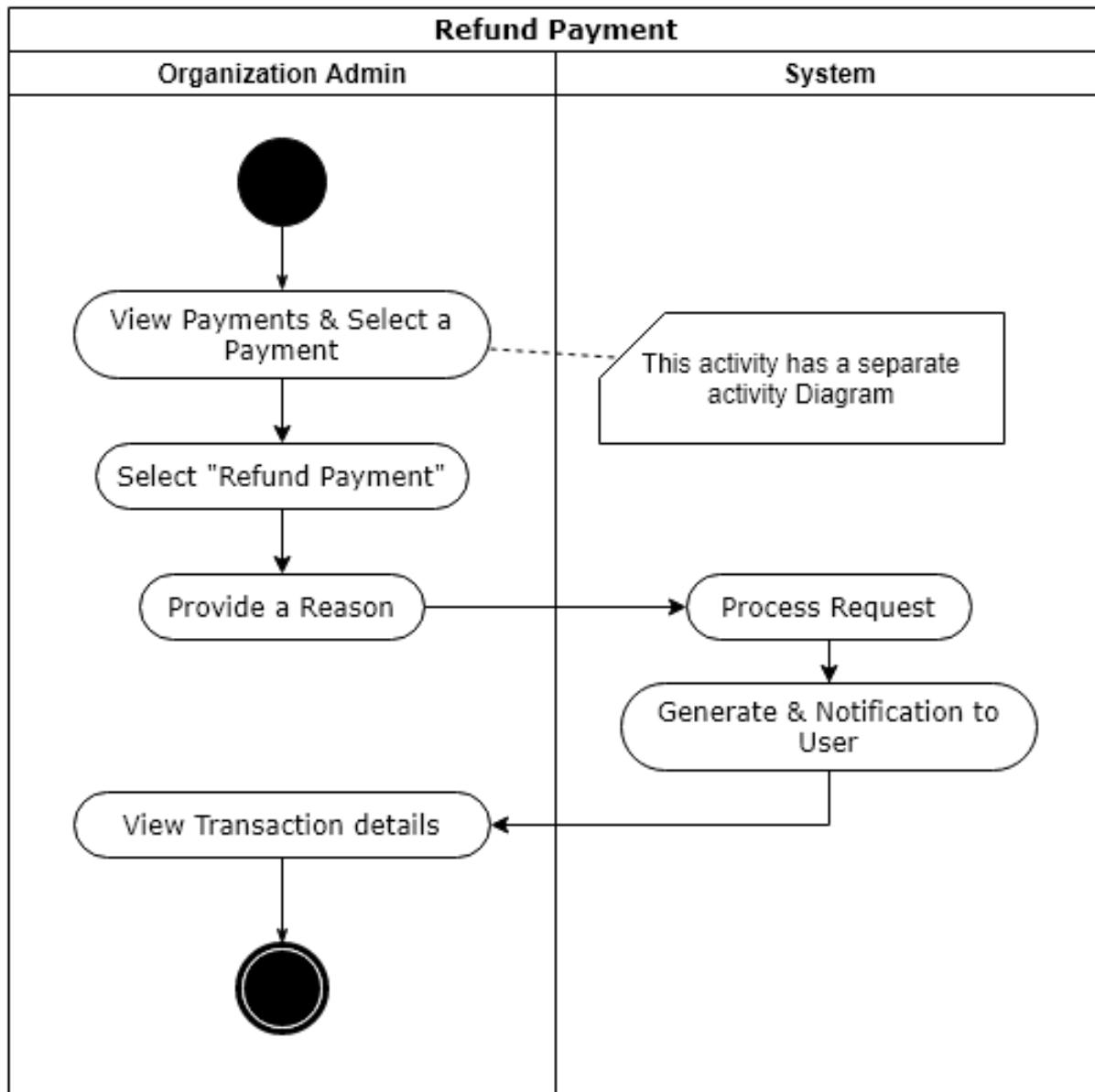


Figure 2.30: Activity Diagram - Refund Payment

## Use Case 31 - Maintain Vital Organization Information

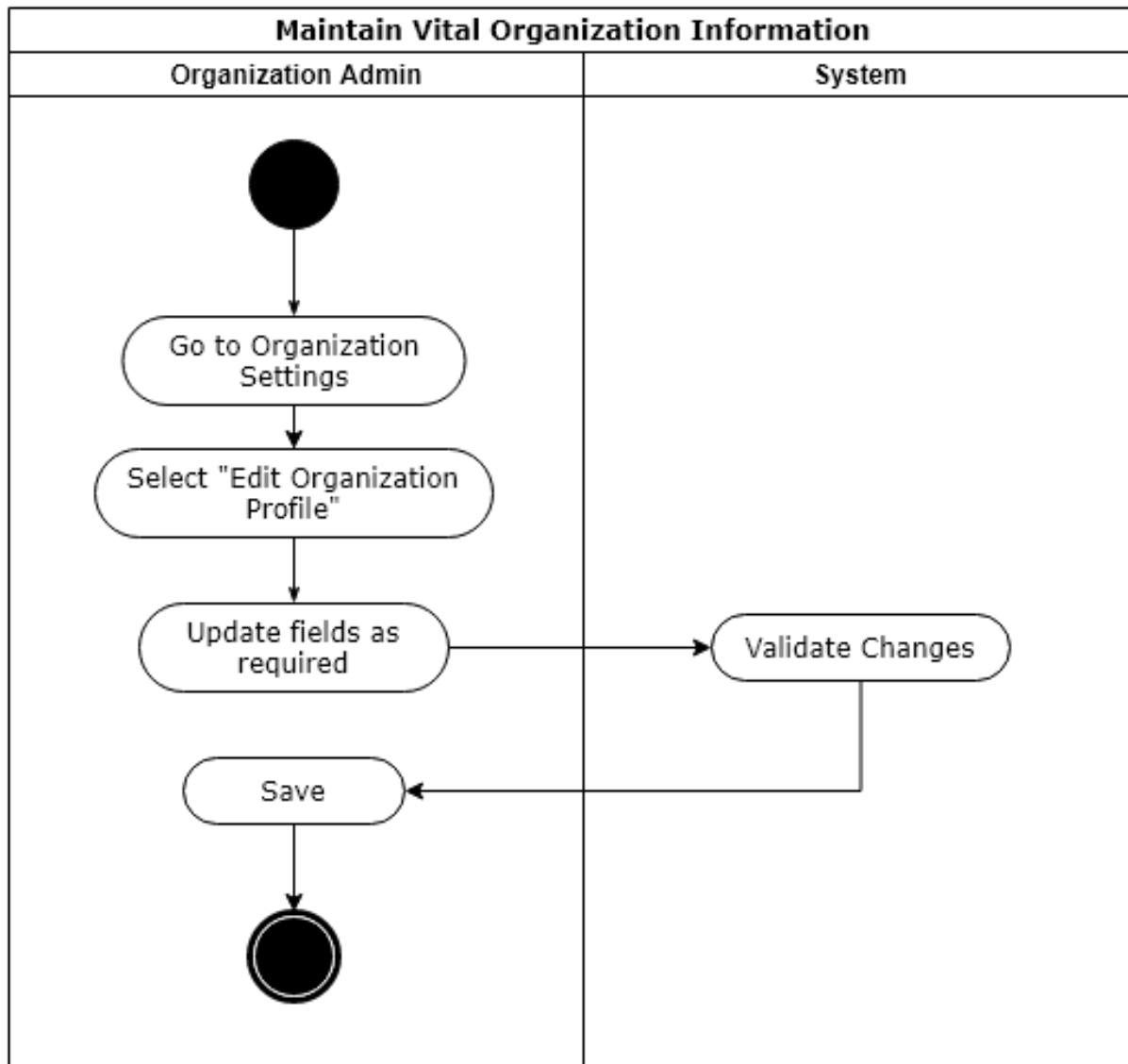


Figure 2.31: Activity Diagram - Maintain Vital Organization Information

## Use Case 45 - View users of an organization

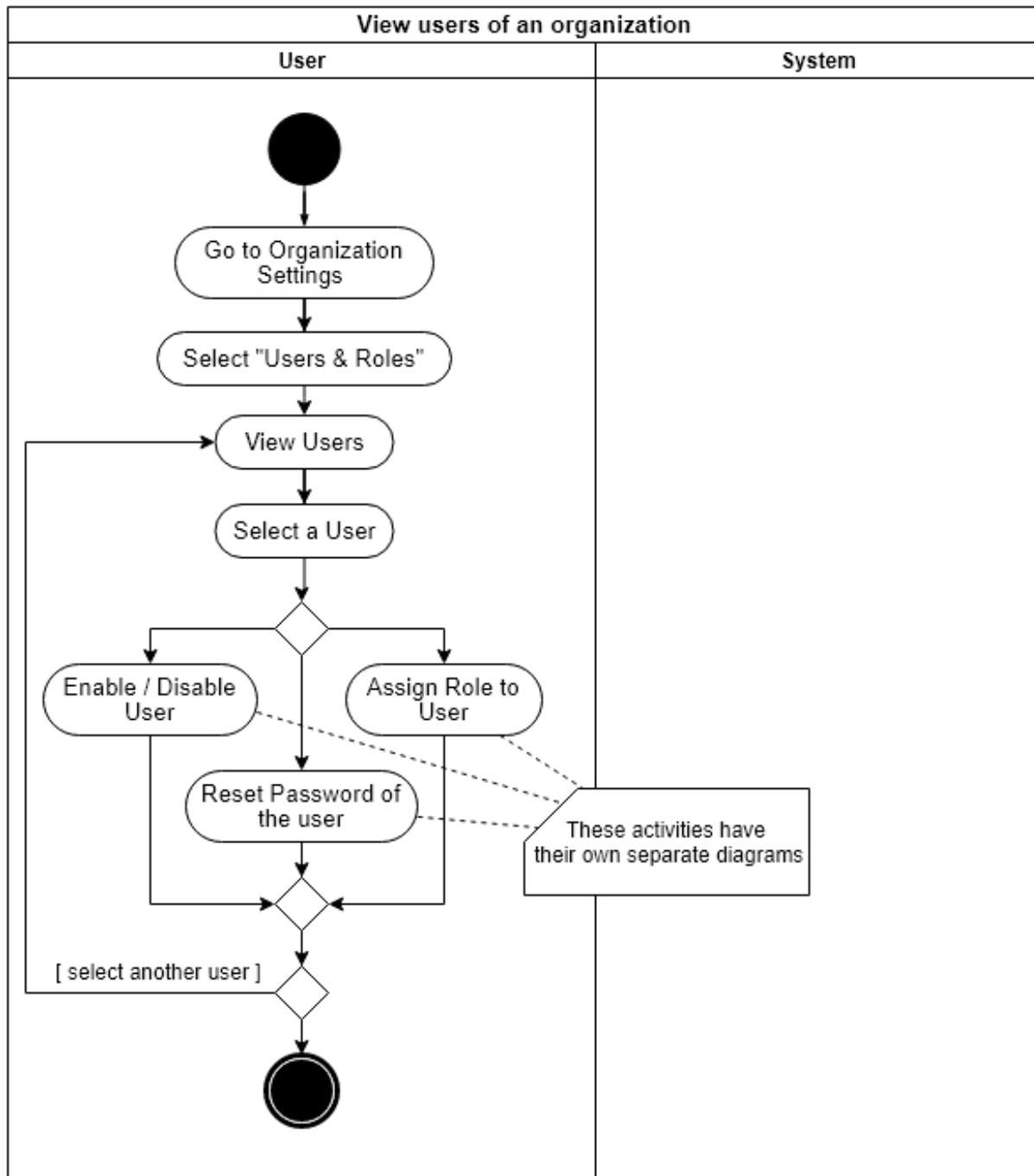


Figure 2.32: Activity Diagram - View users of an organization

## Use Case 46 - Create an Organization User

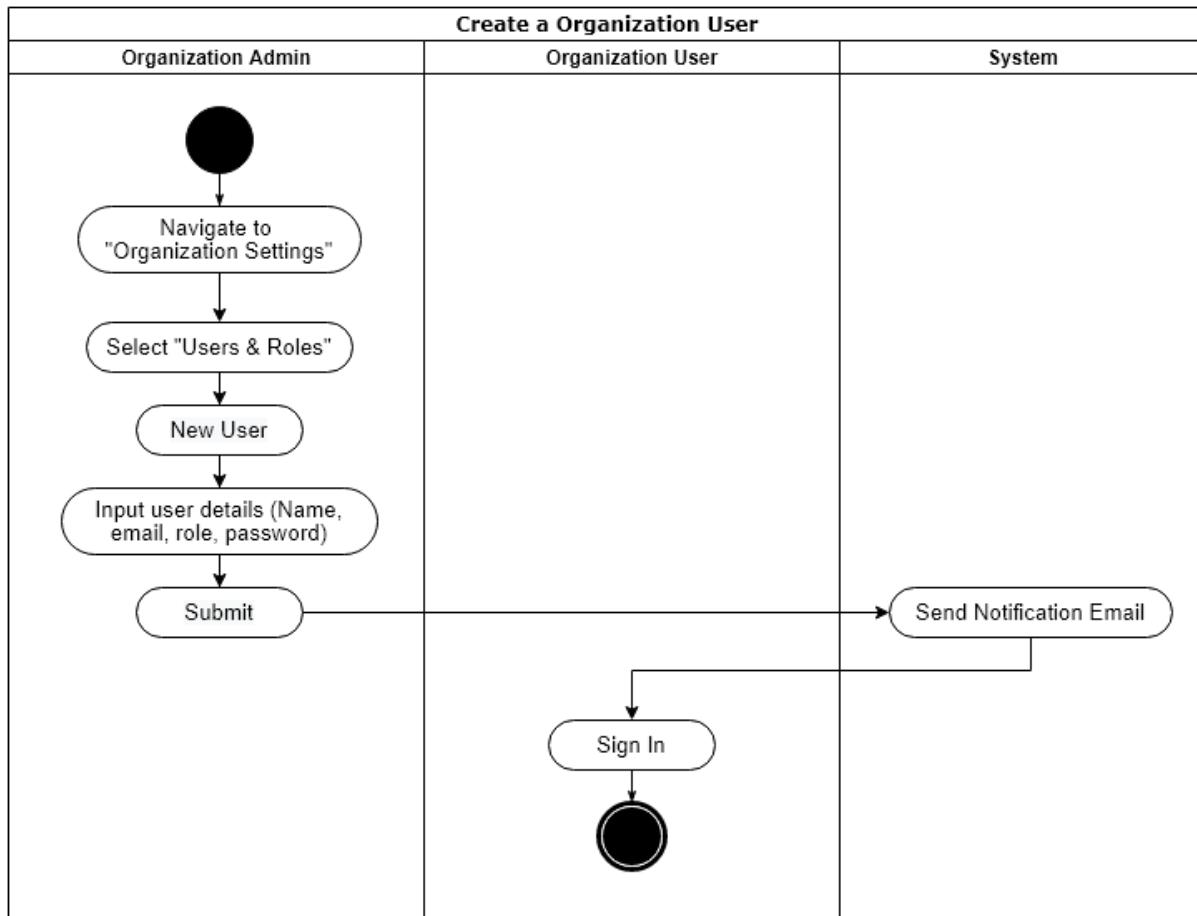


Figure 2.33: Activity Diagram - Create an Organization User

## Use Case 47 - Disable / Enable User

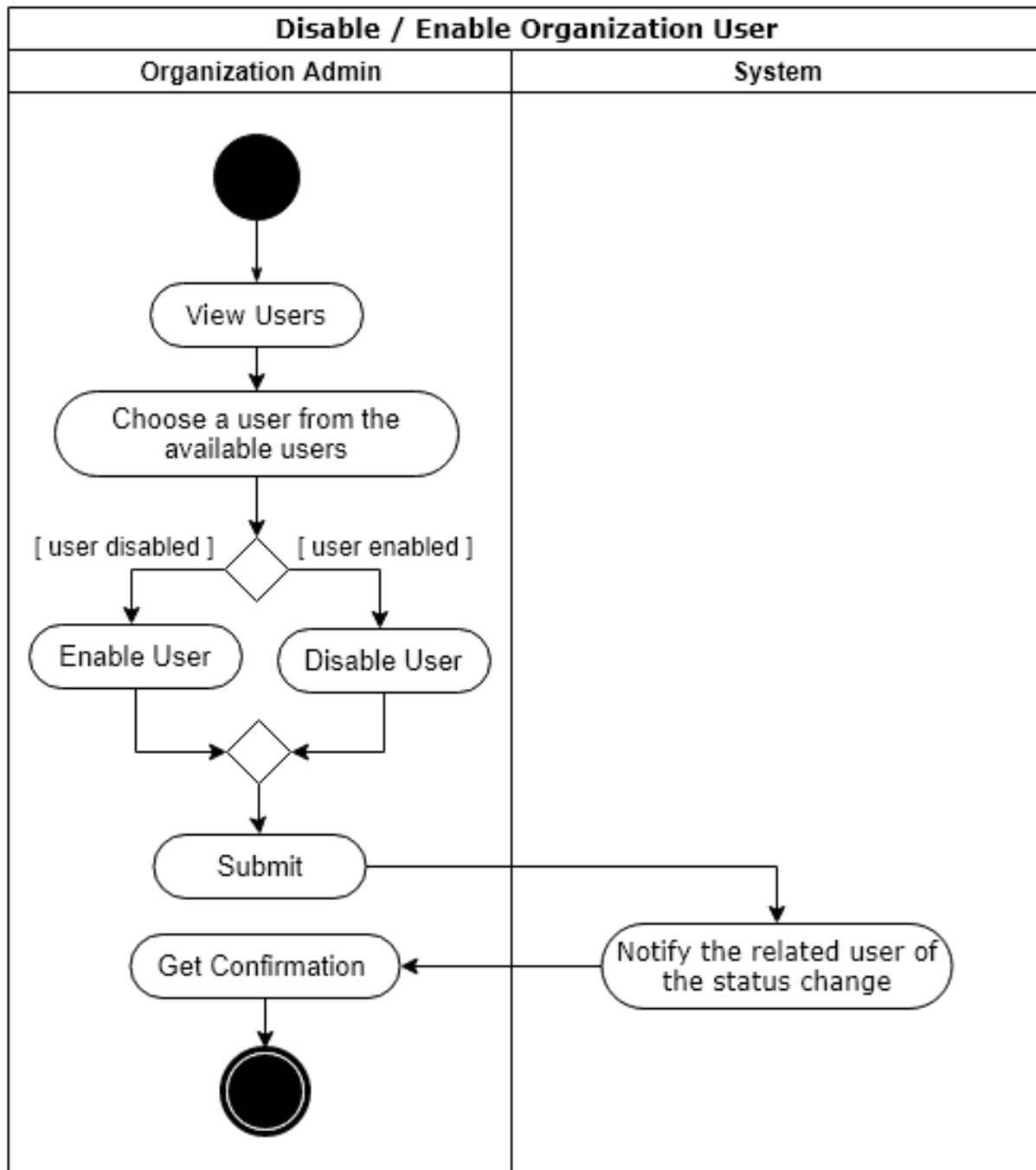


Figure 2.34: Activity Diagram - Disable / Enable User

## Use Case 48 - Assign Roles to Users

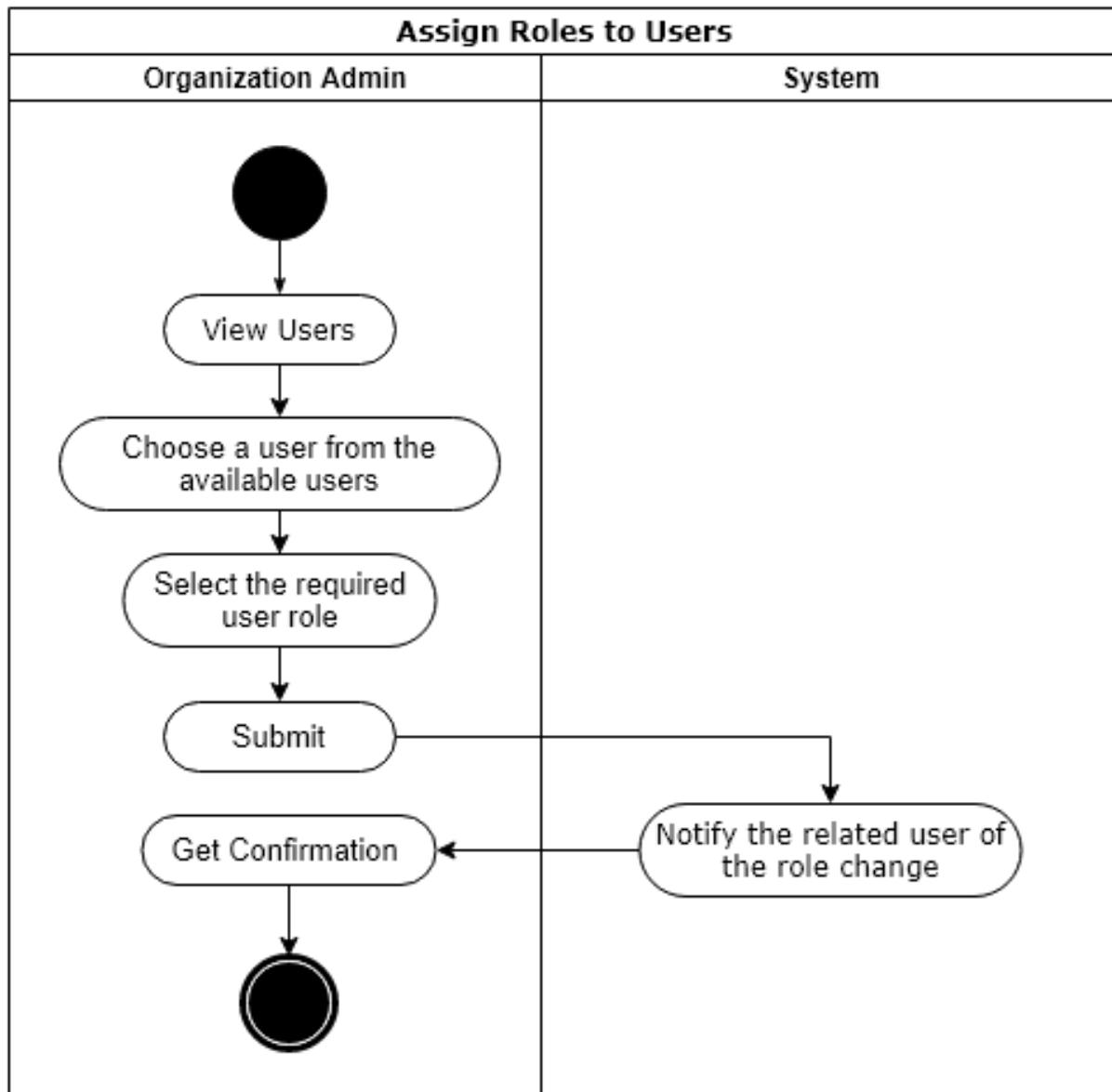
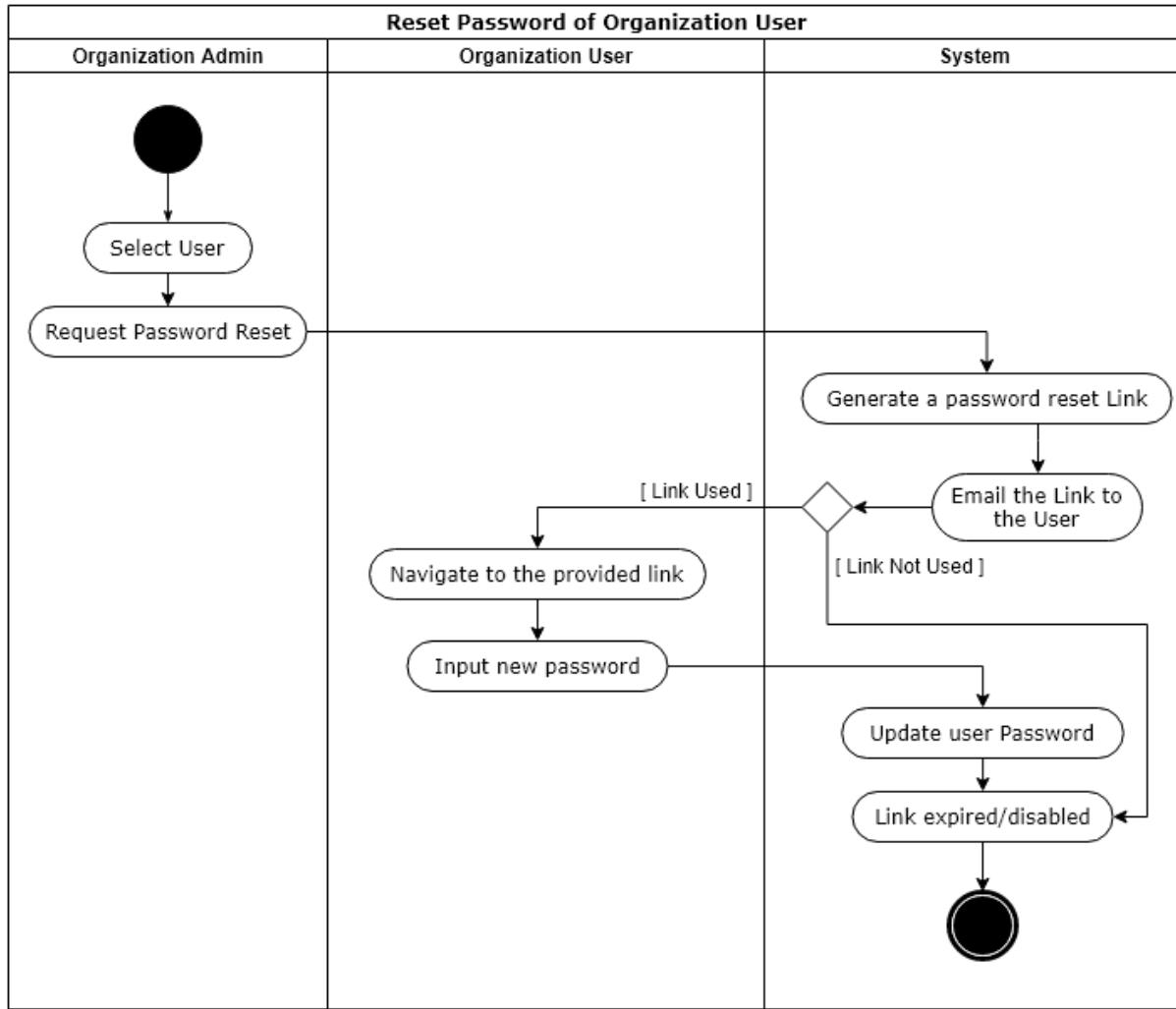


Figure 2.35: Activity Diagram - Assign Roles to Users

**Use Case 49 - Reset Password of Organization User**



*Figure 2.36: Activity Diagram - Reset Password of Organization User*

### 2.5.5 VETERINARY DOCTOR

#### Use Case 32 - Provide Medical Advice

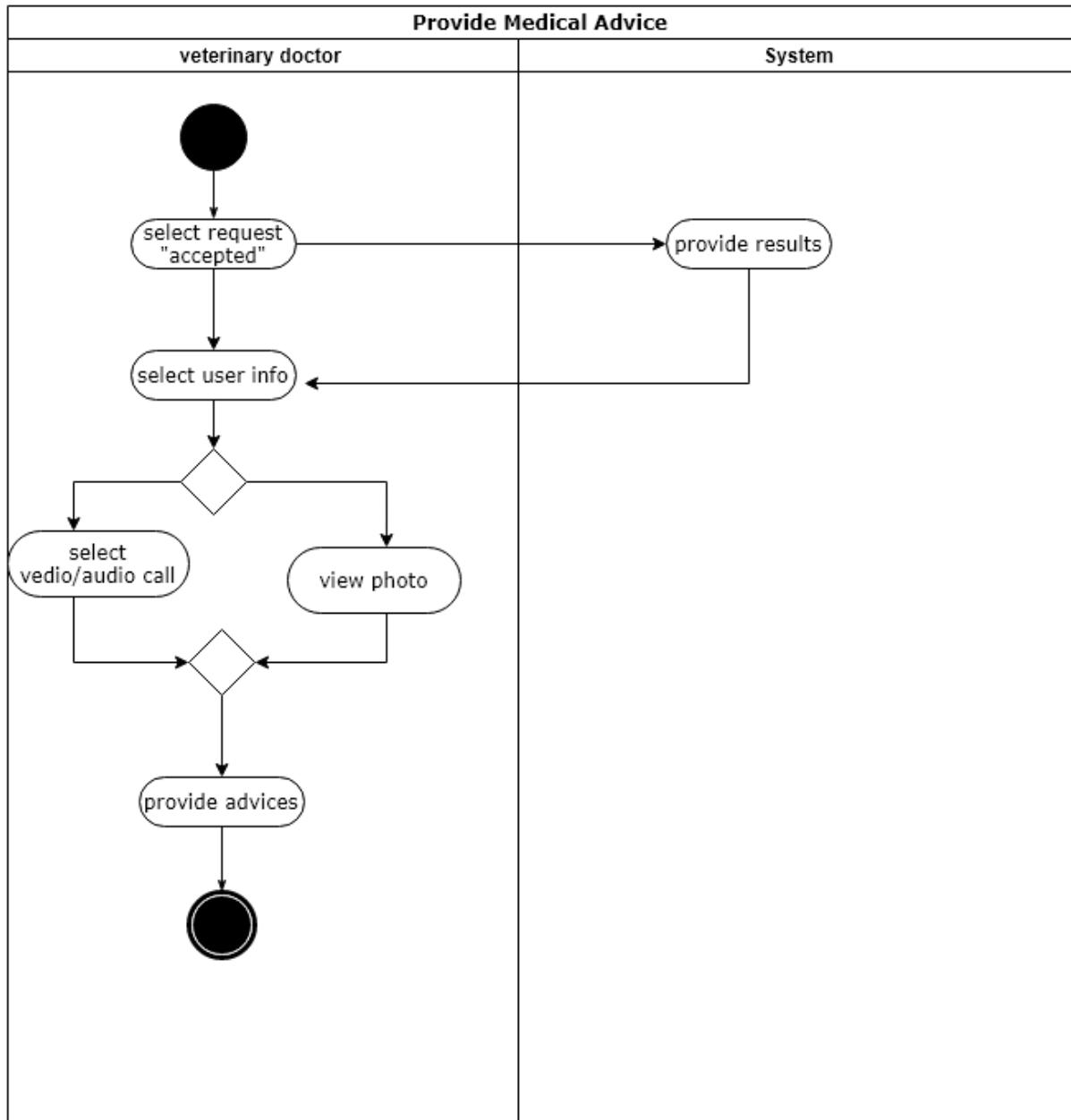


Figure 2.37: Activity Diagram - Provide Medical Advice

## Use Case 33 - View photo uploads of animals

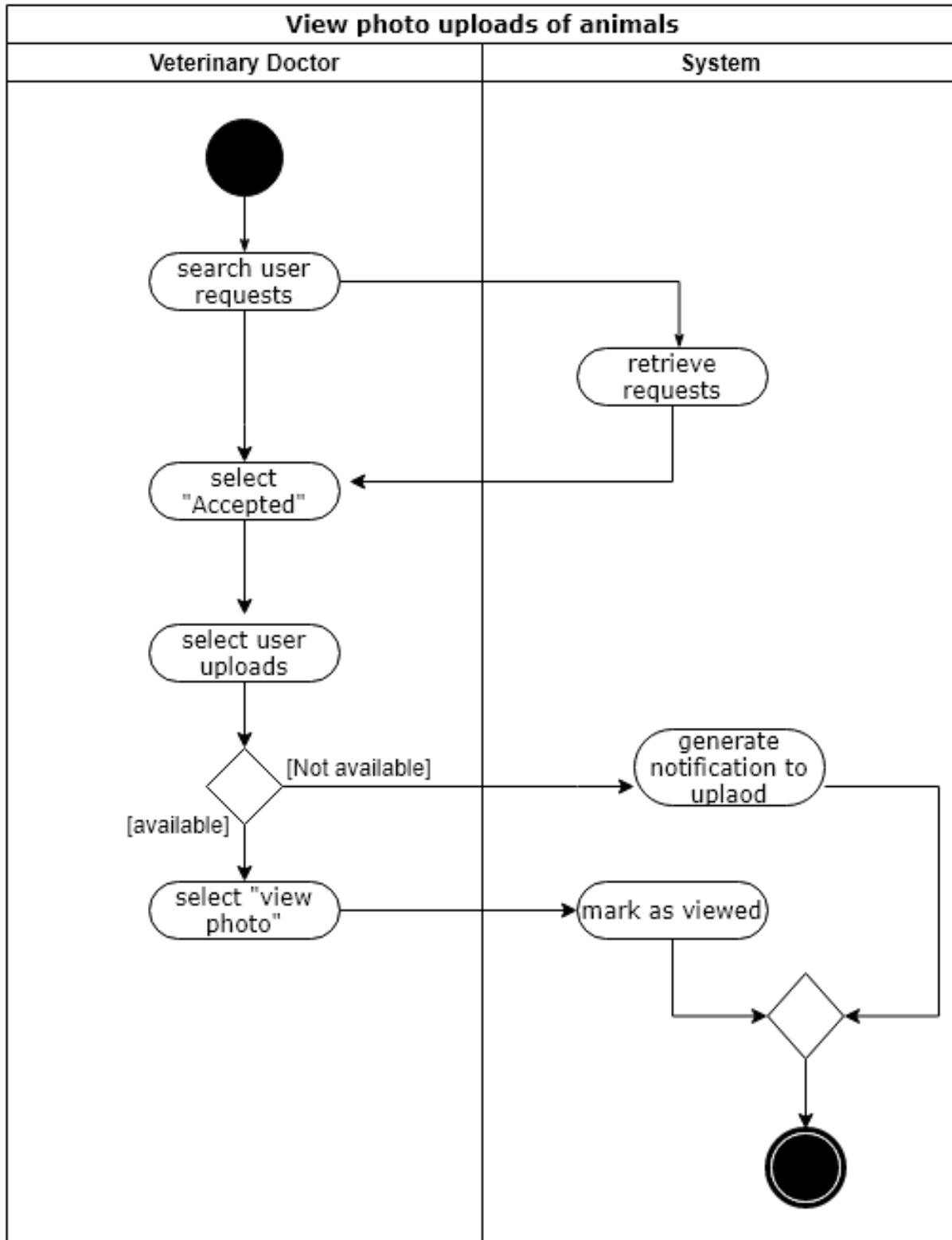


Figure 2.38: Activity Diagram - View photo uploads of animals

## Use Case 34 - Accept / Deny Consultation Requests

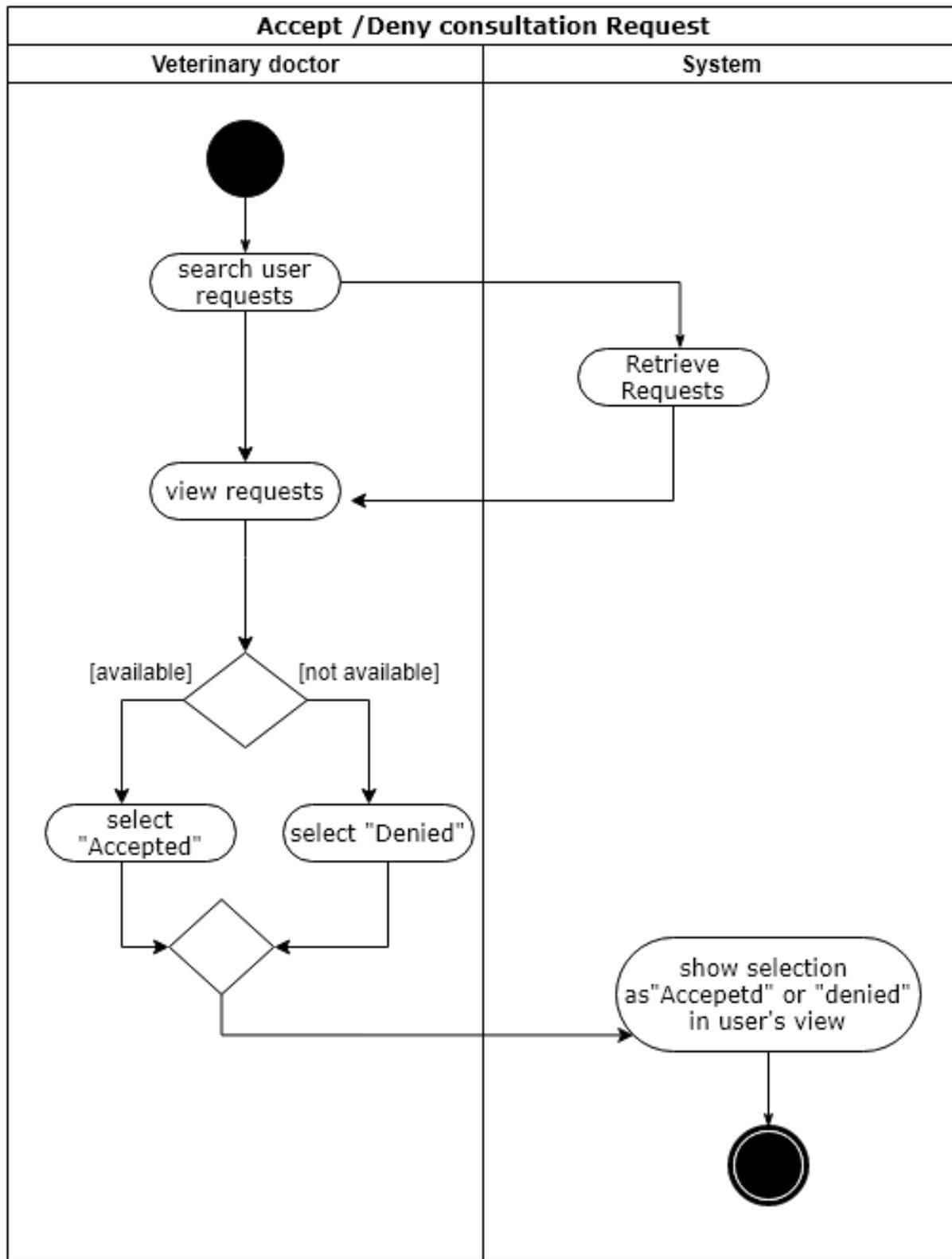


Figure 2.39: Activity Diagram - Accept / Deny Consultation Requests

## Use Case 35 - Audio / Video calls to consult

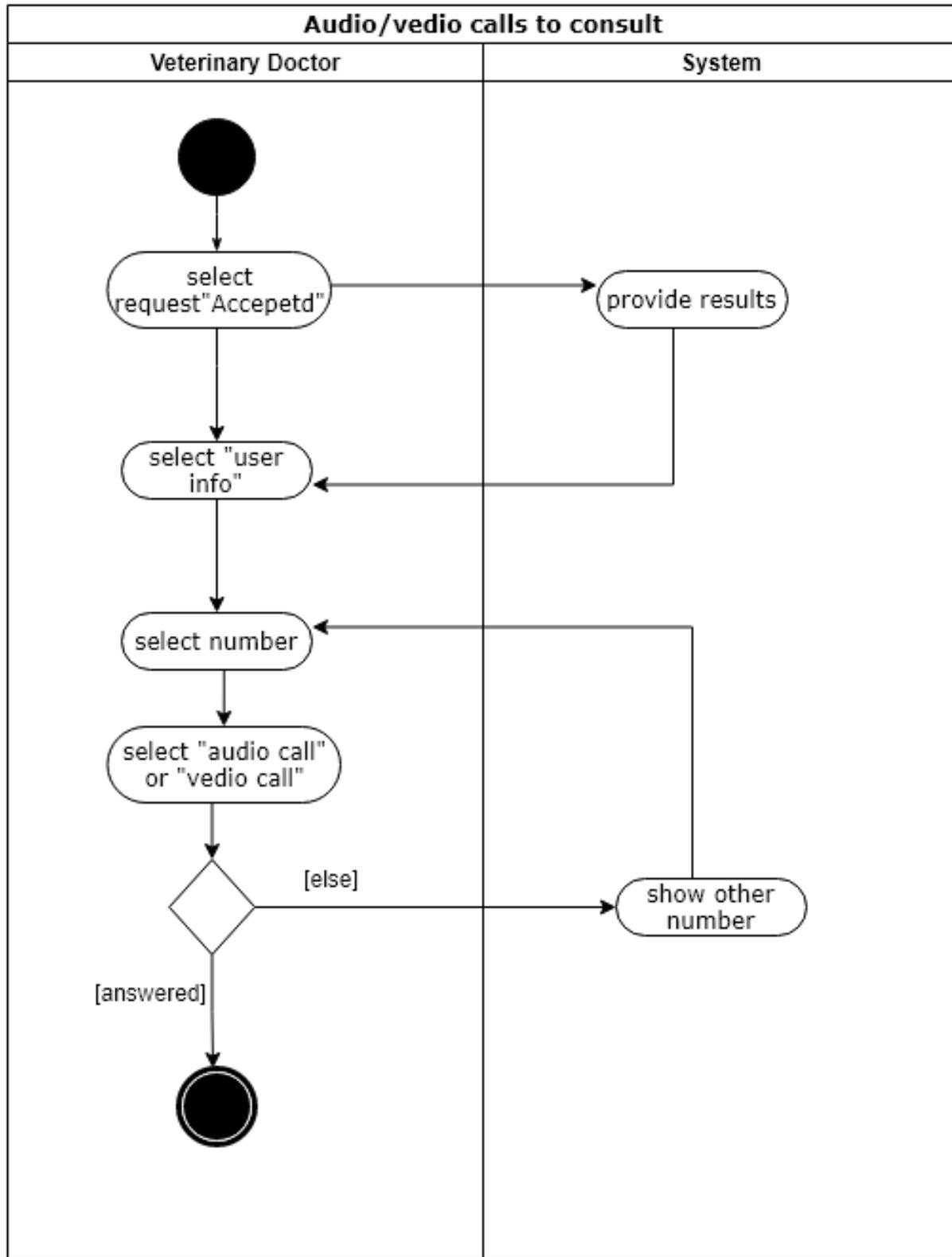


Figure 2.40: Activity Diagram - Audio / Video calls to consult

## Use Case 36 - Maintain health records of a pet

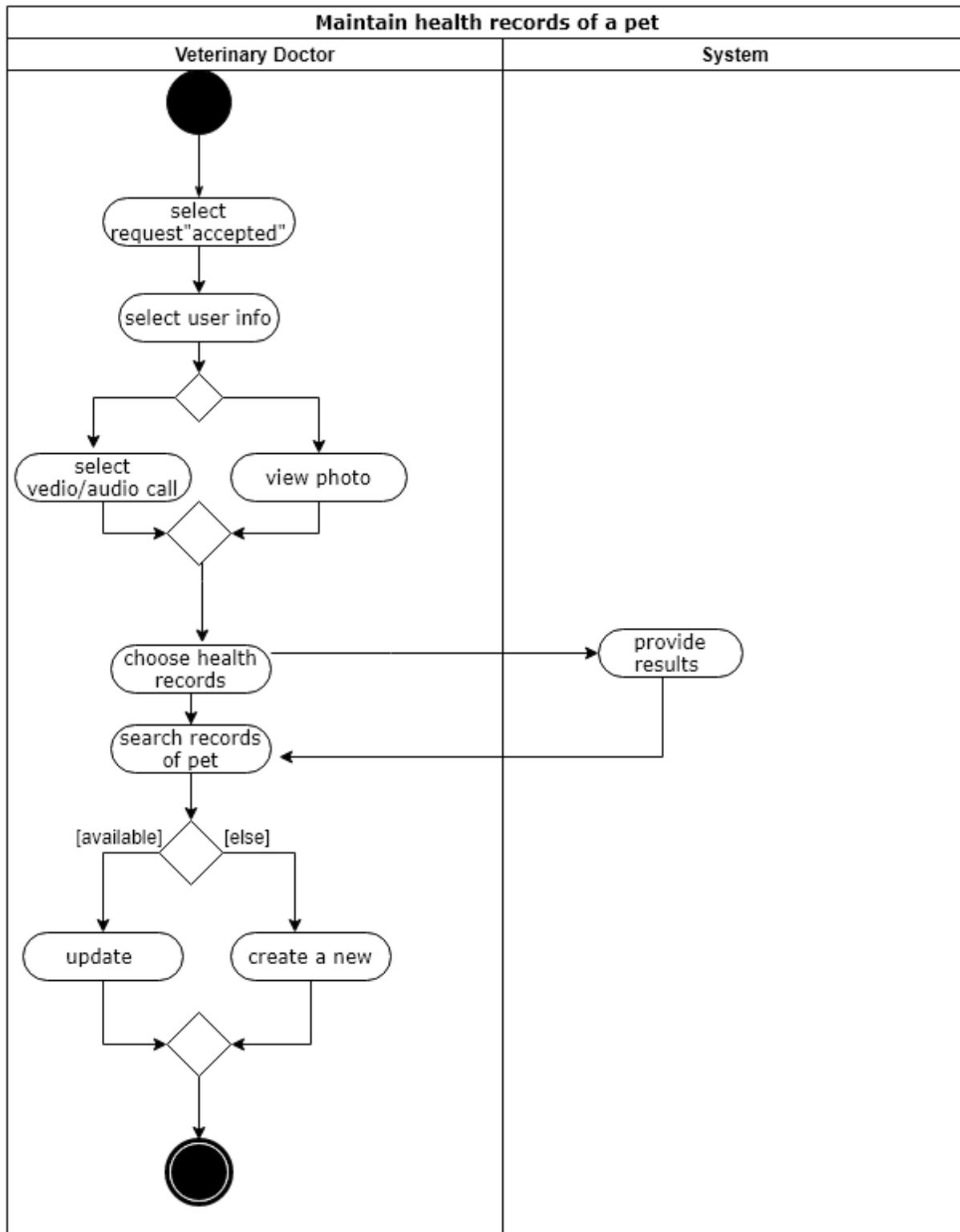


Figure 2.41: Activity Diagram - Maintain health records of a pet

## Use Case 37 - Create prescription

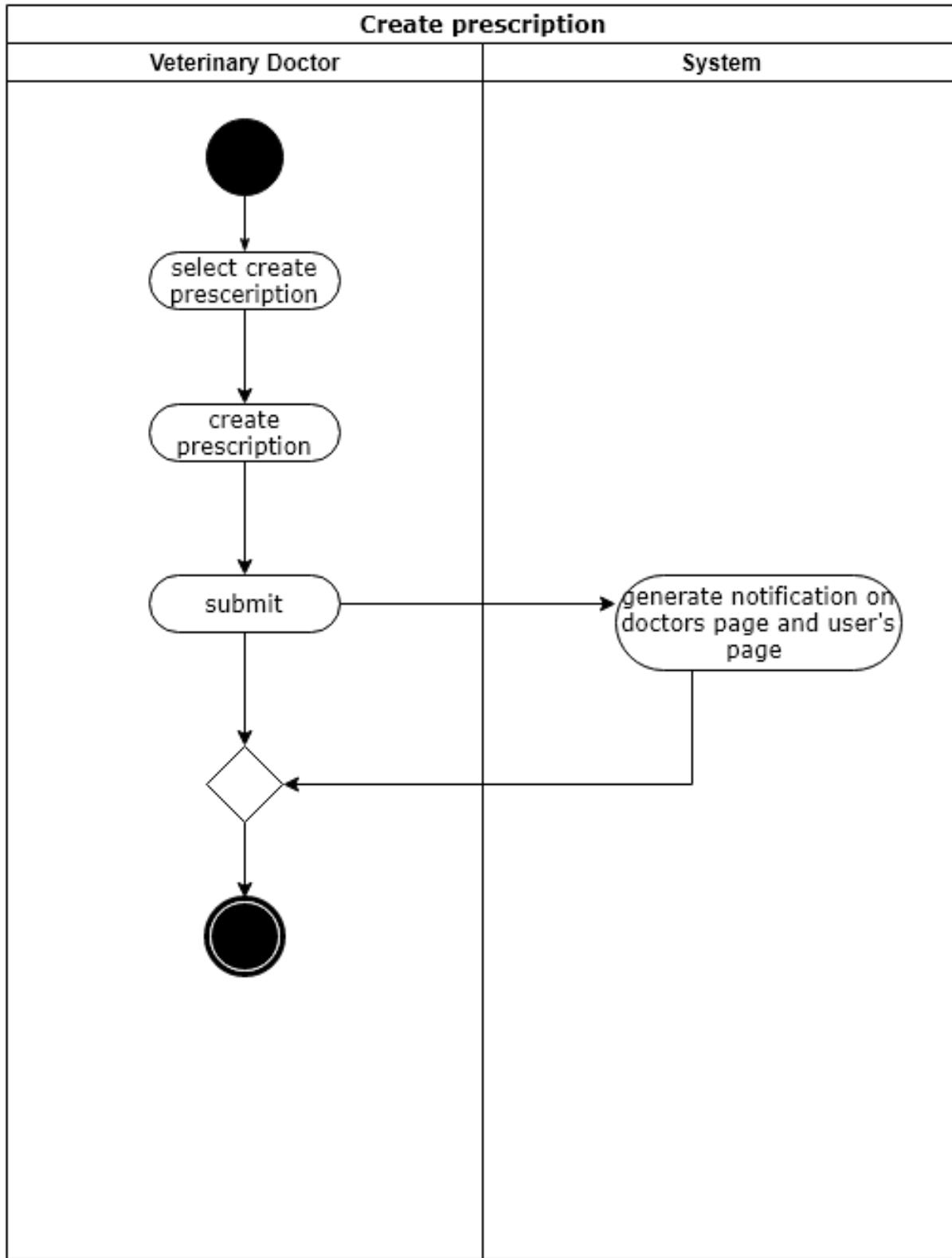


Figure 2.42: Activity Diagram - Create prescription

## 2.5.6 AUTHENTICATION MODULE

### Use Case 38 - Sign In

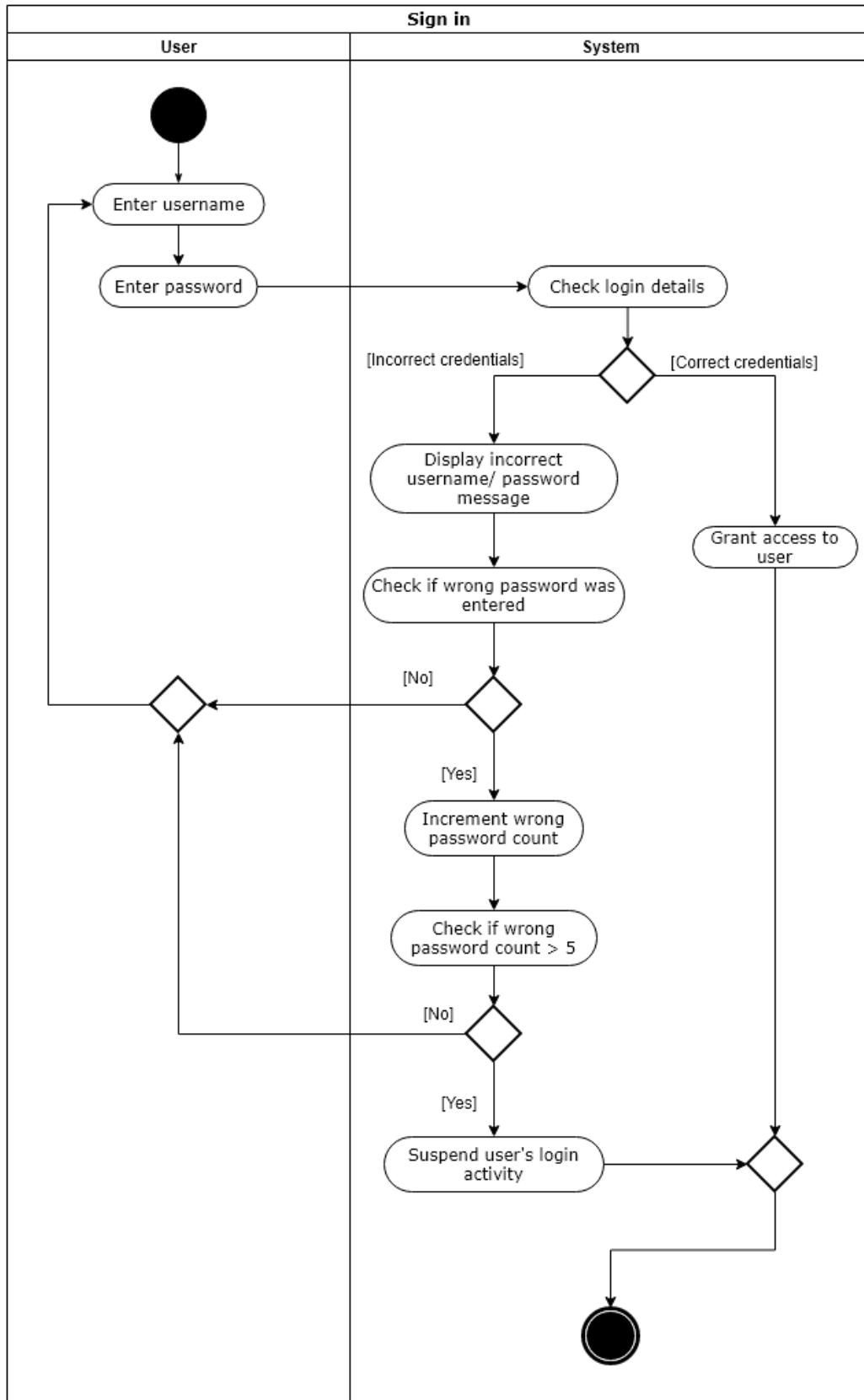


Figure 2.43: Activity Diagram - Sign In

### Use Case 39 - Sign Up

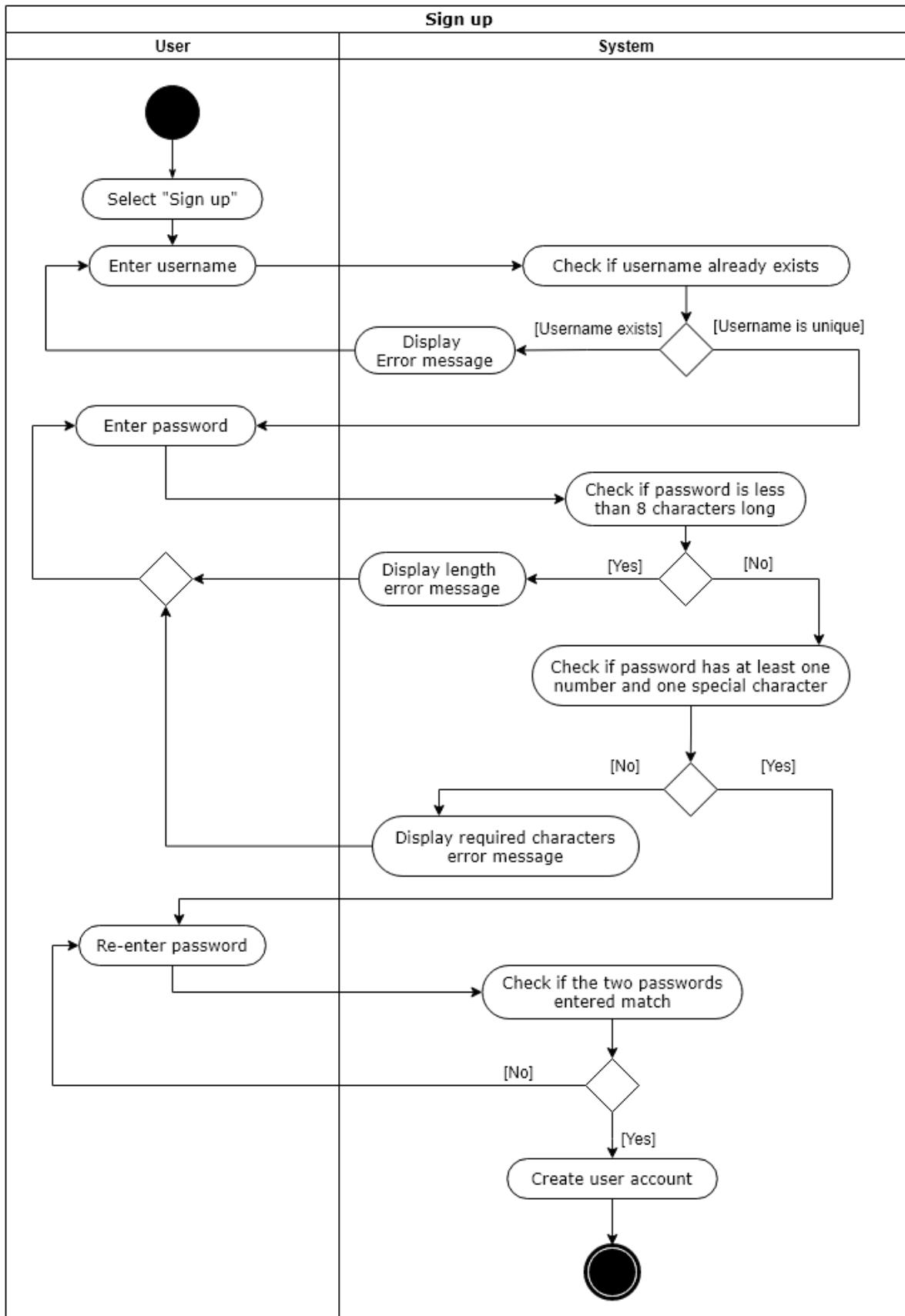


Figure 2.44: Activity Diagram - Sign Up

### Use Case 40 - Update User Profile

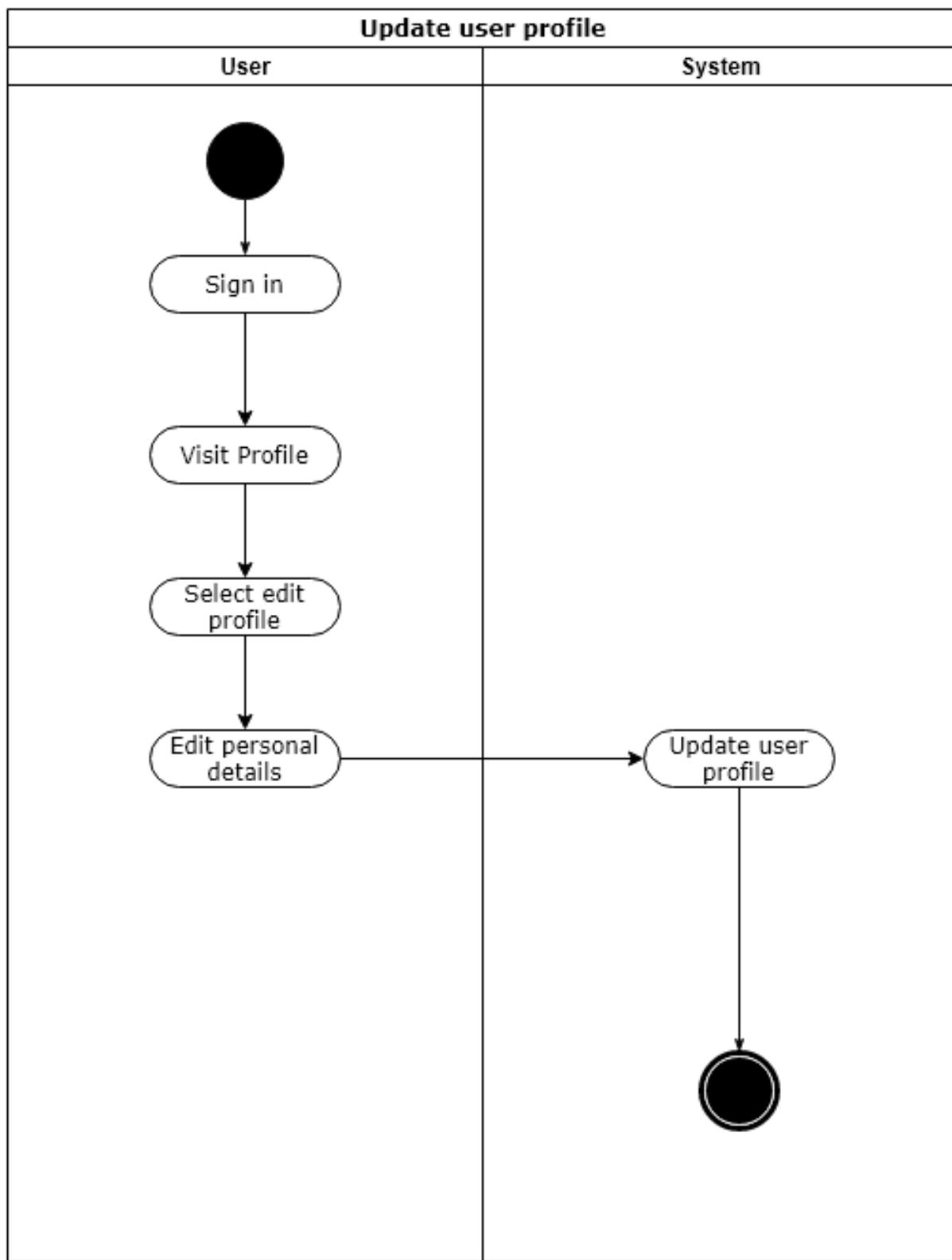


Figure 2.45: Activity Diagram - Update User Profile

## Use Case 41 - Change Password

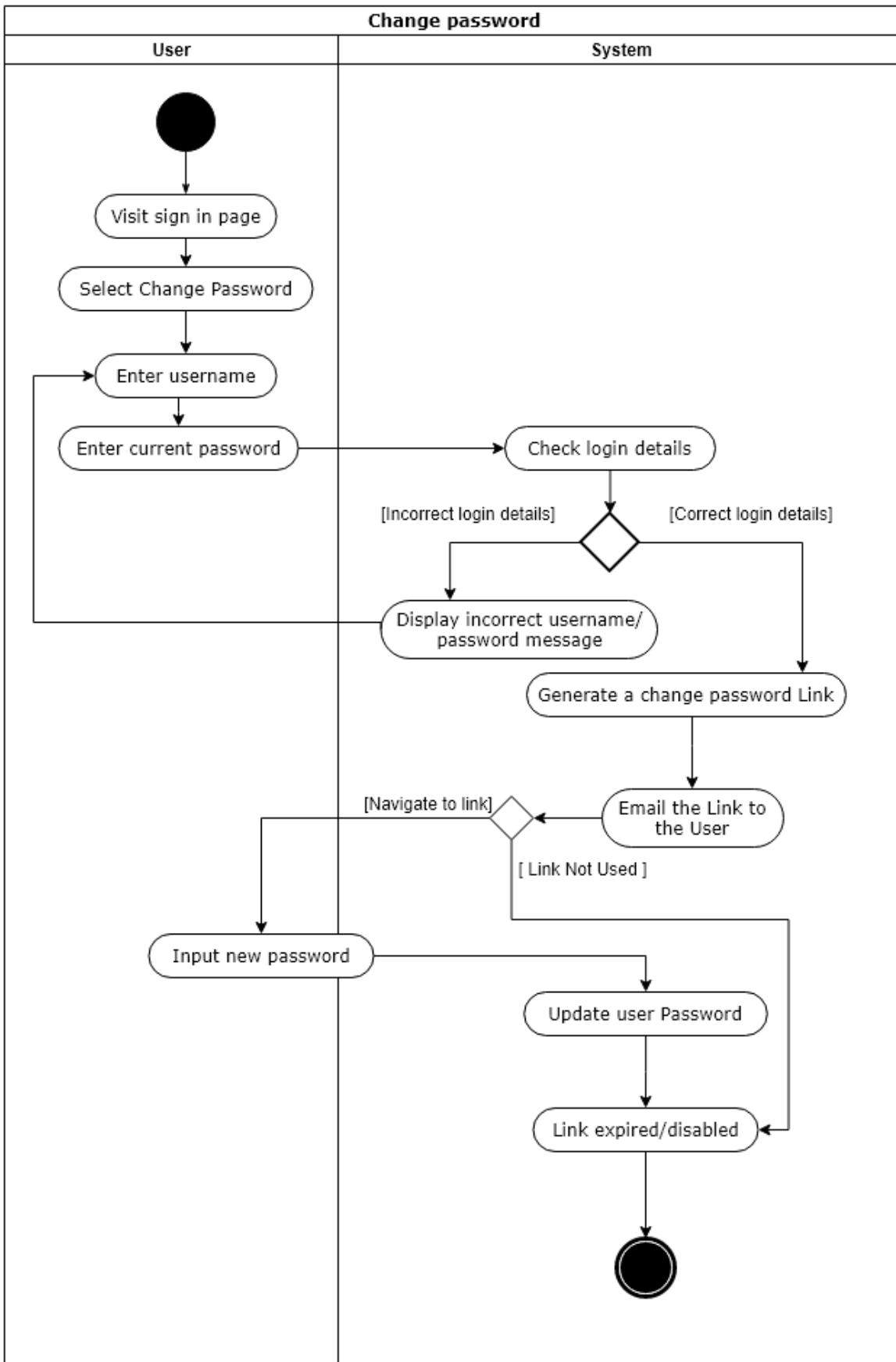
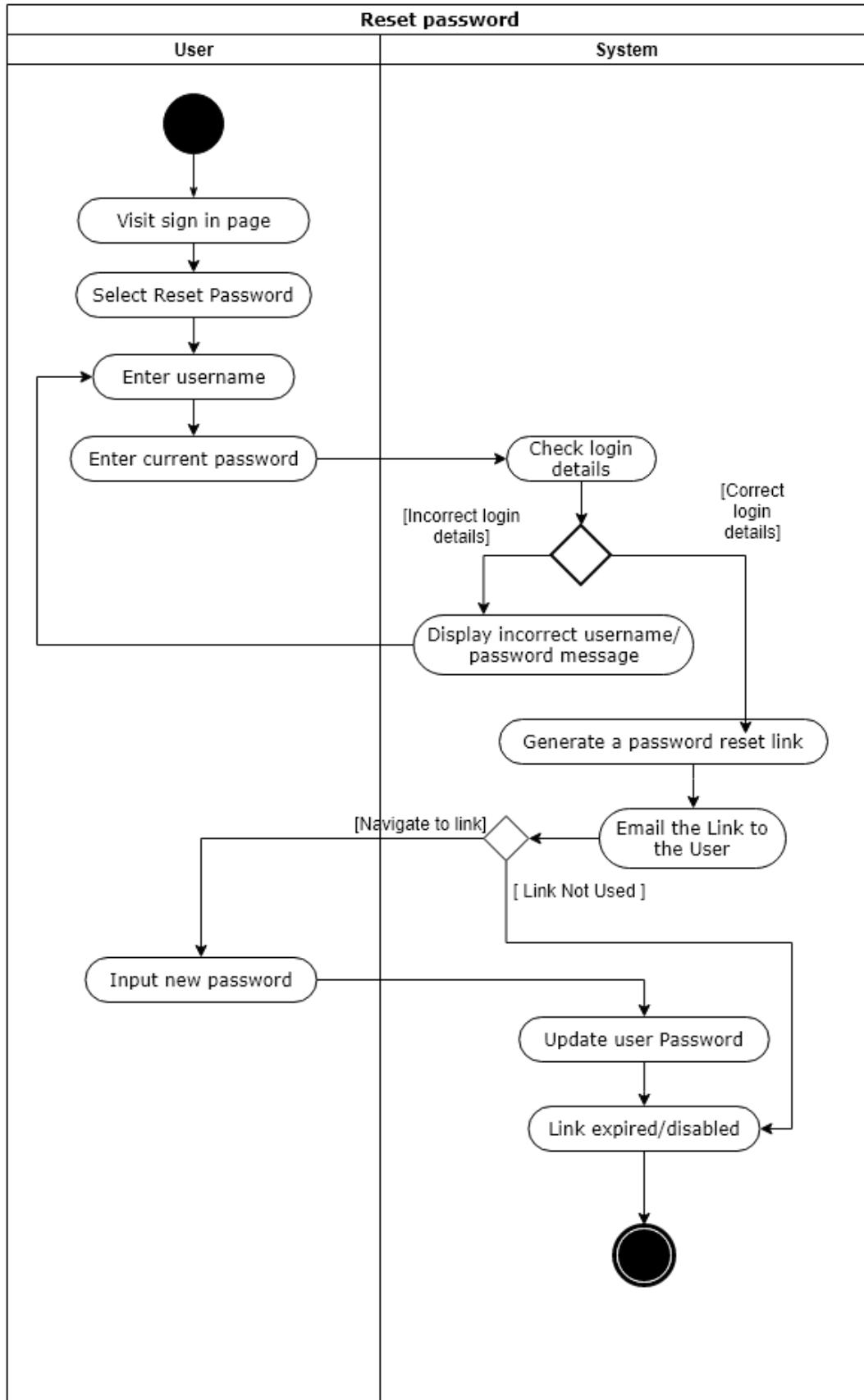


Figure 2.46: Activity Diagram - Change Password

**Use Case 42 - Reset Password**



*Figure 2.47: Activity Diagram - Reset Password*

**Use Case 43 - Register Organization**

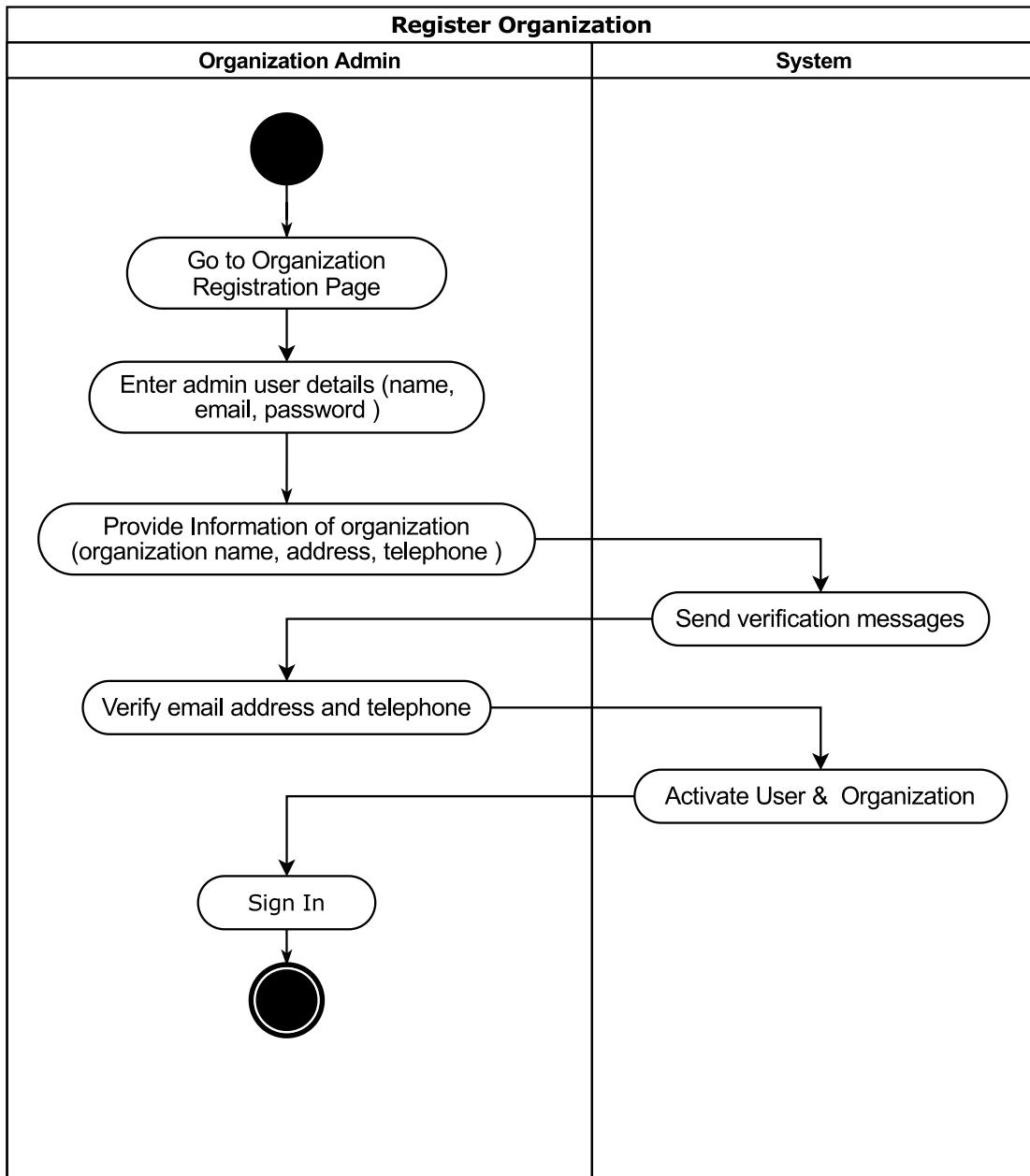


Figure 2.48: Activity Diagram - Register Organization

## Use Case 44 - Register as a Doctor

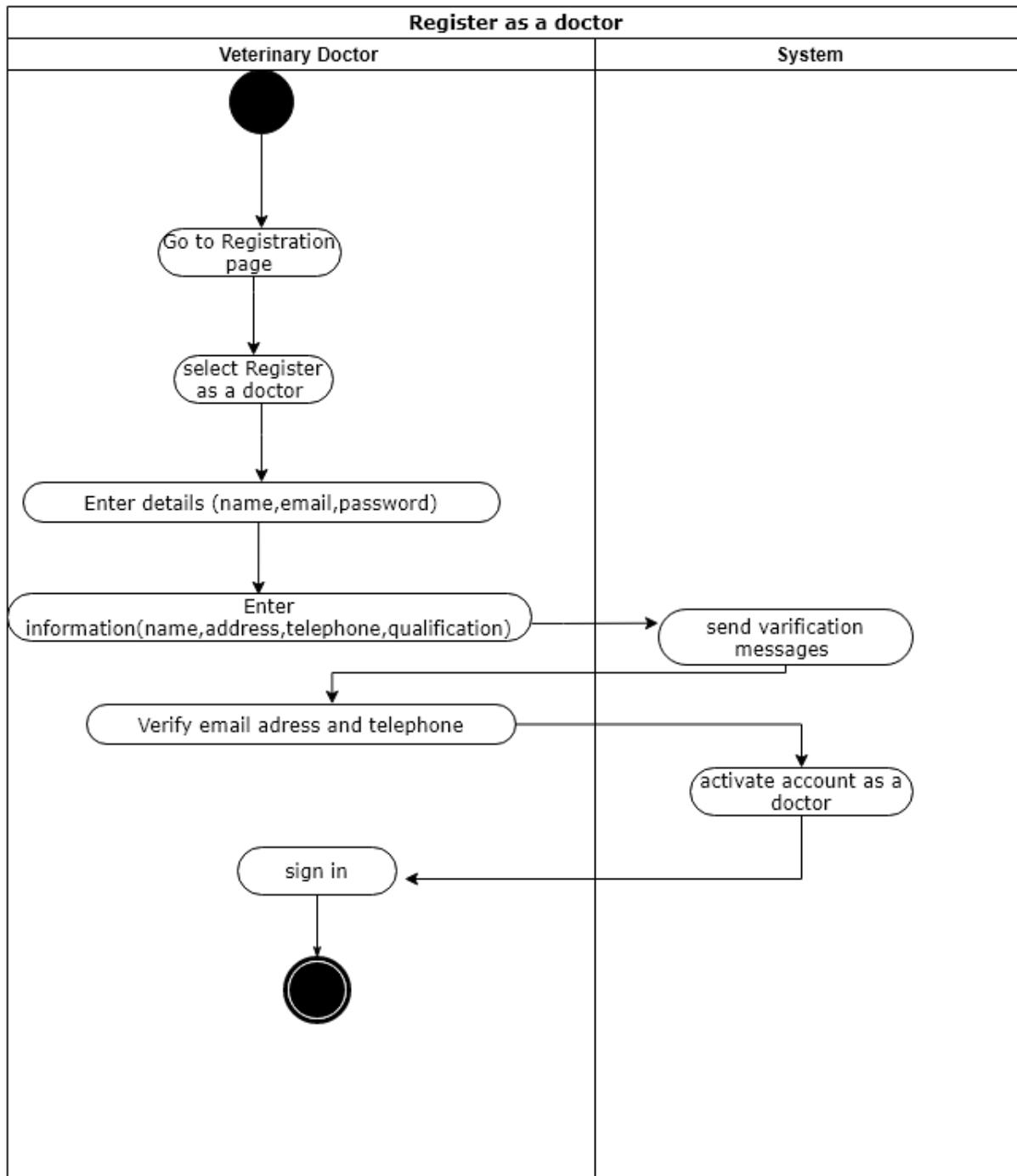


Figure 2.49: Activity Diagram - Register as a Doctor

## Use Case 50 - View Purchase, Donation &amp; Sponsorship History

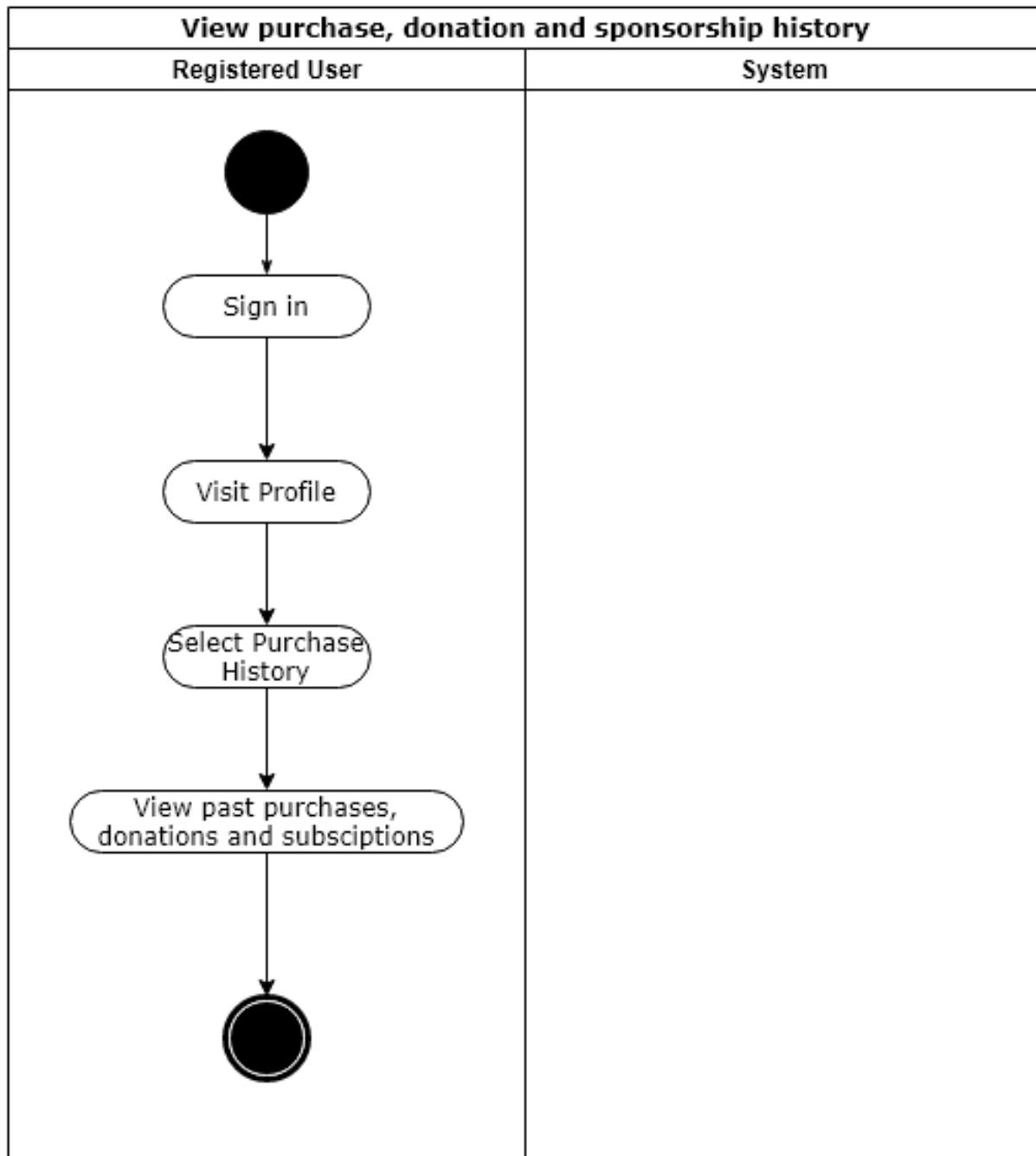


Figure 2.50: Activity Diagram - View Purchase, Donation &amp; Sponsorship History

# 3 SYSTEM ARCHITECTURE

## 3.1 High-Level Architecture

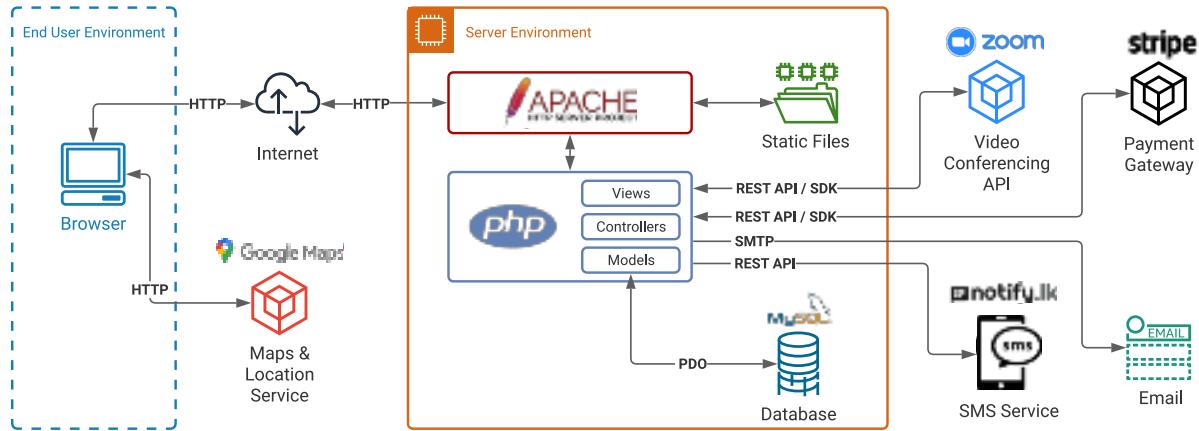


Figure 3.1: High Level Architecture Diagram

## 3.2 System Architectural Structure

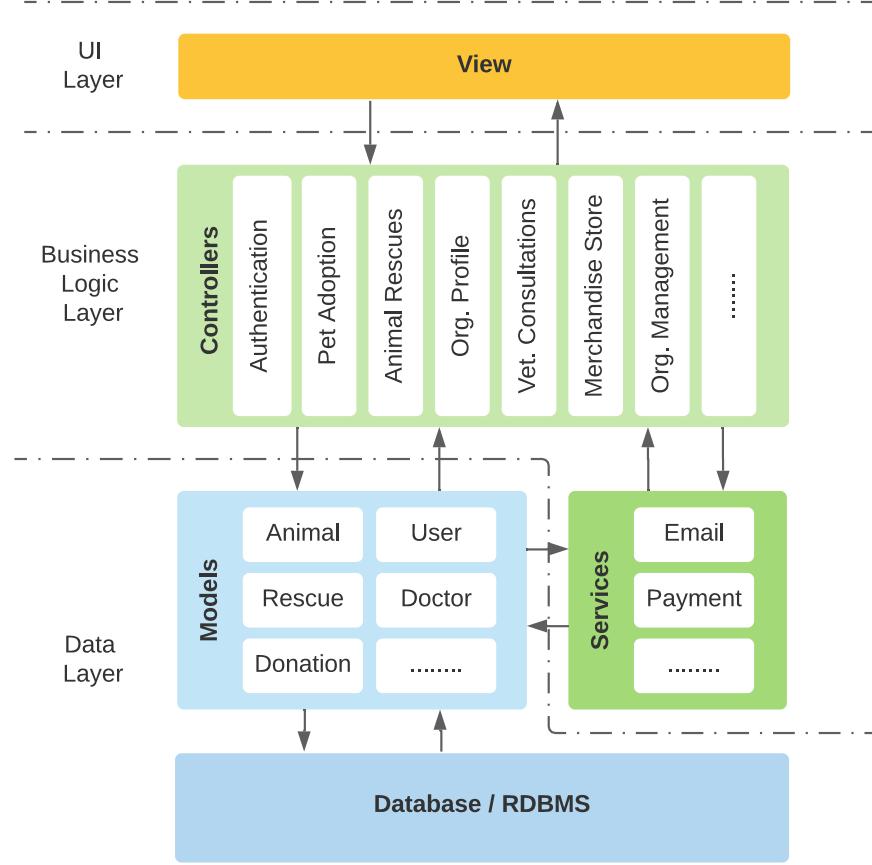


Figure 3.2: System Architectural Structure

### 3.3 System Components

#### 3.3.1 COMPONENT DIAGRAM

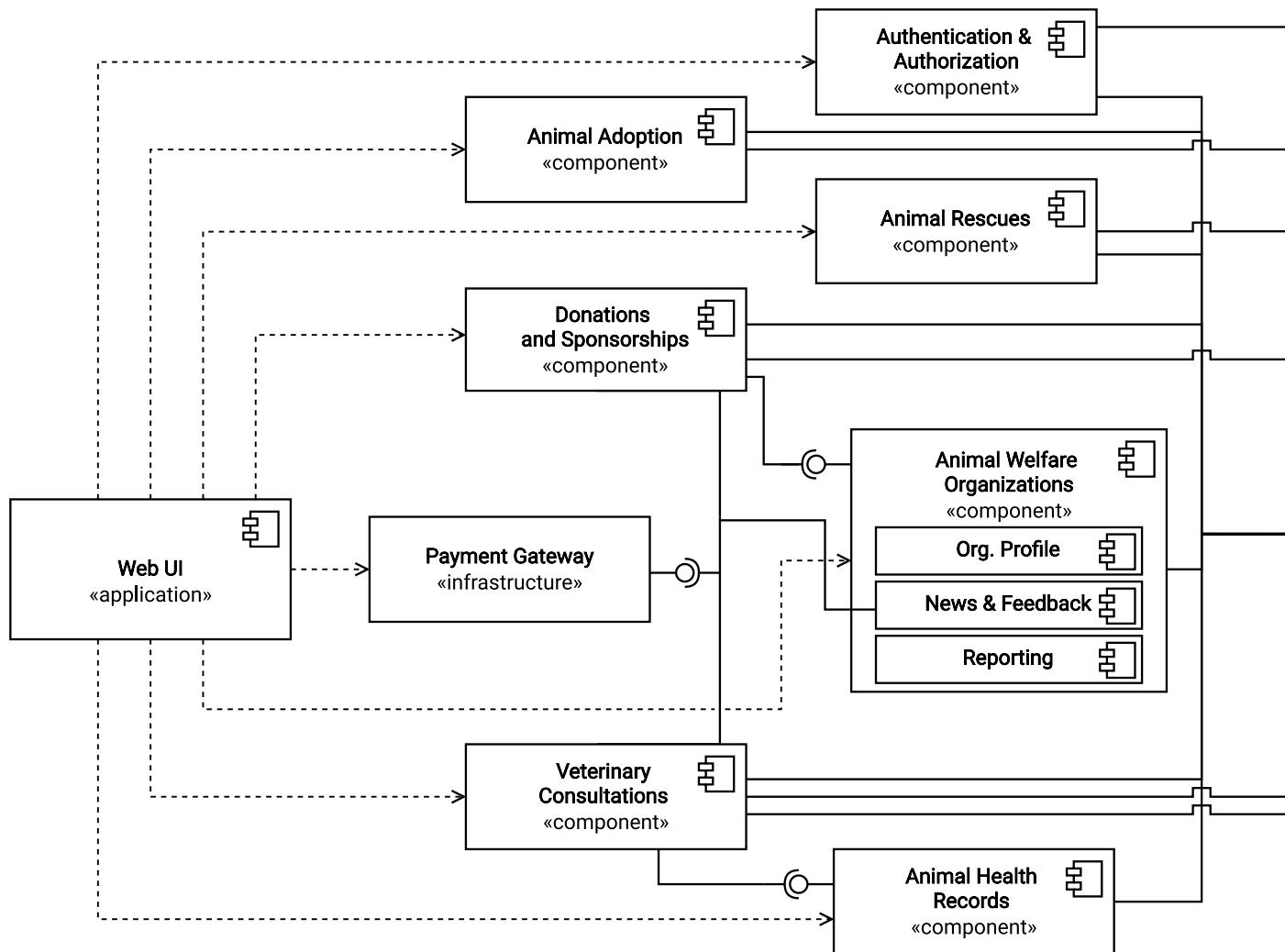


Figure 3.3: Component Diagram

### 3.3.2 COMPONENT DESCRIPTION

*Table 48: Component Functionalities*

Component	Functionality
Authentication & Authorization	<ul style="list-style-type: none"> <li>• Validate credentials of the users</li> <li>• Onboarding of users and organizations to the system.</li> <li>• Providing interface to get authorized user data</li> </ul>
Animal Adoptions	<ul style="list-style-type: none"> <li>• List available animals</li> <li>• Accept adoption requests</li> <li>• Add new animals for adoption</li> <li>• Routine updates on adopted animals</li> </ul>
Animal Rescues	<ul style="list-style-type: none"> <li>• Create rescue requests.</li> <li>• Accept &amp; respond to rescue reports.</li> <li>• Update progress of a rescue</li> </ul>
Animal Welfare Organizations	<ul style="list-style-type: none"> <li>• Organization Timeline</li> <li>• Provide Insights related to adoptions, rescues &amp; others.</li> </ul>
Donations & Sponsorships	<ul style="list-style-type: none"> <li>• Make donations</li> <li>• Sponsorships (recurring donations)</li> </ul>
Veterinary Consultations	<ul style="list-style-type: none"> <li>• Book consultations</li> <li>• Accept &amp; carryout the consultation online</li> </ul>
Animal Health Records	<ul style="list-style-type: none"> <li>• Store records in form of images, text &amp; prescriptions.</li> <li>• Vaccination reminders</li> </ul>
Notifications	<ul style="list-style-type: none"> <li>• Send transactional &amp; promotional emails</li> <li>• Send SMS notifications</li> </ul>
Payment Gateway	<ul style="list-style-type: none"> <li>• Accept and process payments</li> <li>• Refund payments</li> </ul>
RDBMS	<ul style="list-style-type: none"> <li>• Provide the functionality of a datastore with SQL compliant query interface</li> </ul>
Video Conferencing Platform	<ul style="list-style-type: none"> <li>• Initiate video / audio session between a provided pair of users.</li> </ul>

### 3.3.3 COMPONENTS

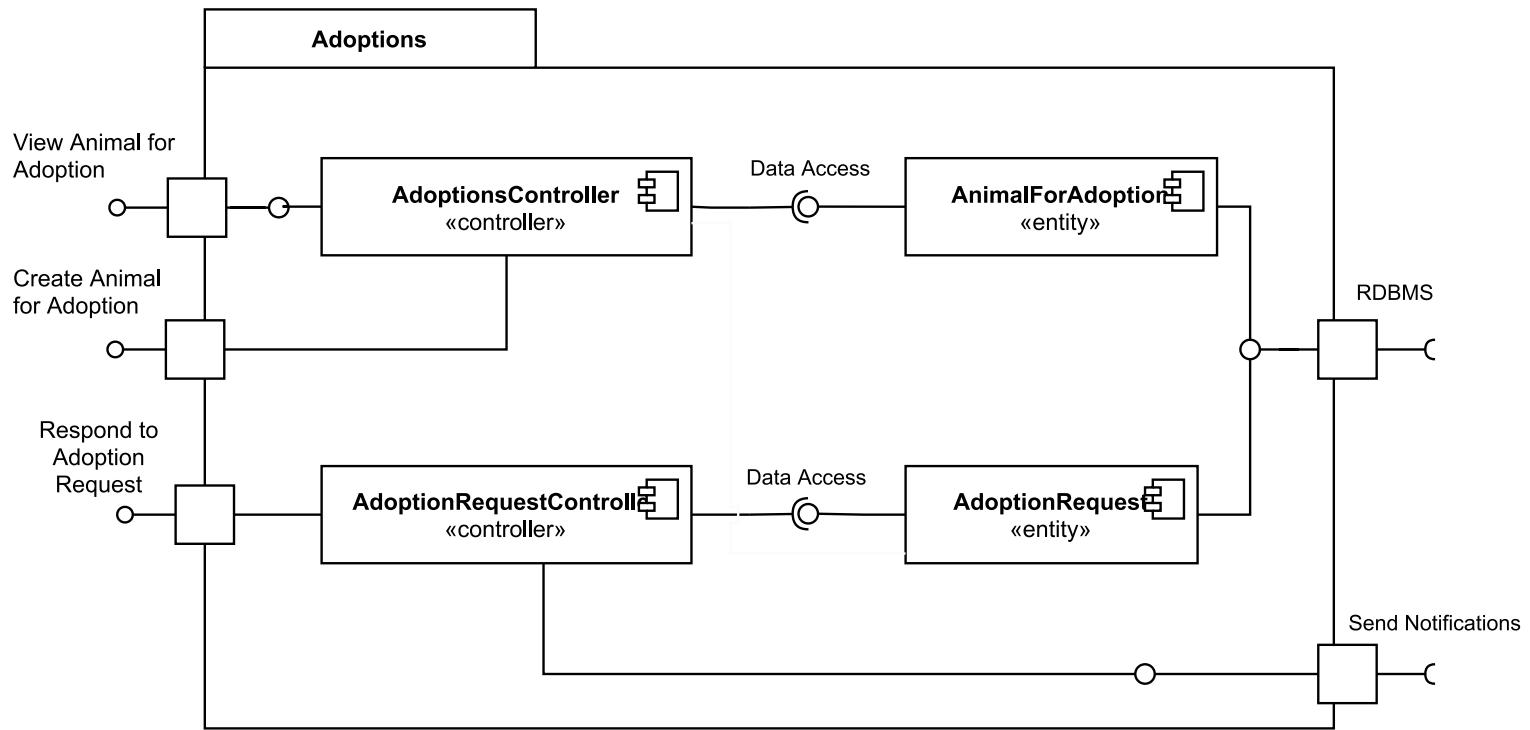


Figure 3.4: Component - Adoptions

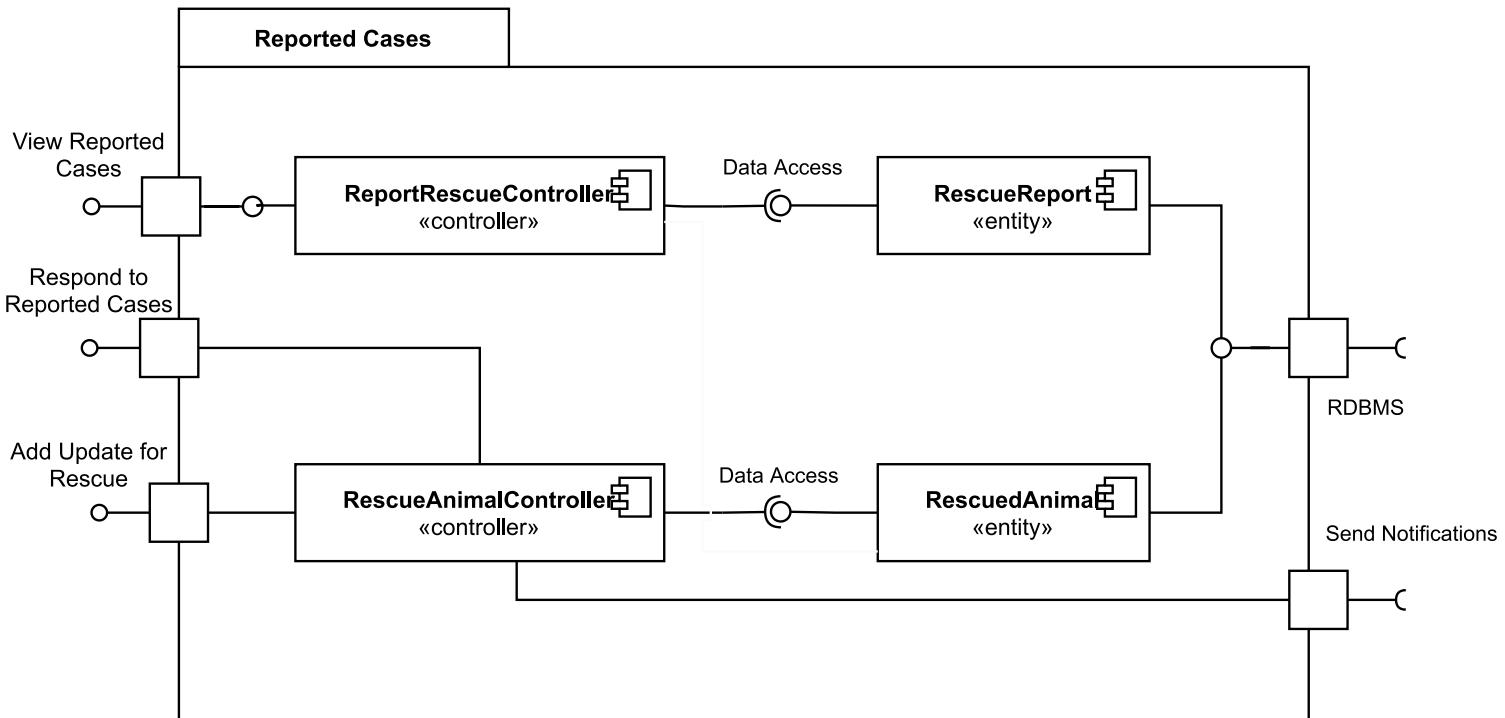


Figure 3.5: Component - Reported Cases

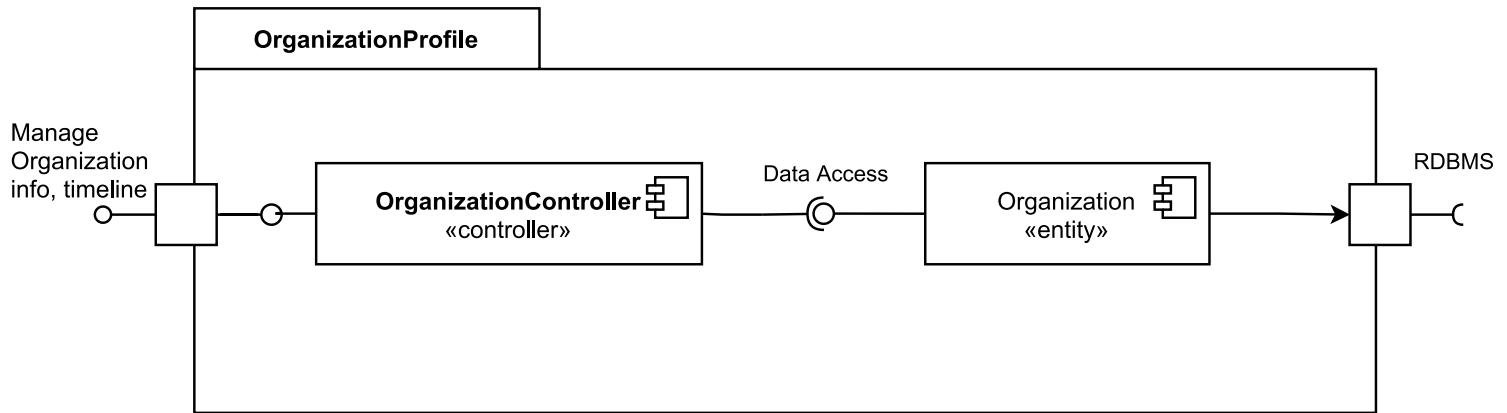


Figure 3.6: Component: Organization Profile

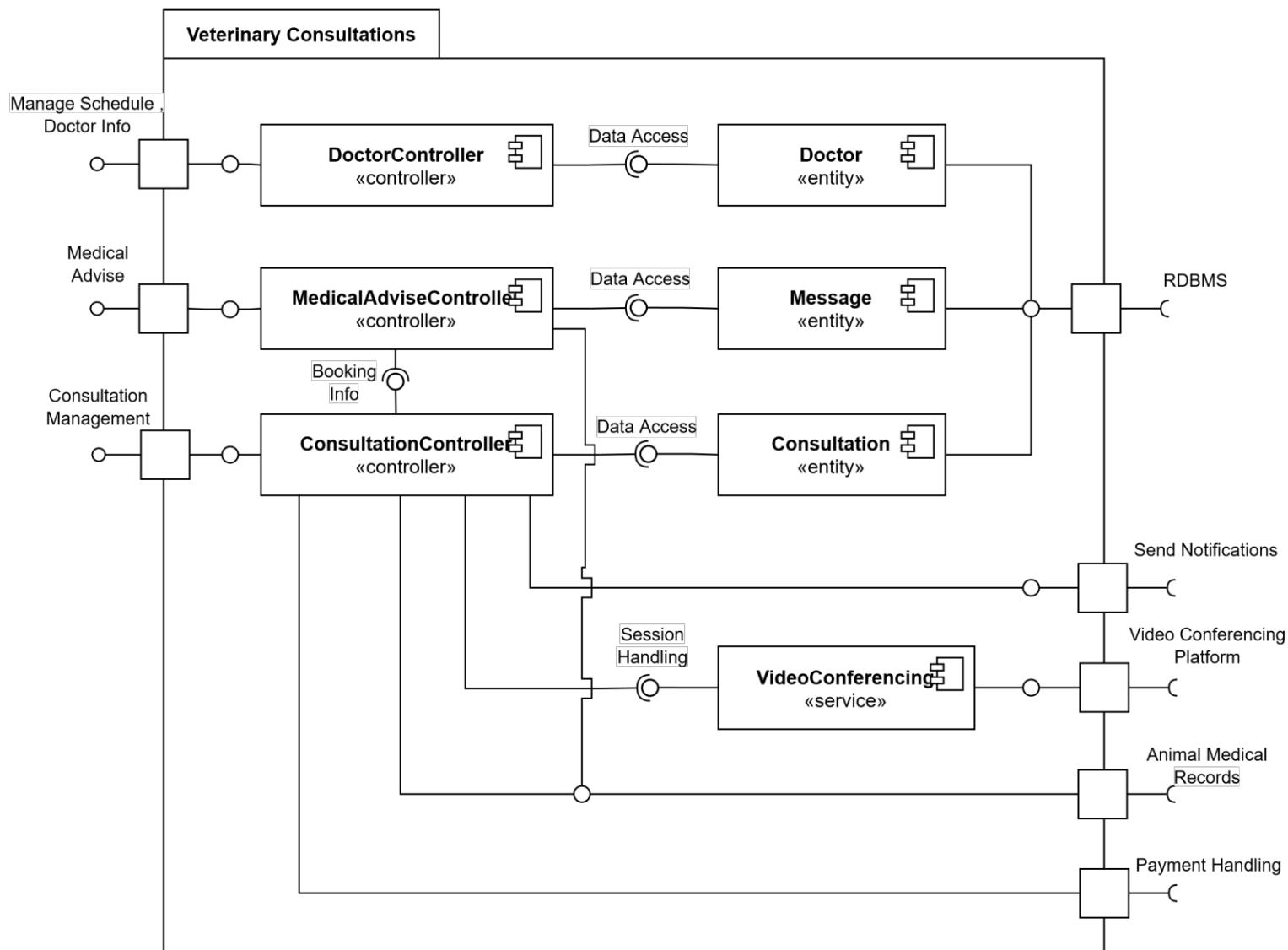


Figure 3.7: Component - Veterinary Consultations

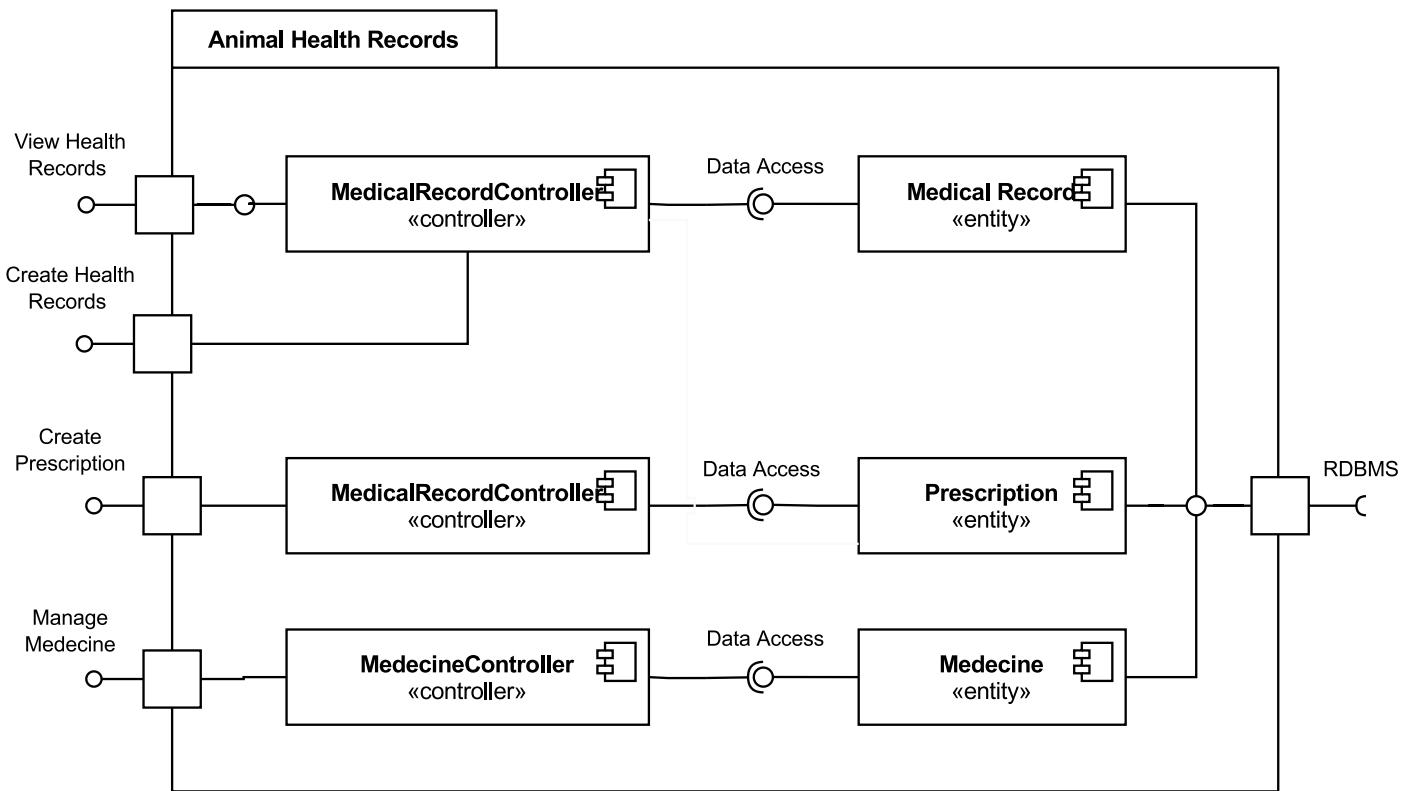


Figure 3.8: Component - Animal Health Records

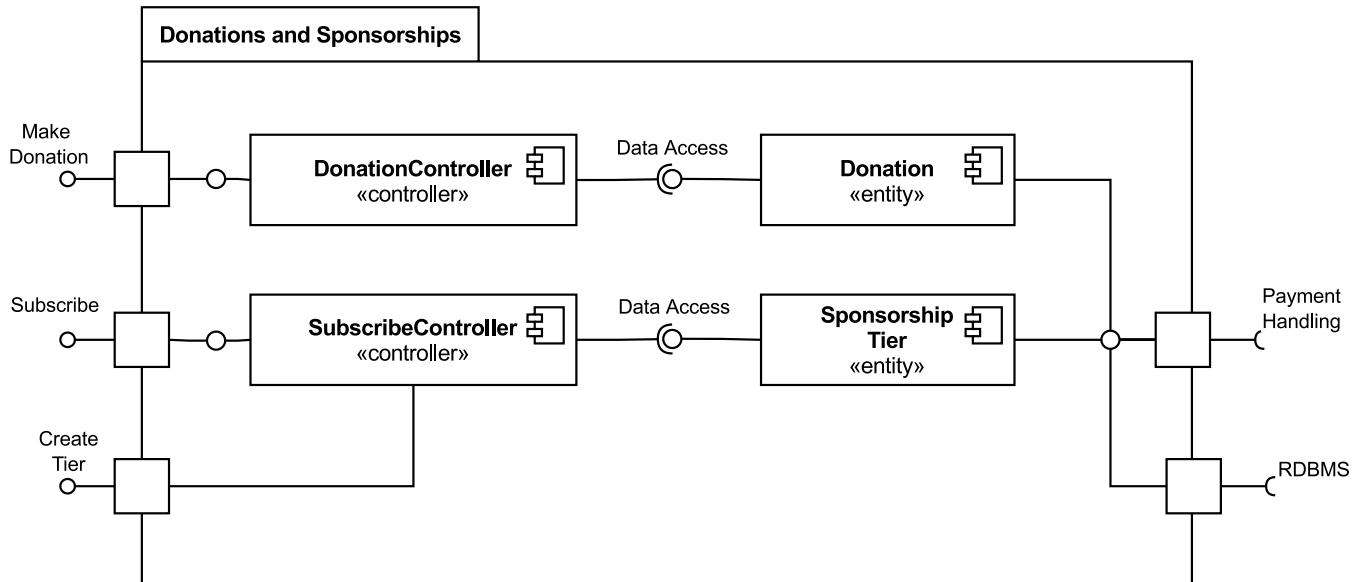


Figure 3.9: Component - Donations & Sponsorships

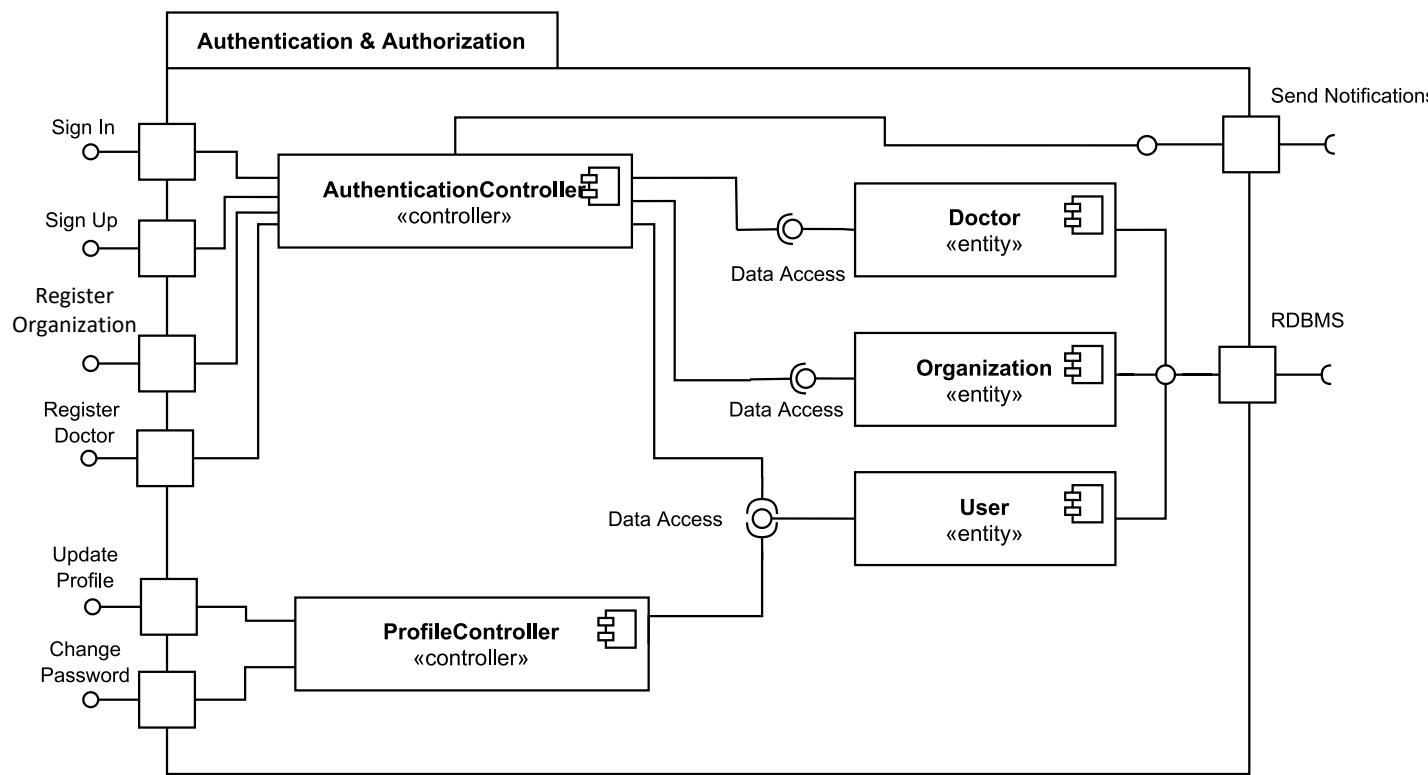


Figure 3.10: Component - Authentications & Authorization

## 4 SYSTEM DESIGN

### 4.1 Class Diagram

For the overall functionality of the System following classes are identified.

- Animal
- Rescued Animal
- Adoption Animal
- User
- Organization
- Organization User
- Veterinary Doctor
- Adoption Request
- Adoption Updates
- Consultation
- Prescription
- Prescription Item
- Medical Record
- Donation
- Sponsorship
- Sponsorship Tier
- Payment

# Adoptee - An Application for Pet Adoption and Animal Support

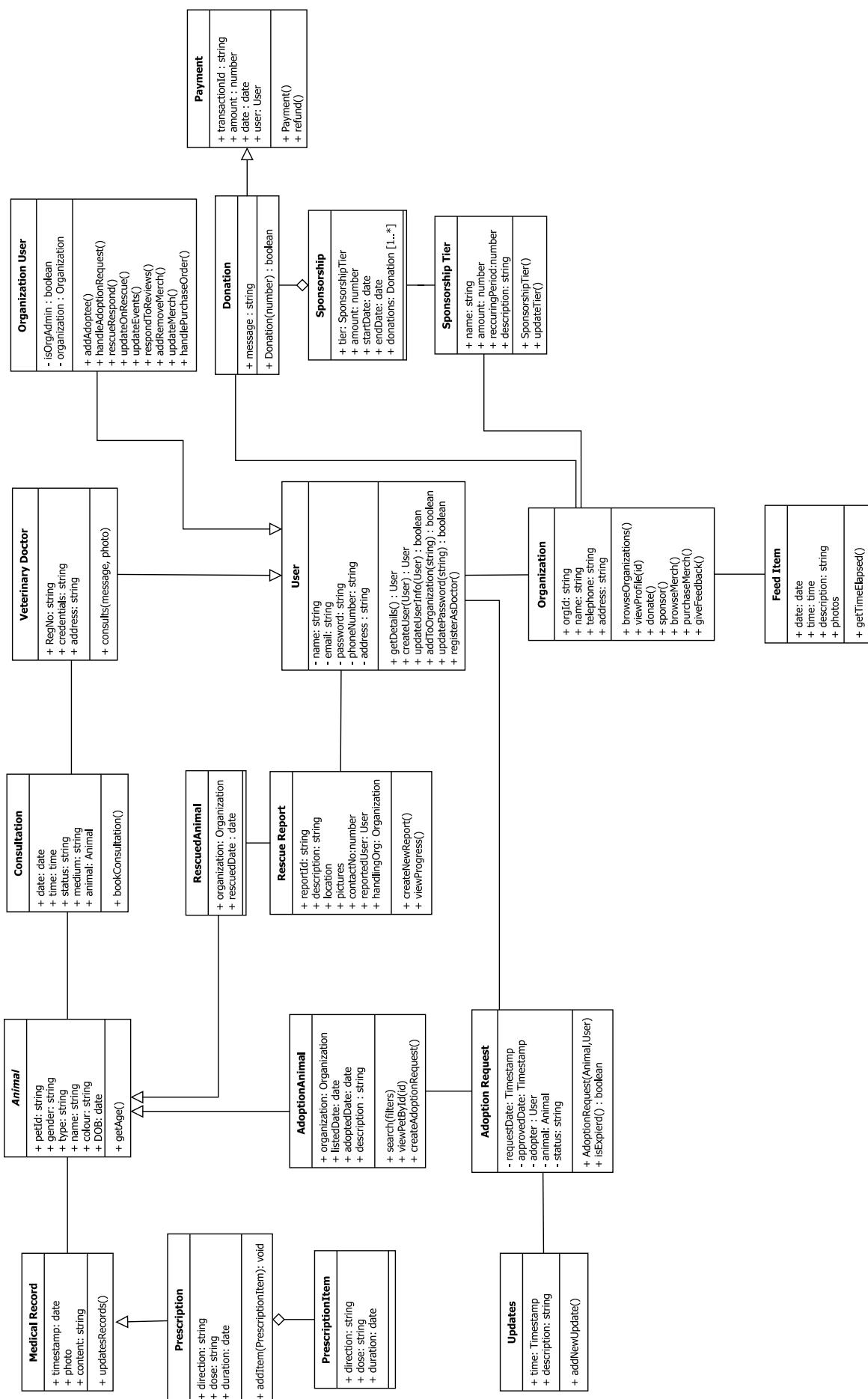


Figure 4.1: Class Diagram

## 4.2 Entity Relationship Diagram

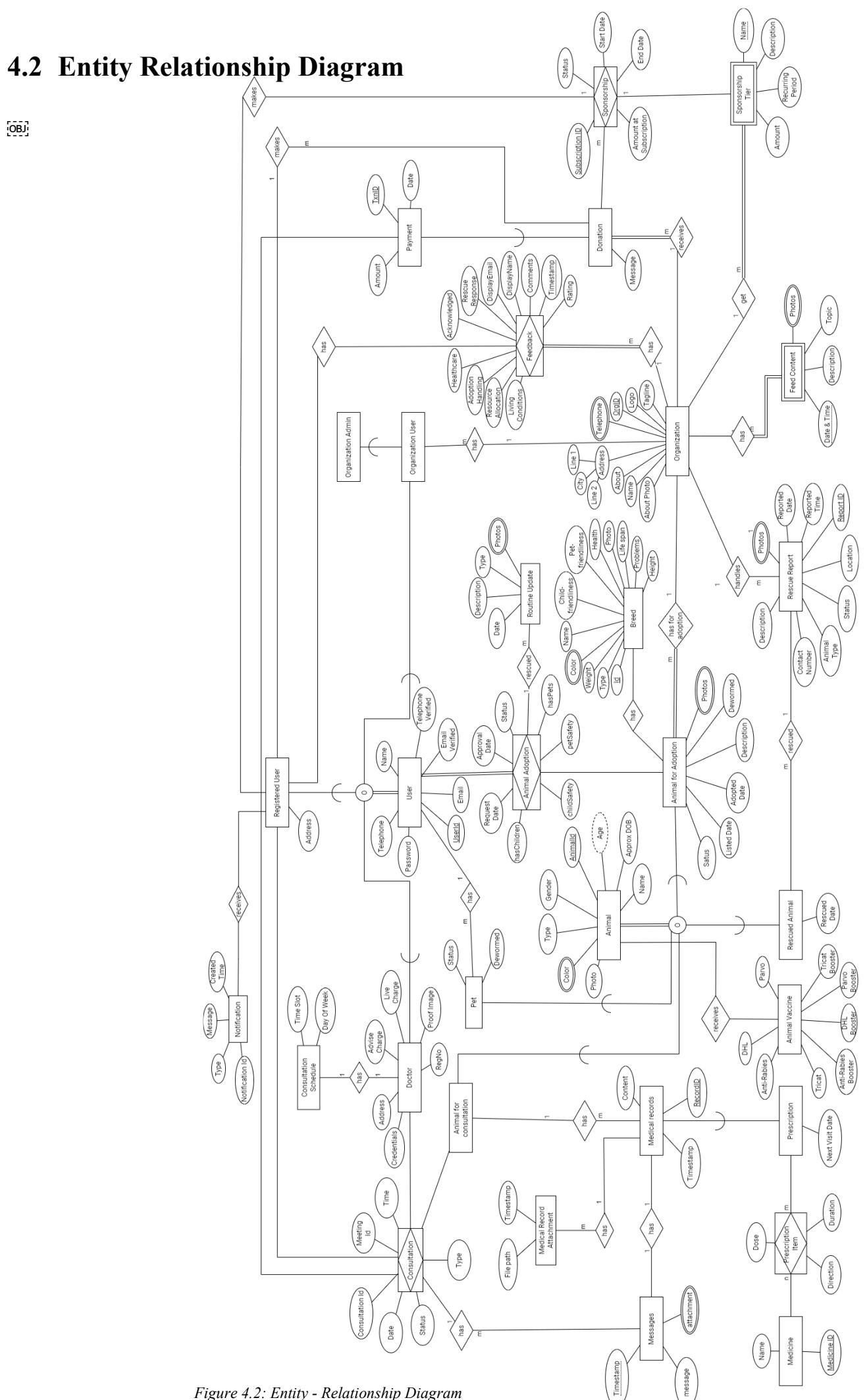
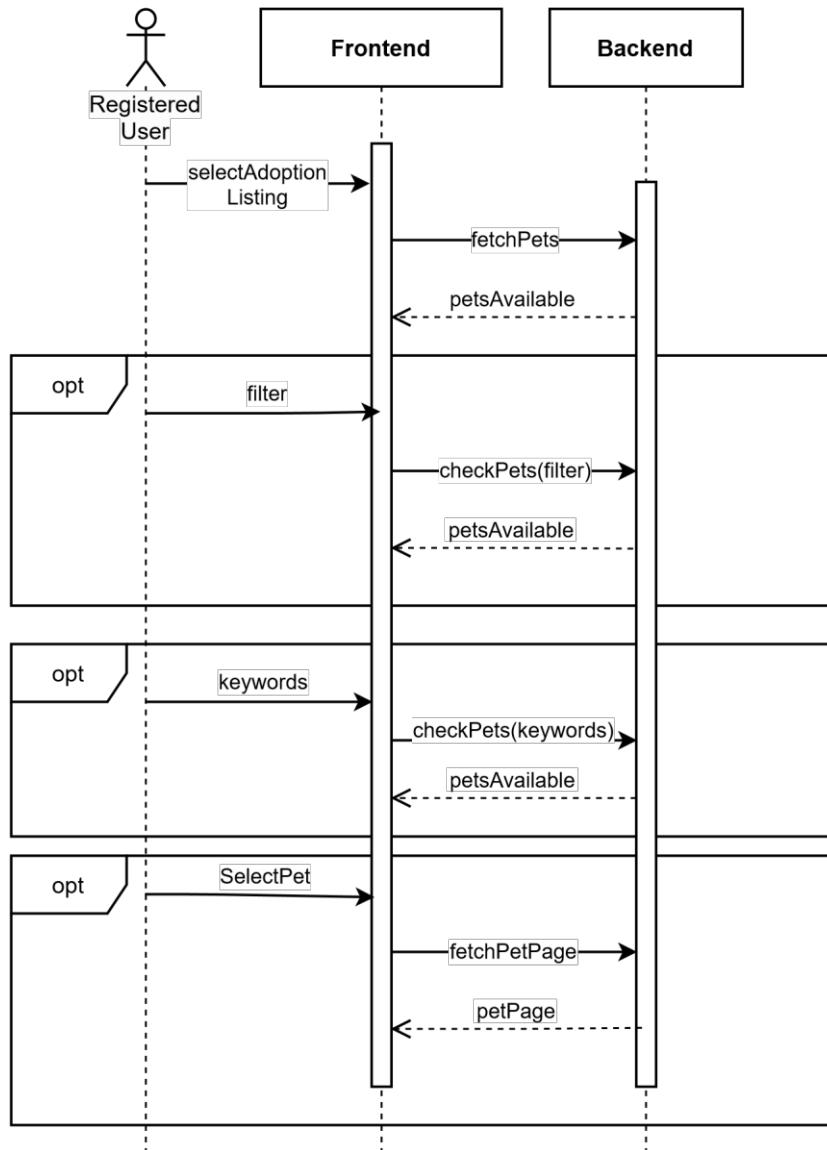


Figure 4.2: Entity - Relationship Diagram

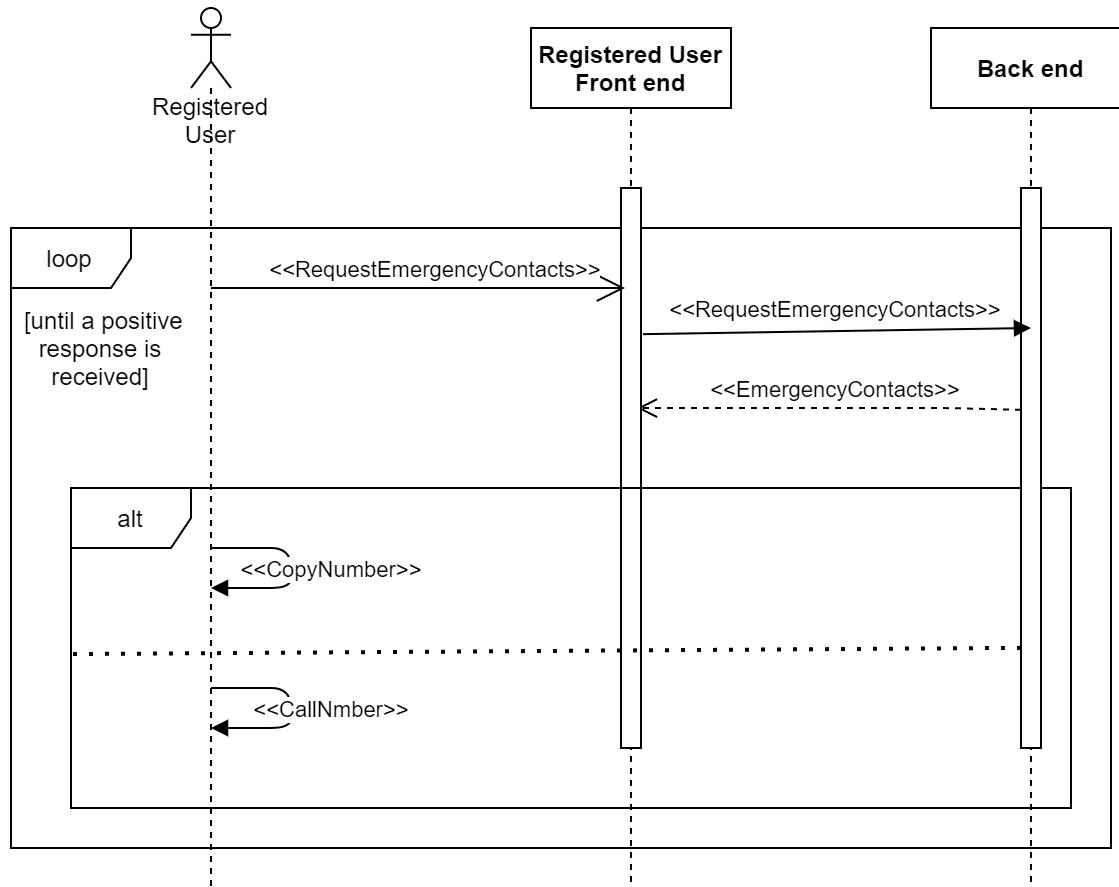
## 4.3 Sequence Diagrams

### 4.3.1 GUEST USER

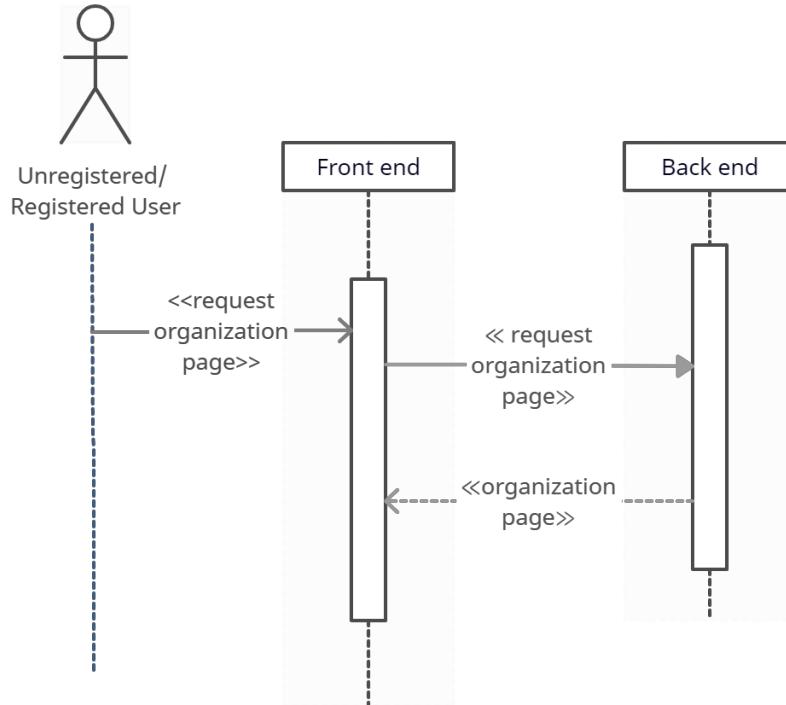
Use Case 1 – Search for Animals to Adopt



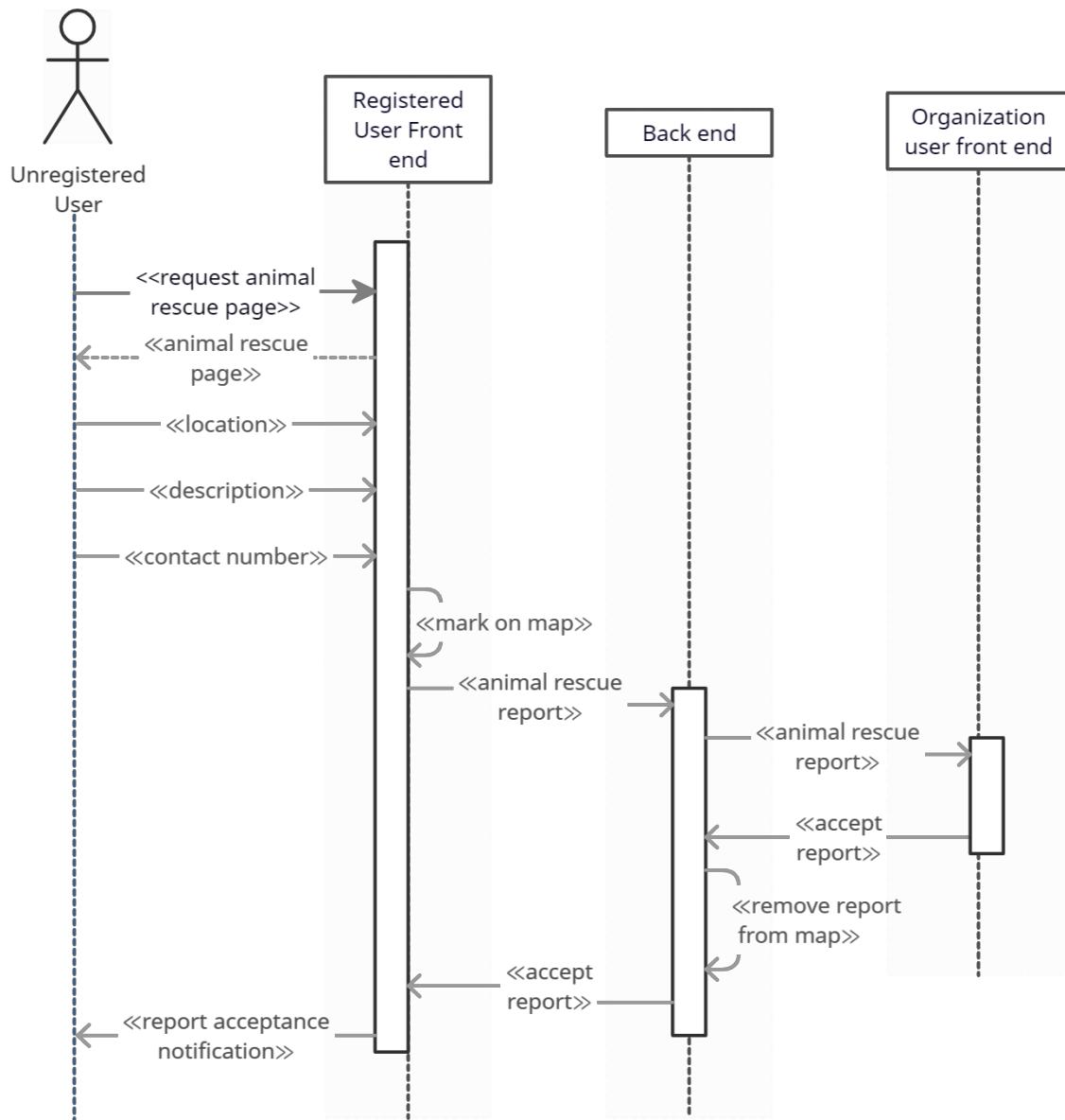
**Use Case 2, 3 – View and call emergency contact numbers**



**Use case 4 – View organization profile/ feed**

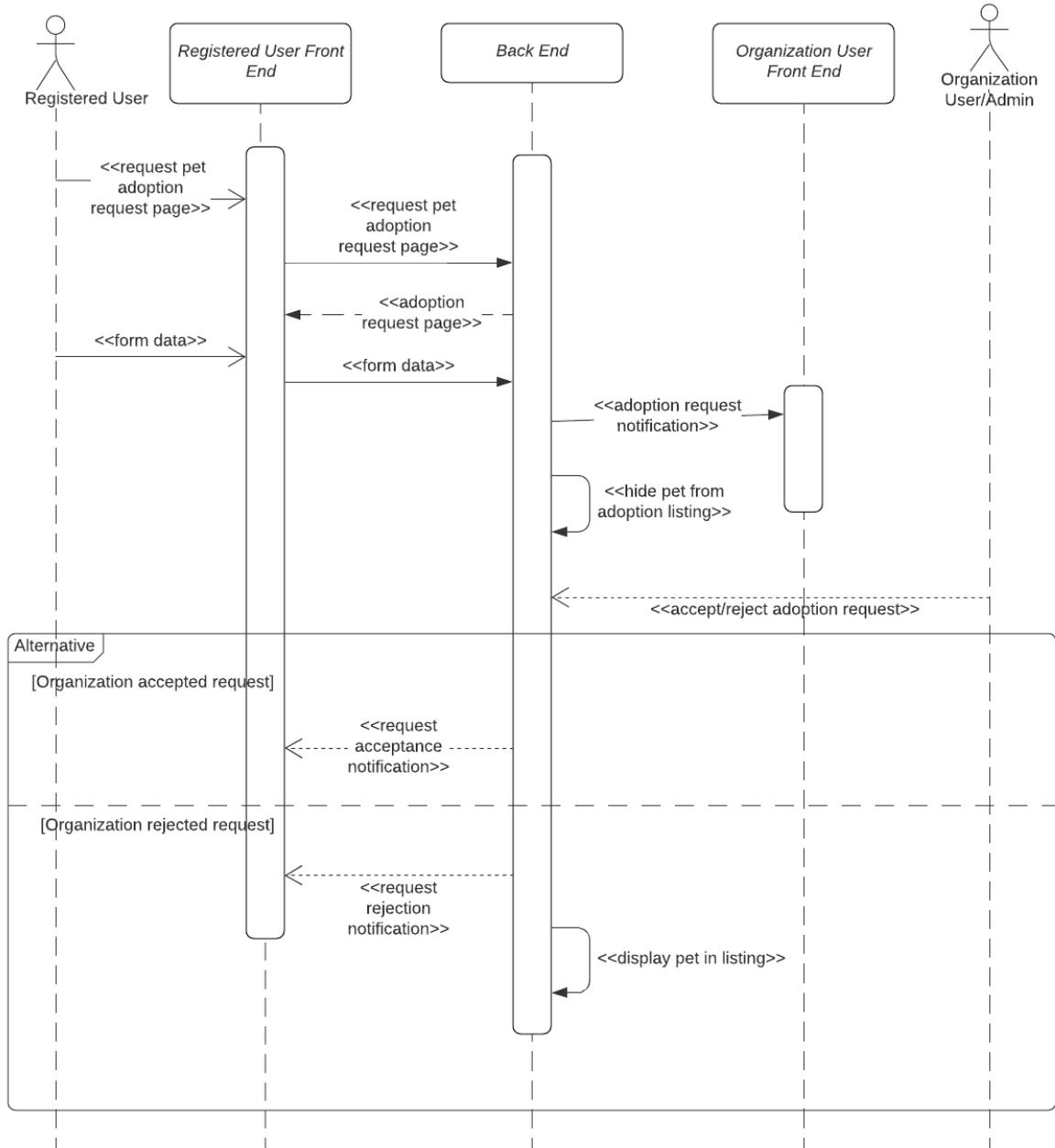


**Use case 5 – Report about injured animals**

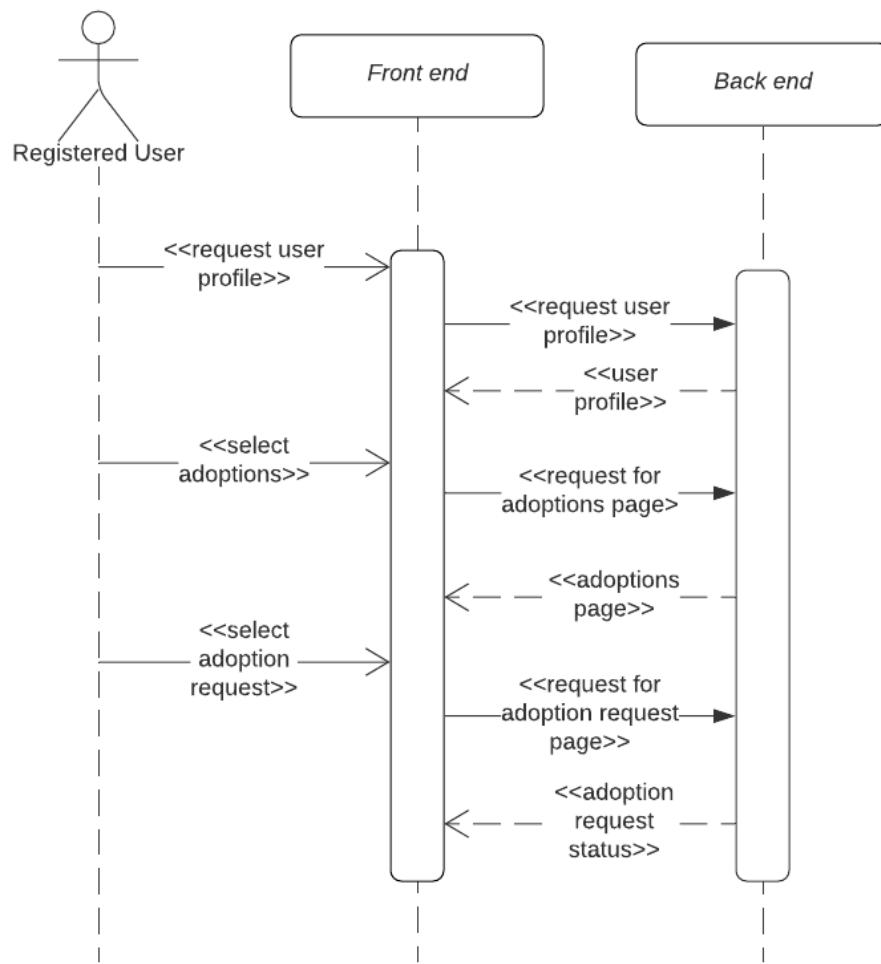


#### 4.3.2 REGISTERED USER

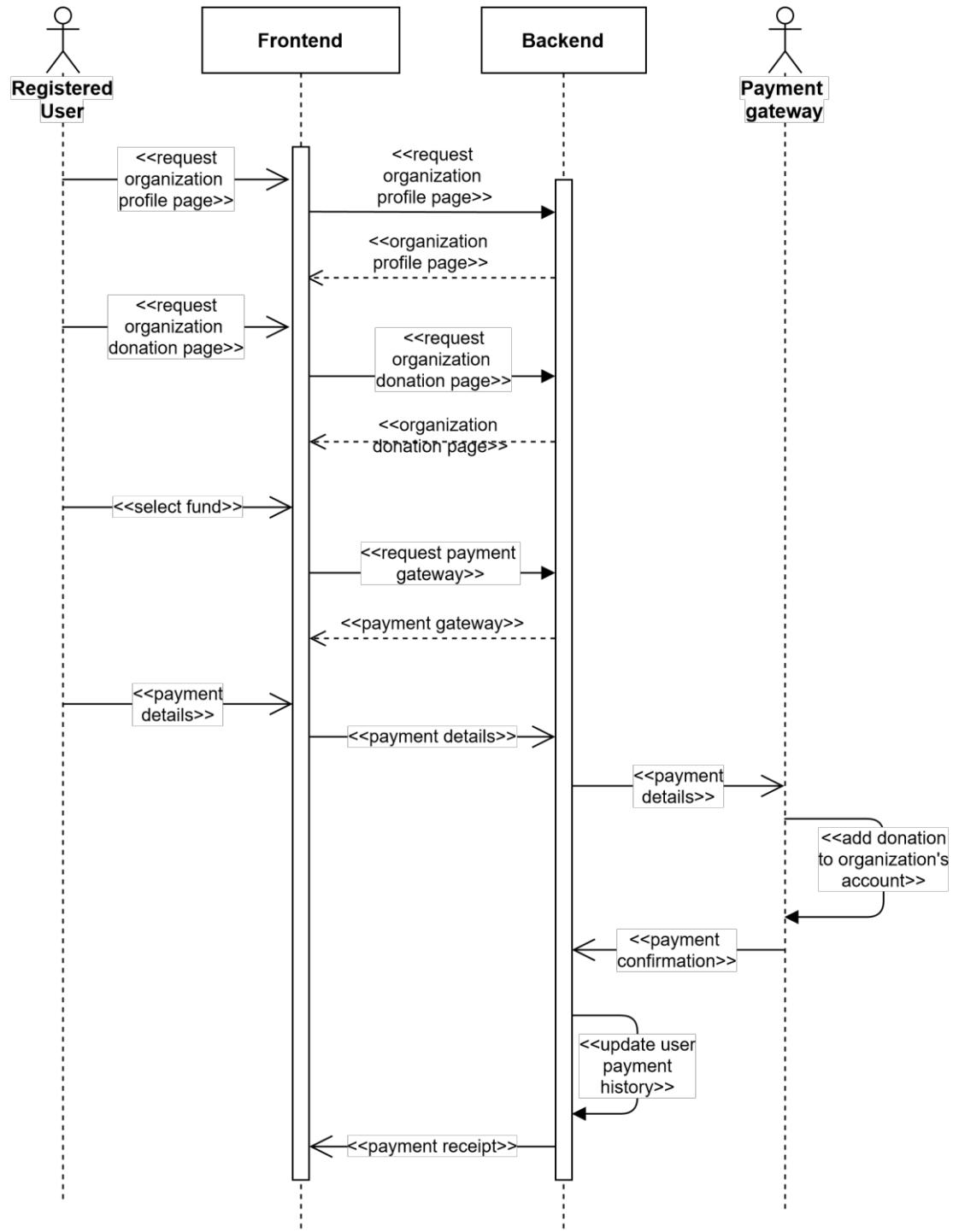
Use case 6, 8 – Request to adopt a pet, Receive notification regarding the status of a request



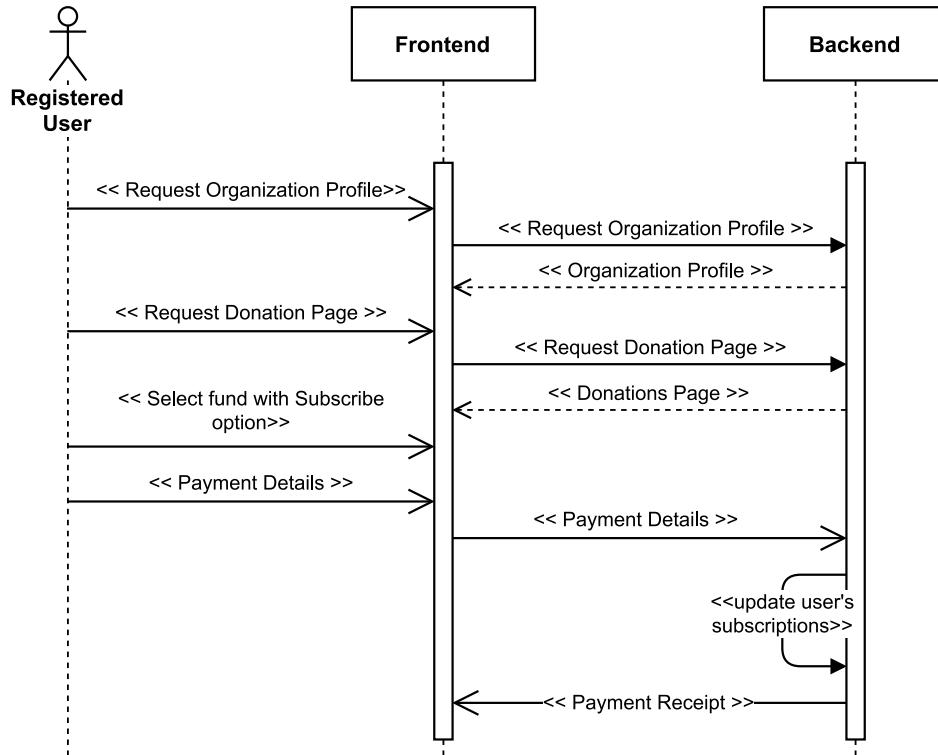
Use case 7 – View adoption request status



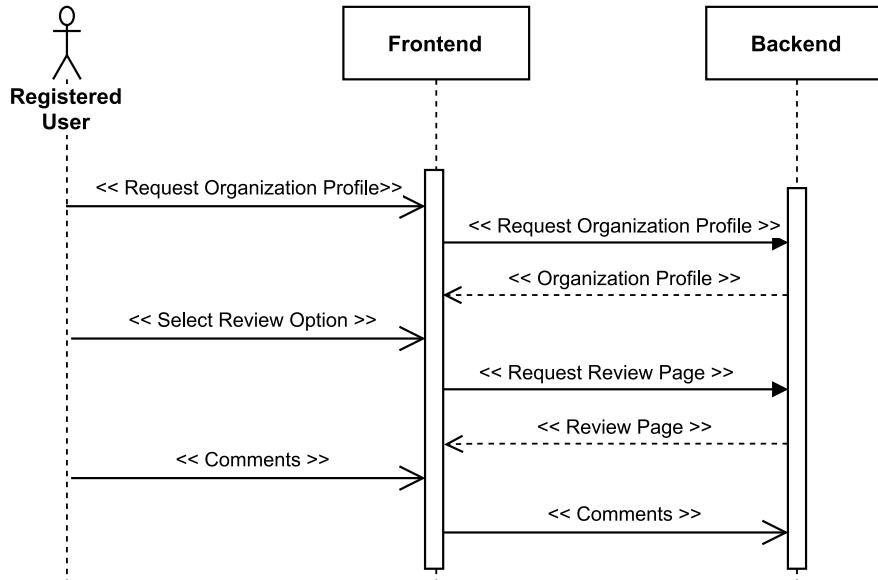
Use case 9 – Make donation



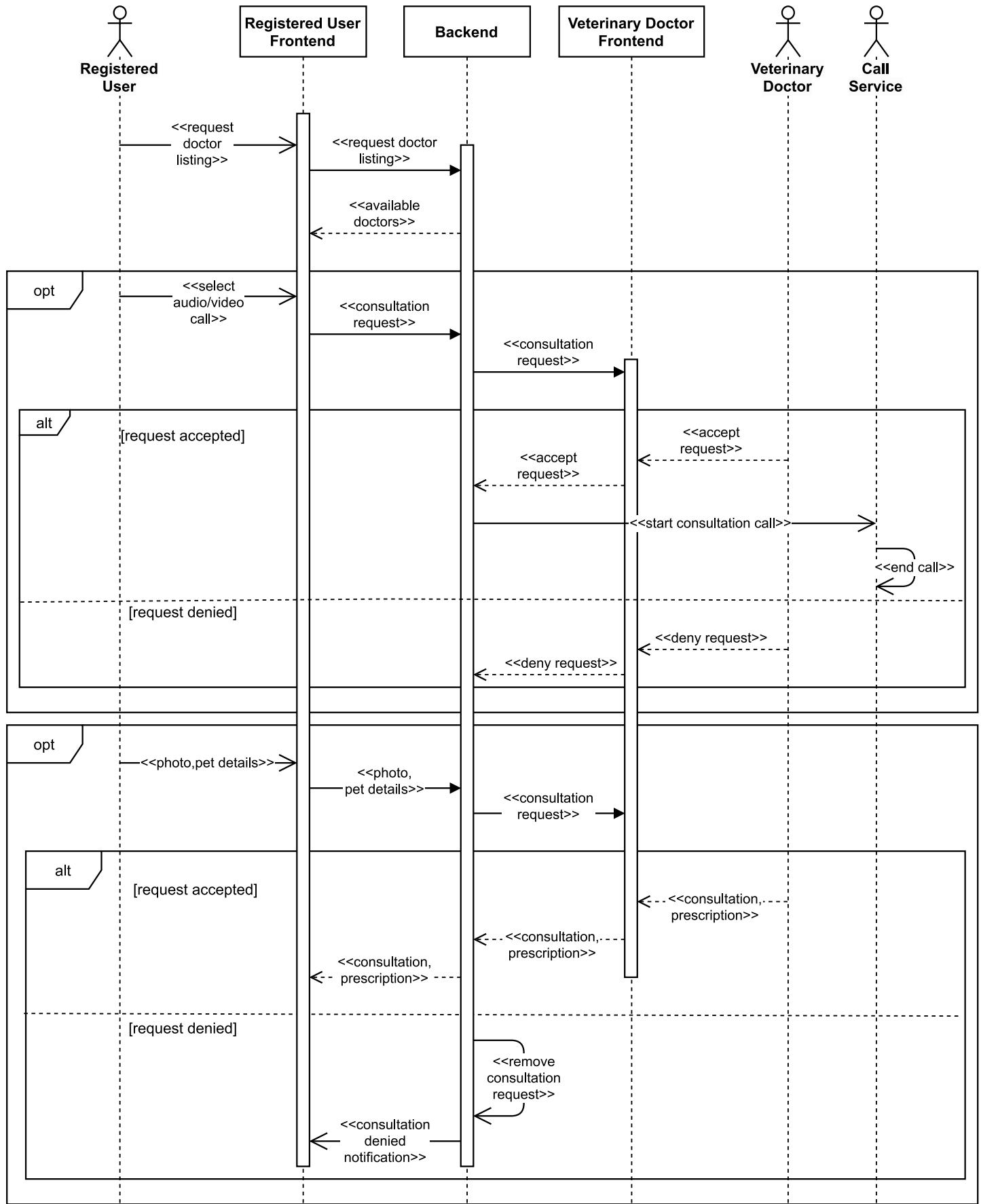
**Use case 10 - Subscribe to a sponsorship of an organization**



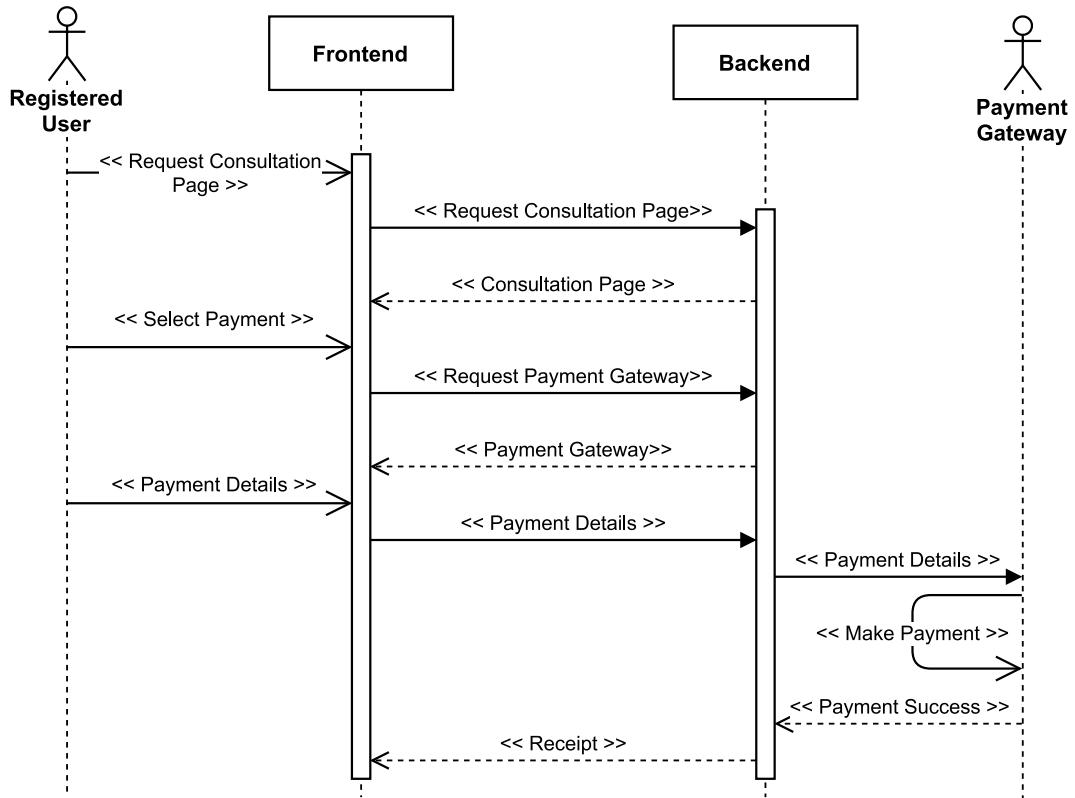
**Use case 12 – Review Organization**



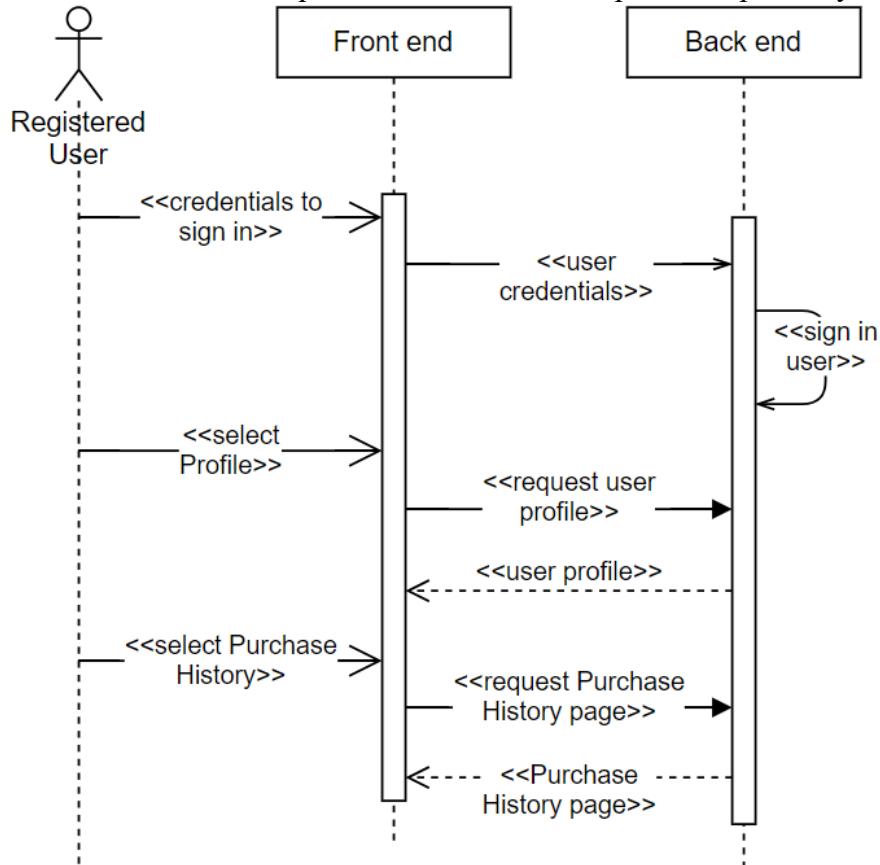
Use Case 13 – Consult doctor



Use case 14 – Pay for consultation

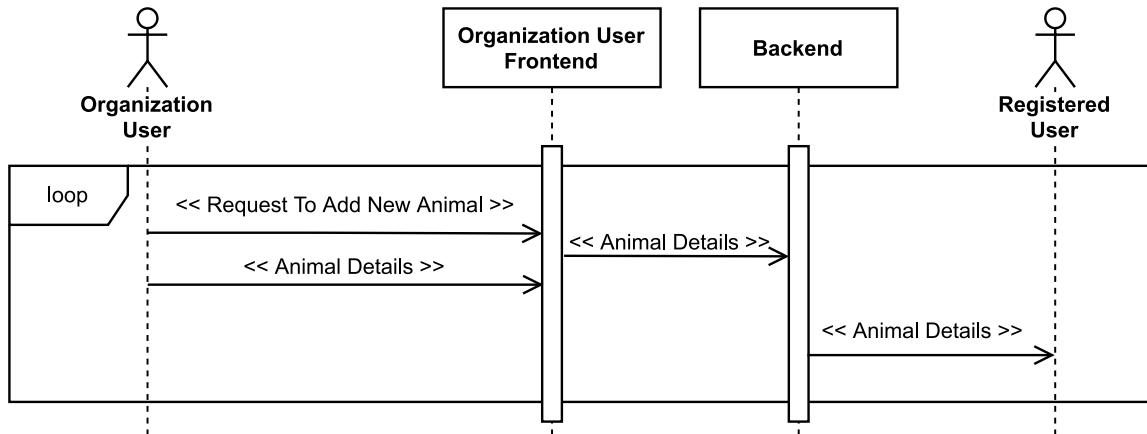


Use case 50 – View purchase, donation and sponsorship history

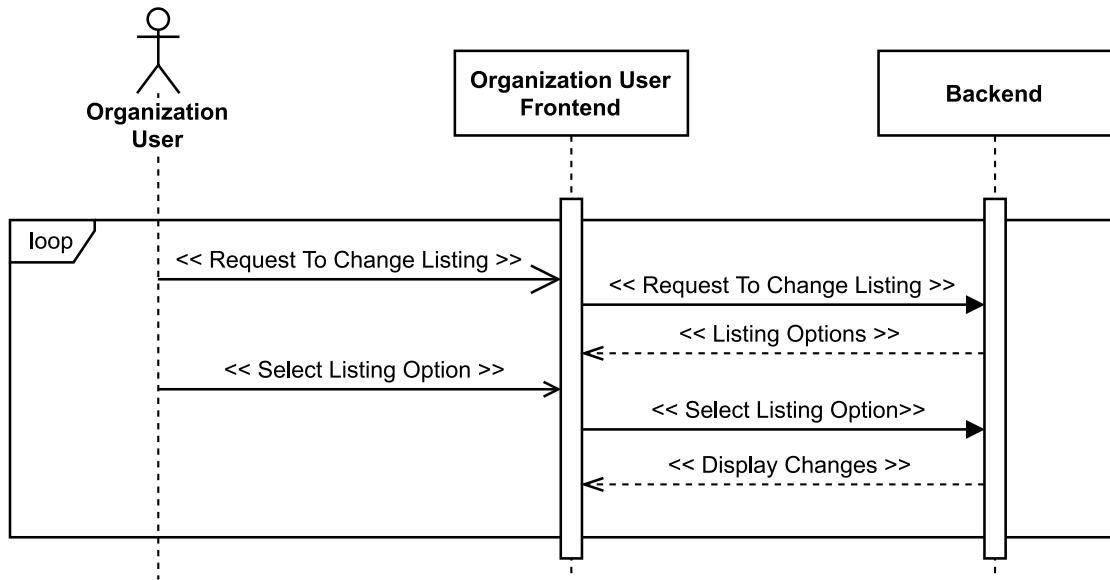


#### 4.3.3 ORGANIZATION USER

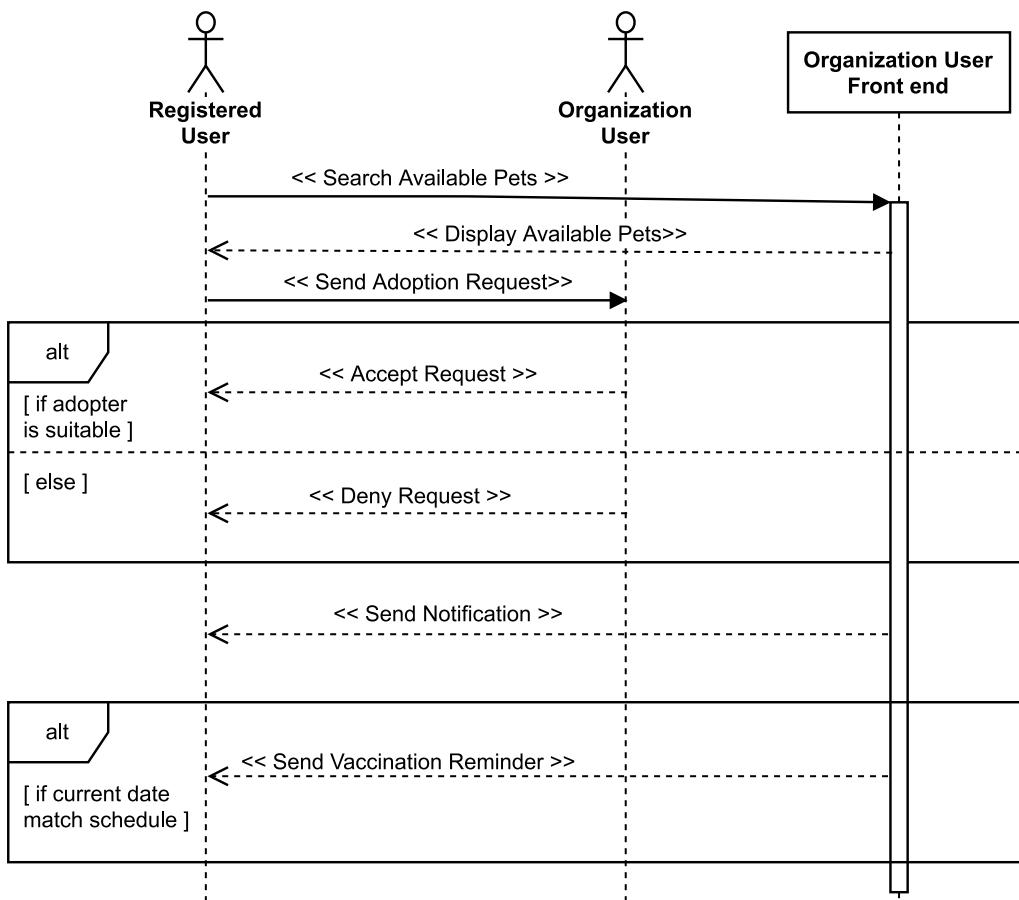
Use case 15 – Put new animals up for adoption



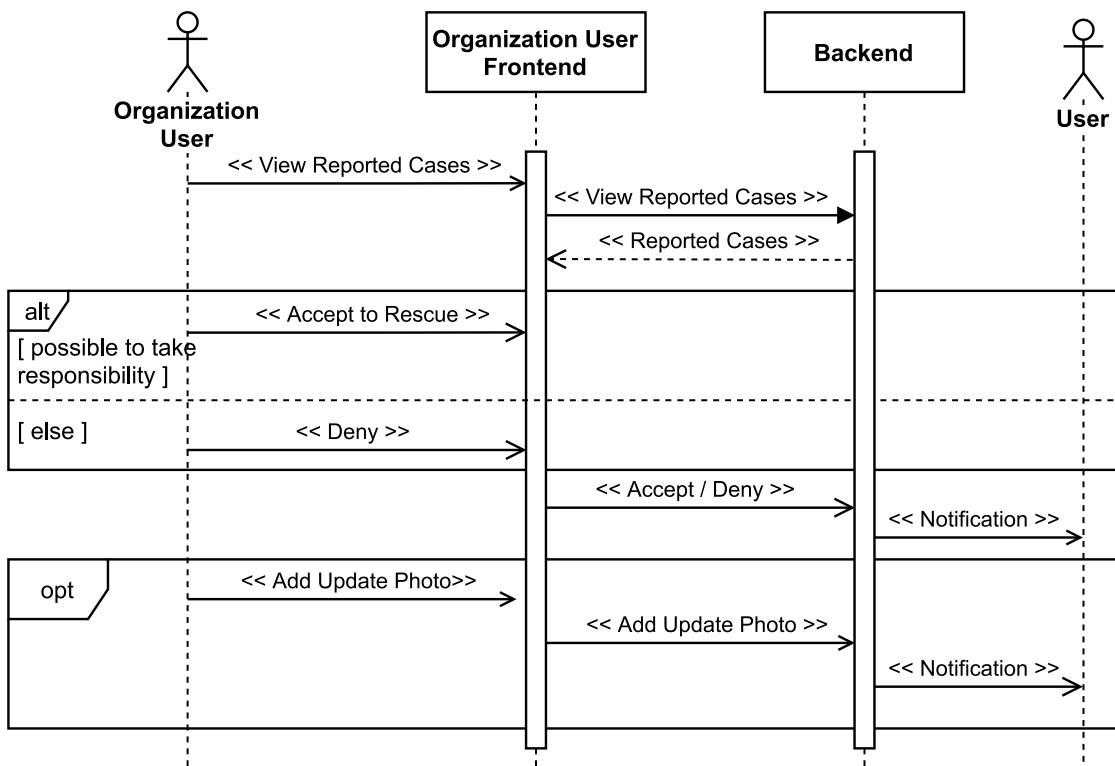
Use case 16 – Change adoption listing settings



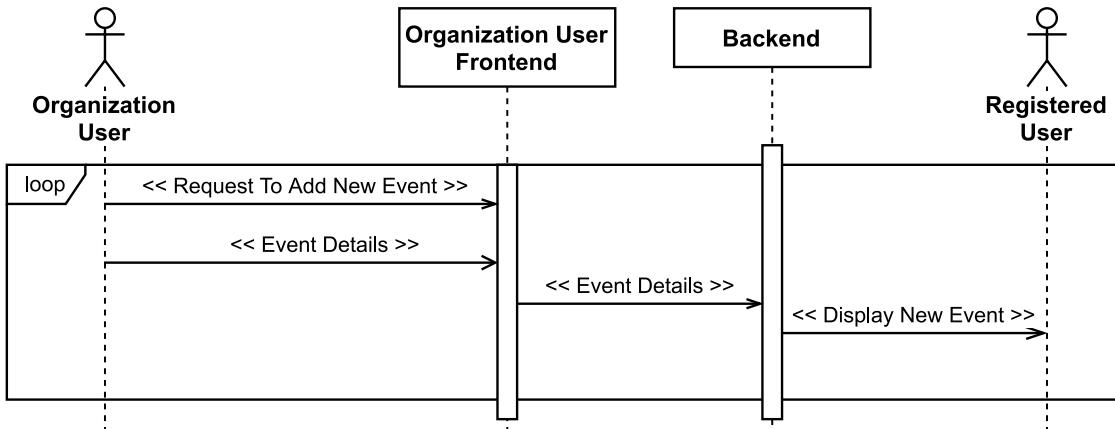
Use case 17, 18, 52 - Approve/ Reject adoption request,  
 Notify adopters about adoption request, Send vaccination reminders



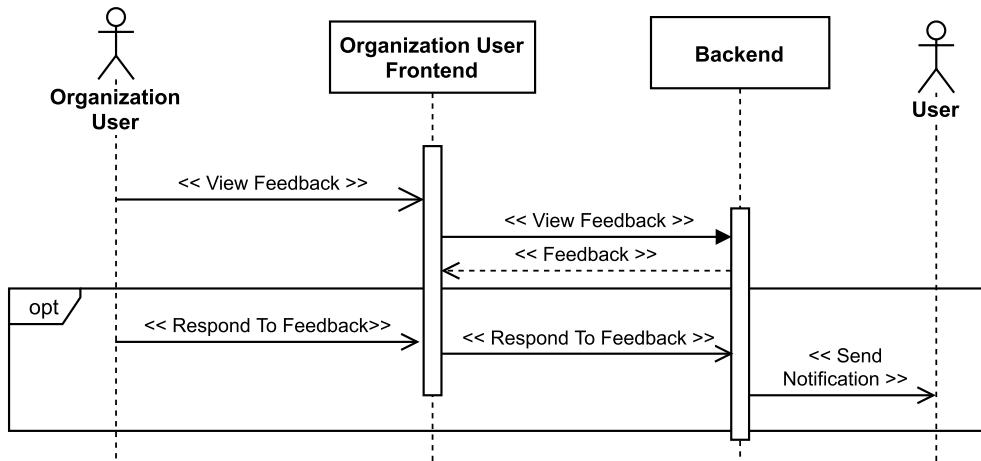
Use case 19, 20 – Respond to reports of abandoned/ injured animals,  
Notify reporter on progress / action taken



Use case 21 - Post information about events the organization has done

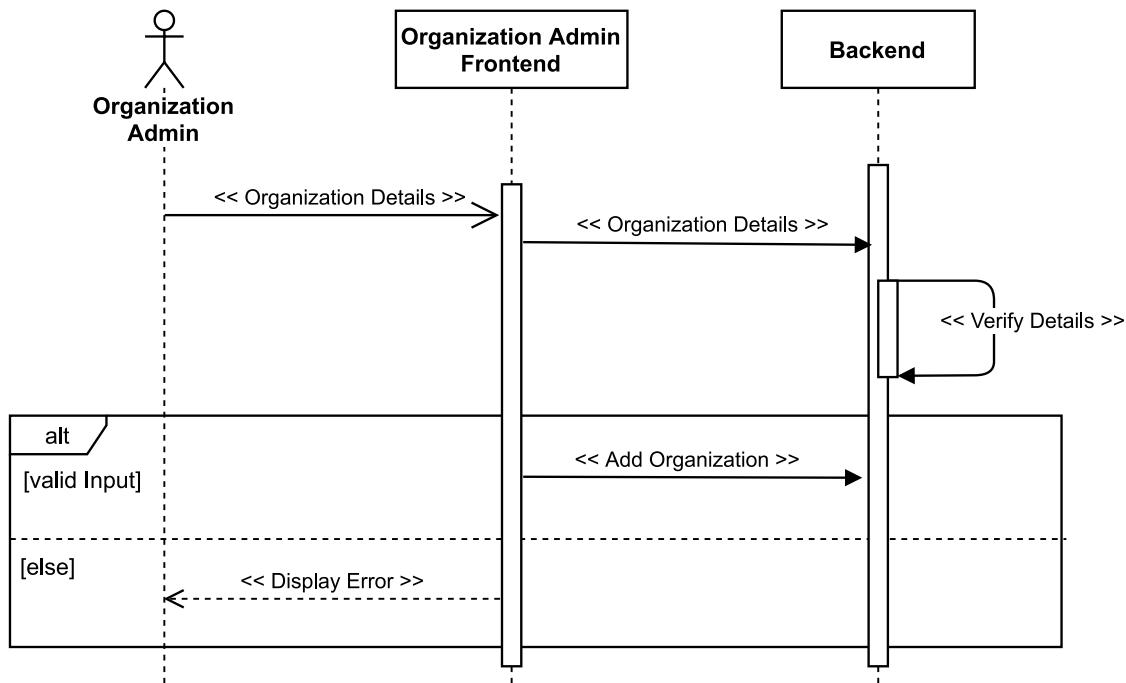


Use case 22 - Respond to reviews / complaints about the organization

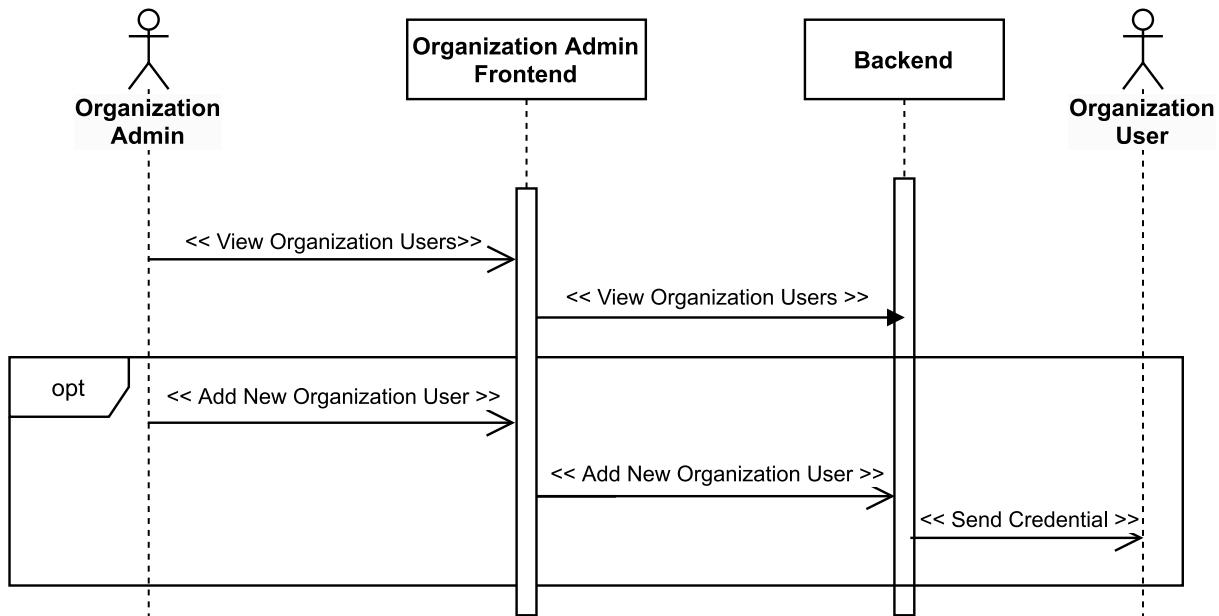


#### 4.3.4 ORGANIZATION ADMINISTRATOR

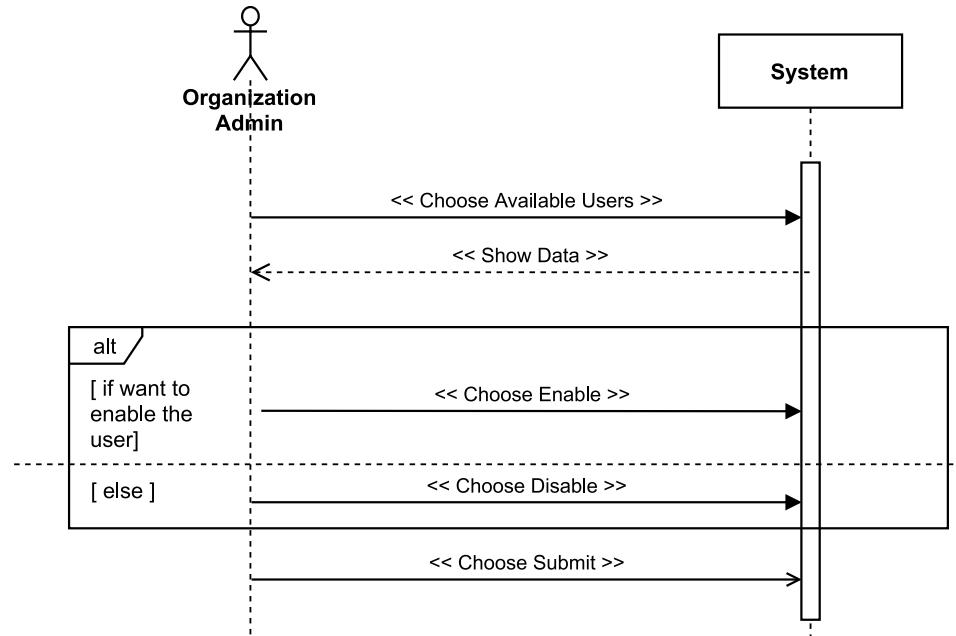
Use case 43 – Register Organization



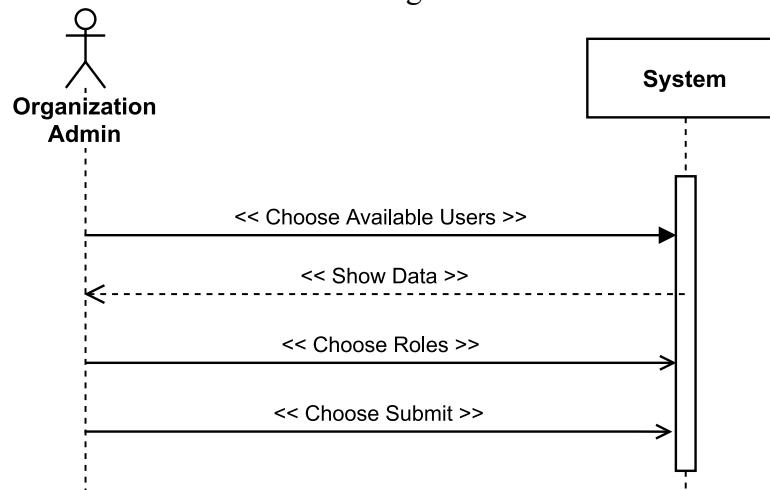
Use case 45/46 – View users of an organization / Create users of an organization



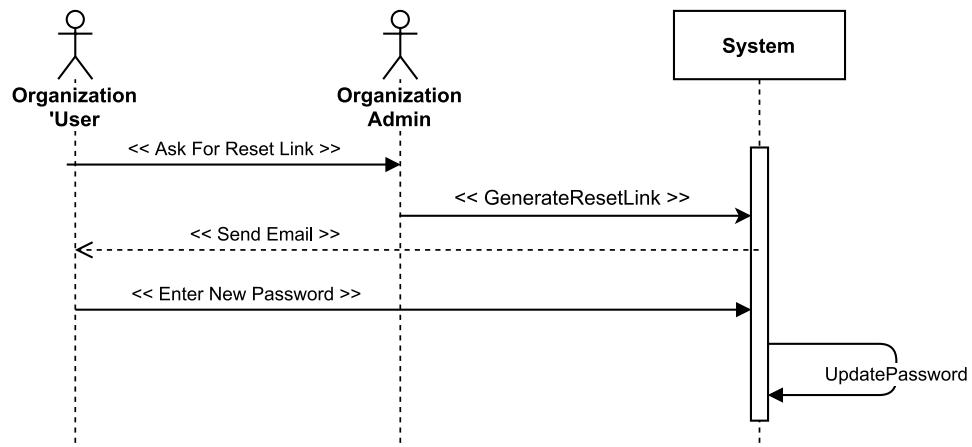
**Use case 47 – Disable / Enable User**



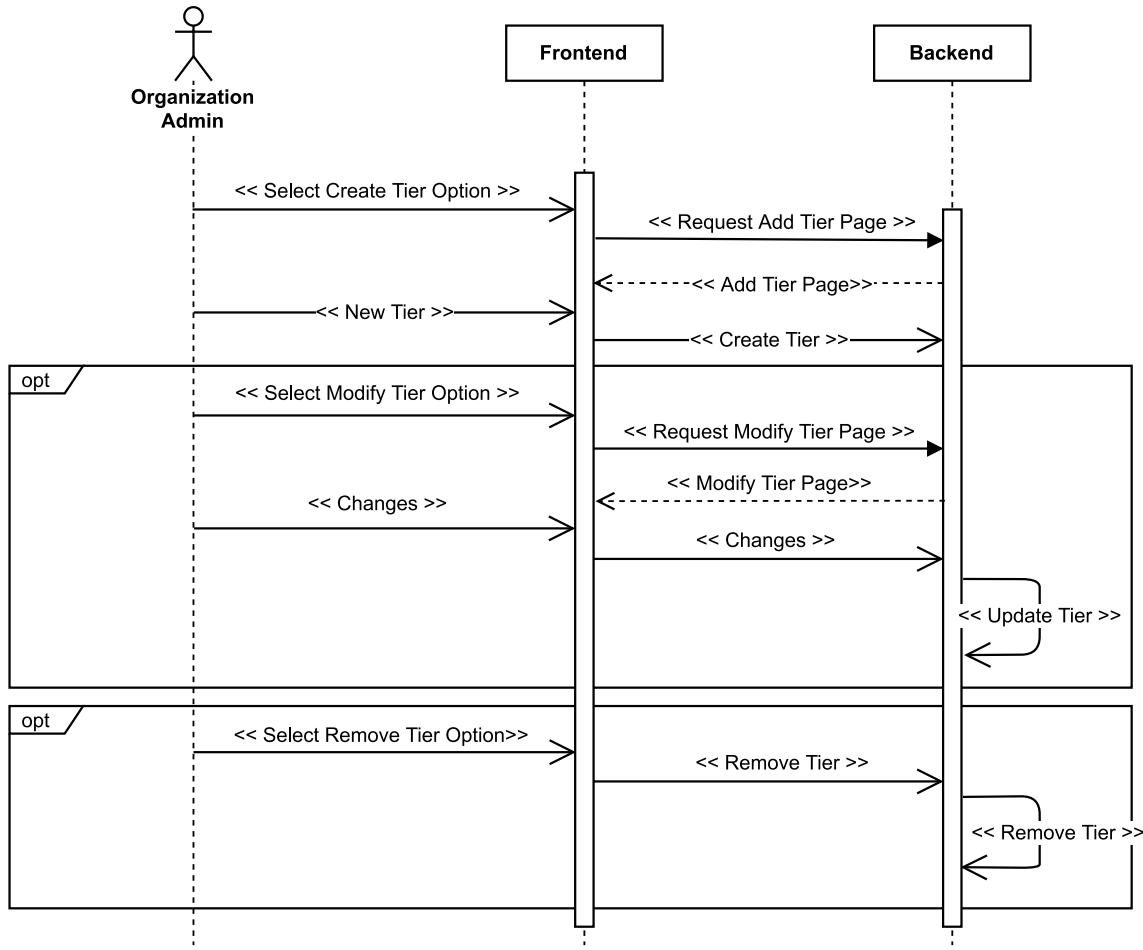
**Use case 48 – Assign Roles to Users**



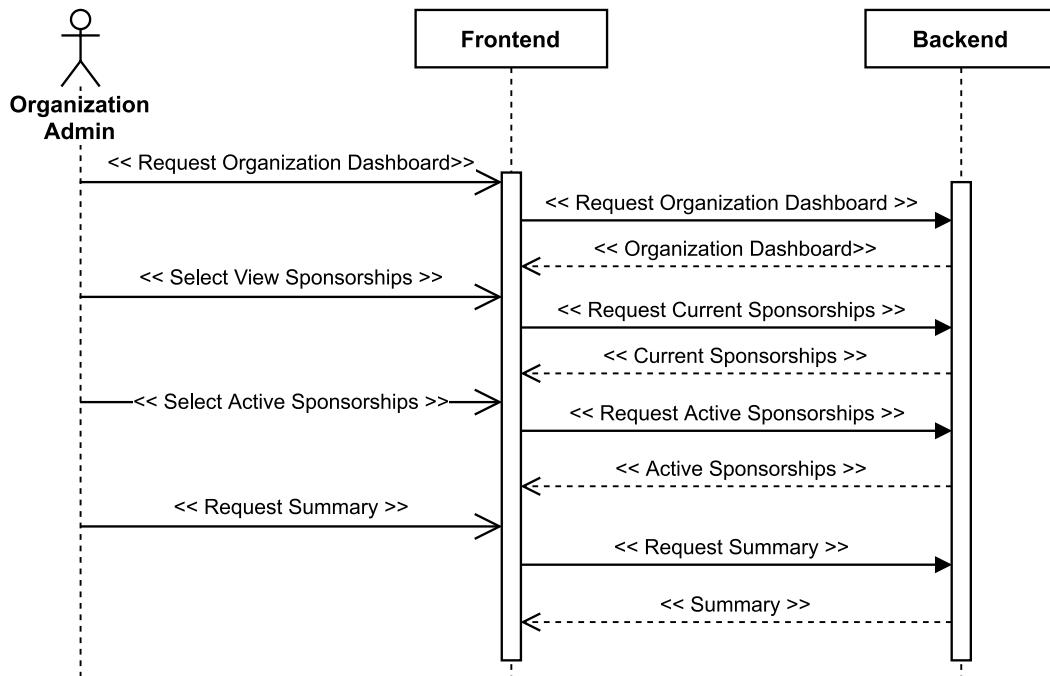
**Use case 49 – Reset Password of Organization User**



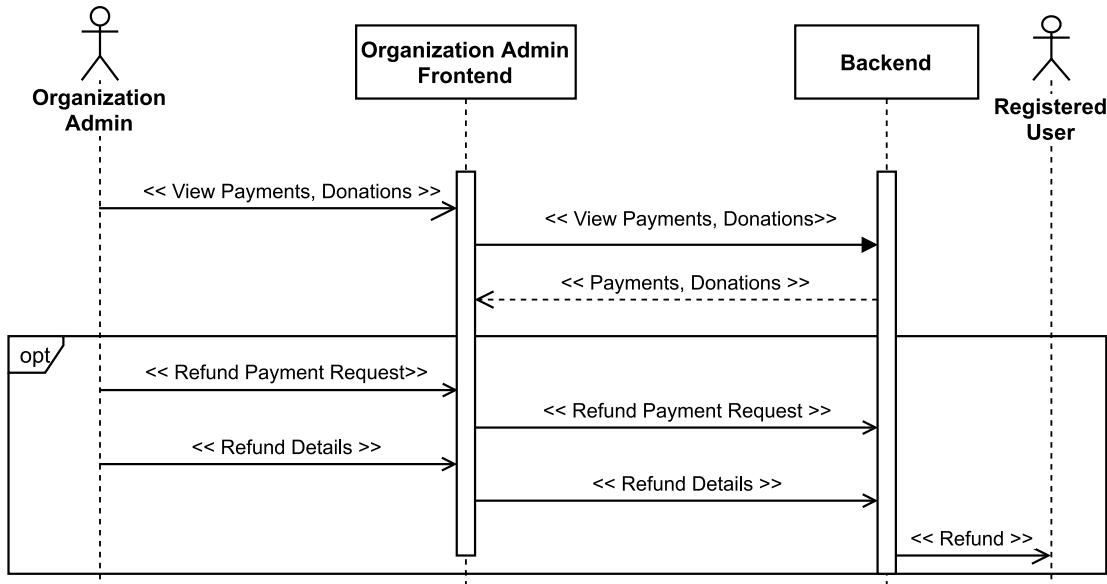
**Use case 27 – Maintain sponsorship tiers**



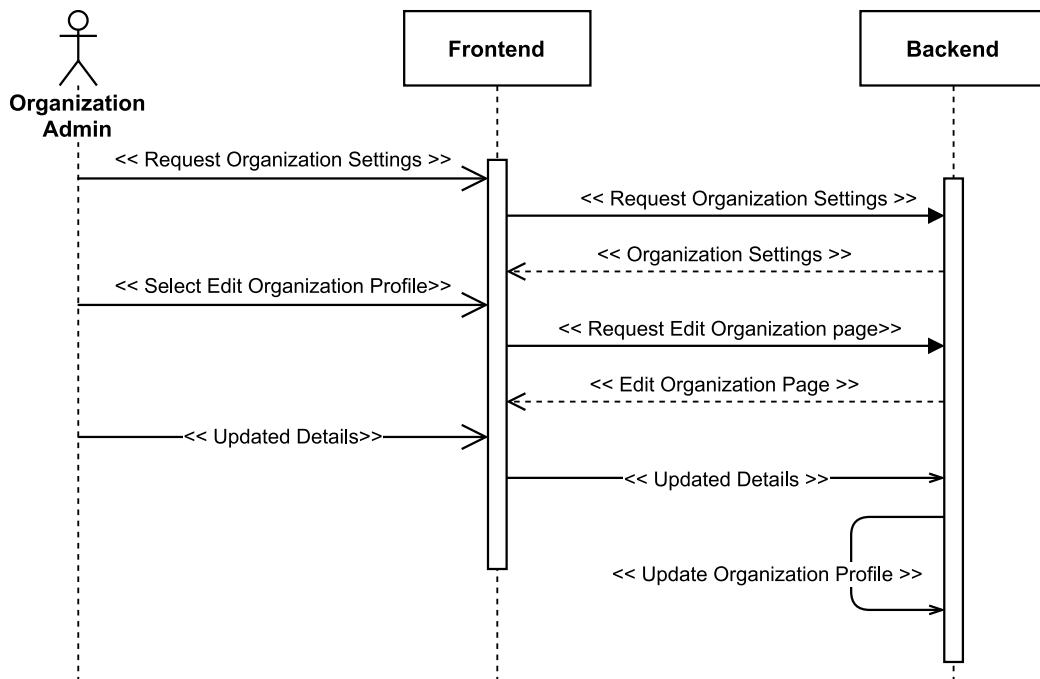
**Use case 28 – View active sponsorships**



Use case 29, 30 – View payments and donations received, Refund payment

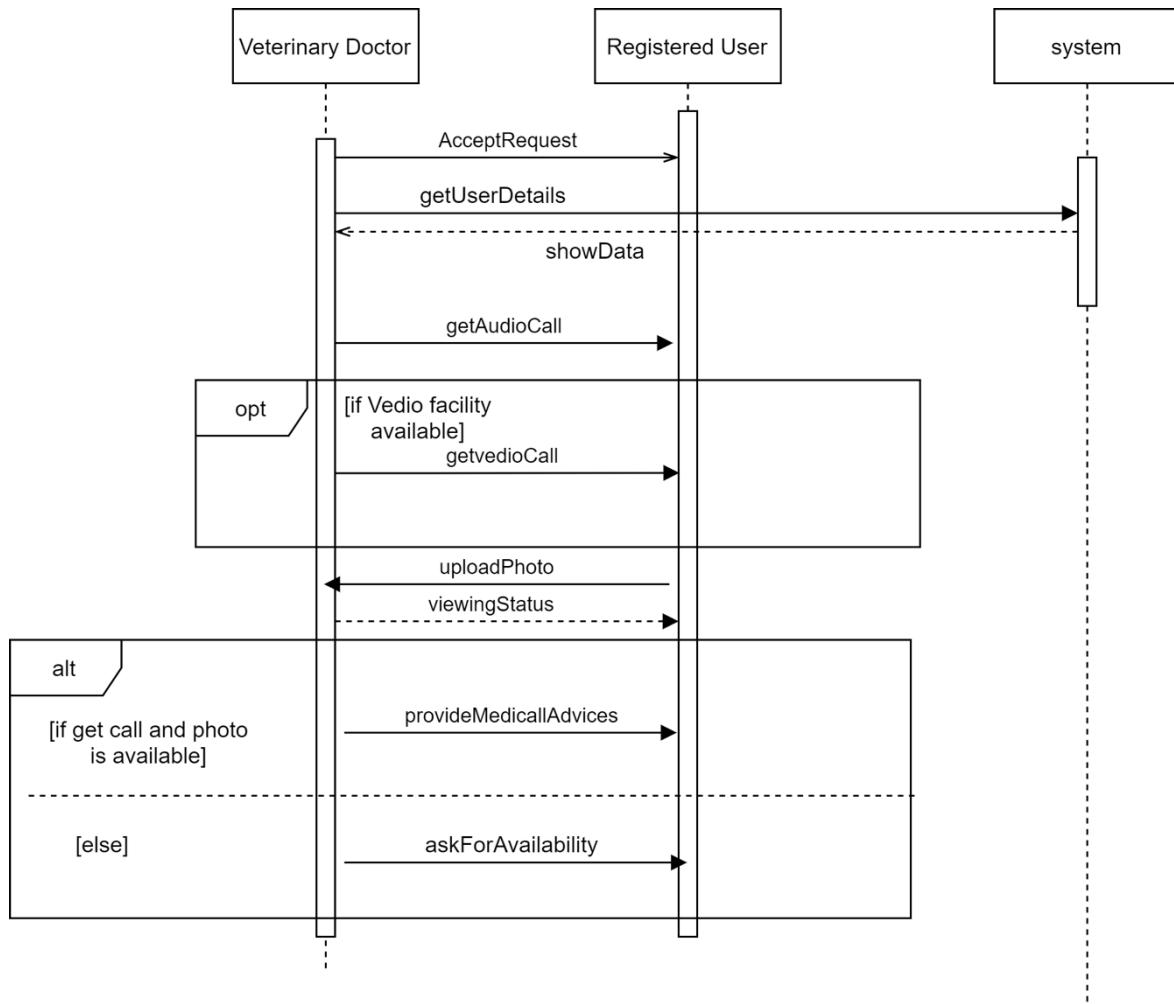


Use case 31 – Maintain vital organization information

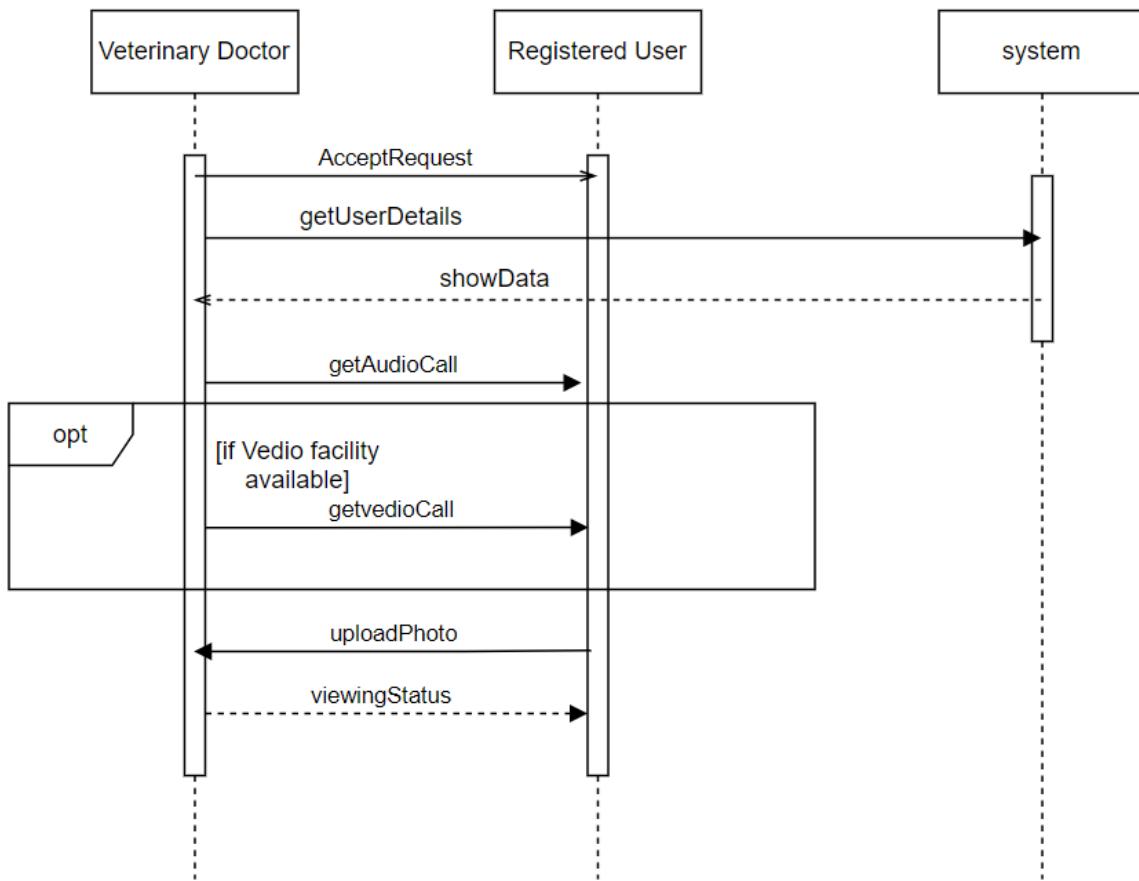


#### 4.3.5 VETERINARY DOCTOR

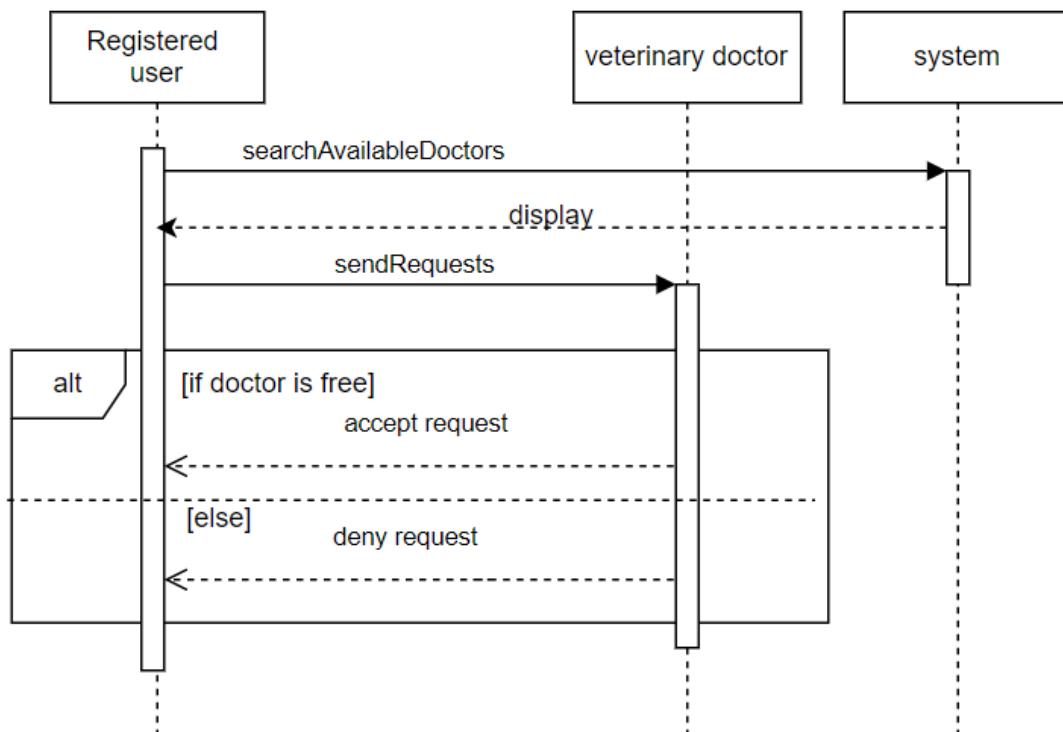
Use case 32 – Provide medical advice



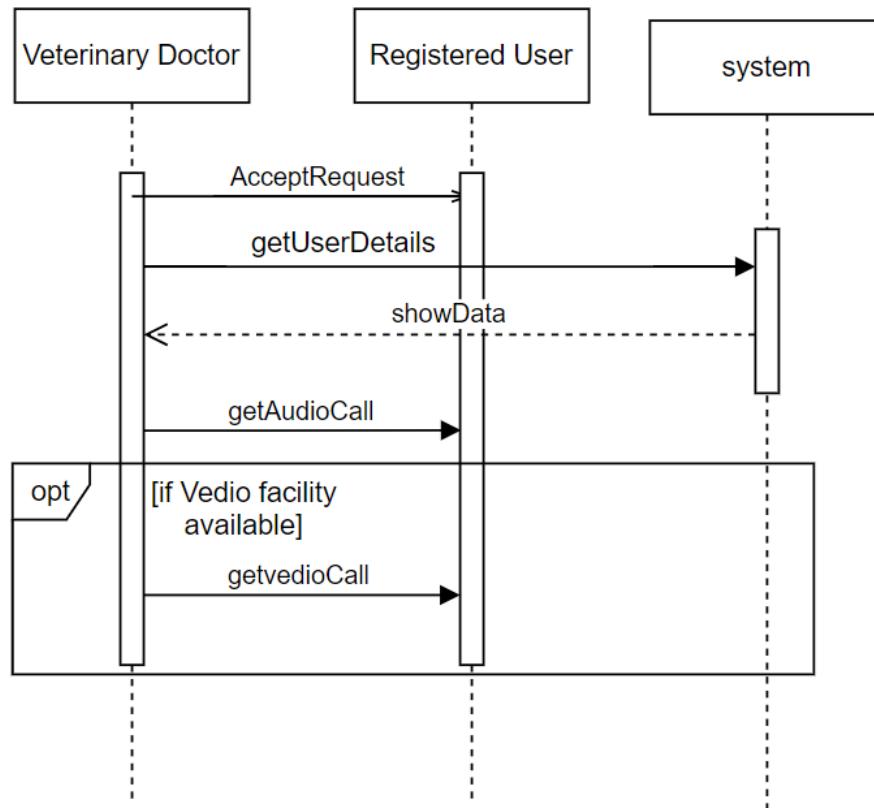
Use case 33 – View photo uploads of animals



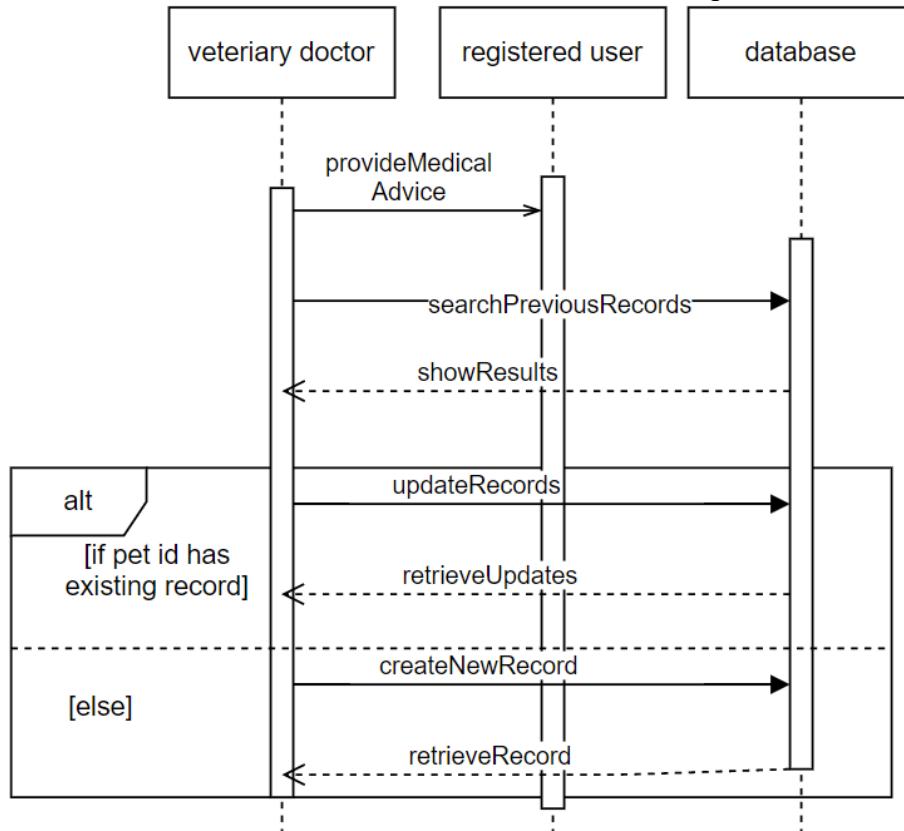
Use case 34 – Accept/ Deny consultation requests



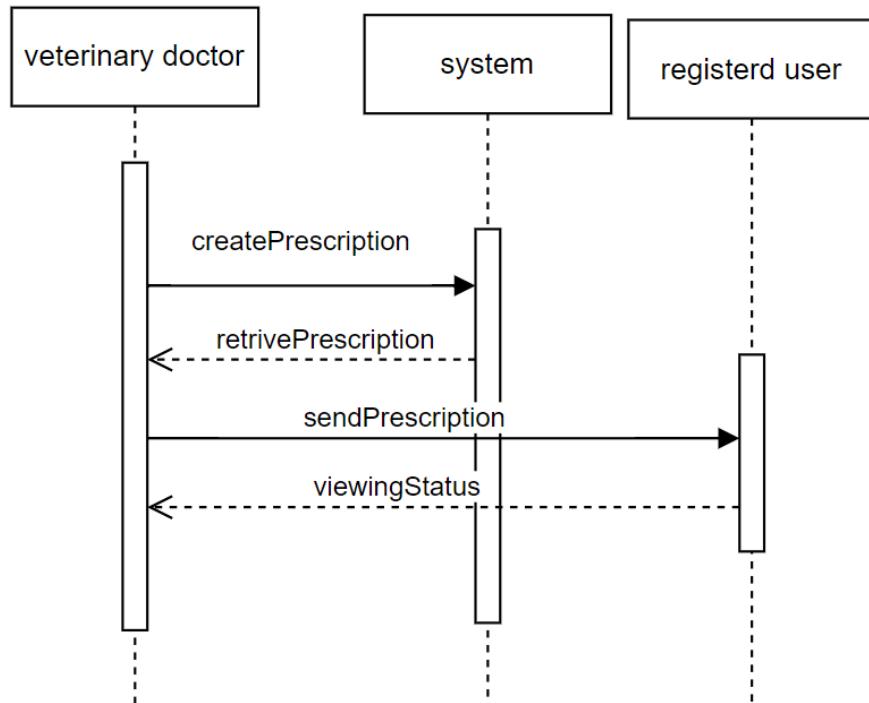
Use case 35 – Audio/ Video calls to consult



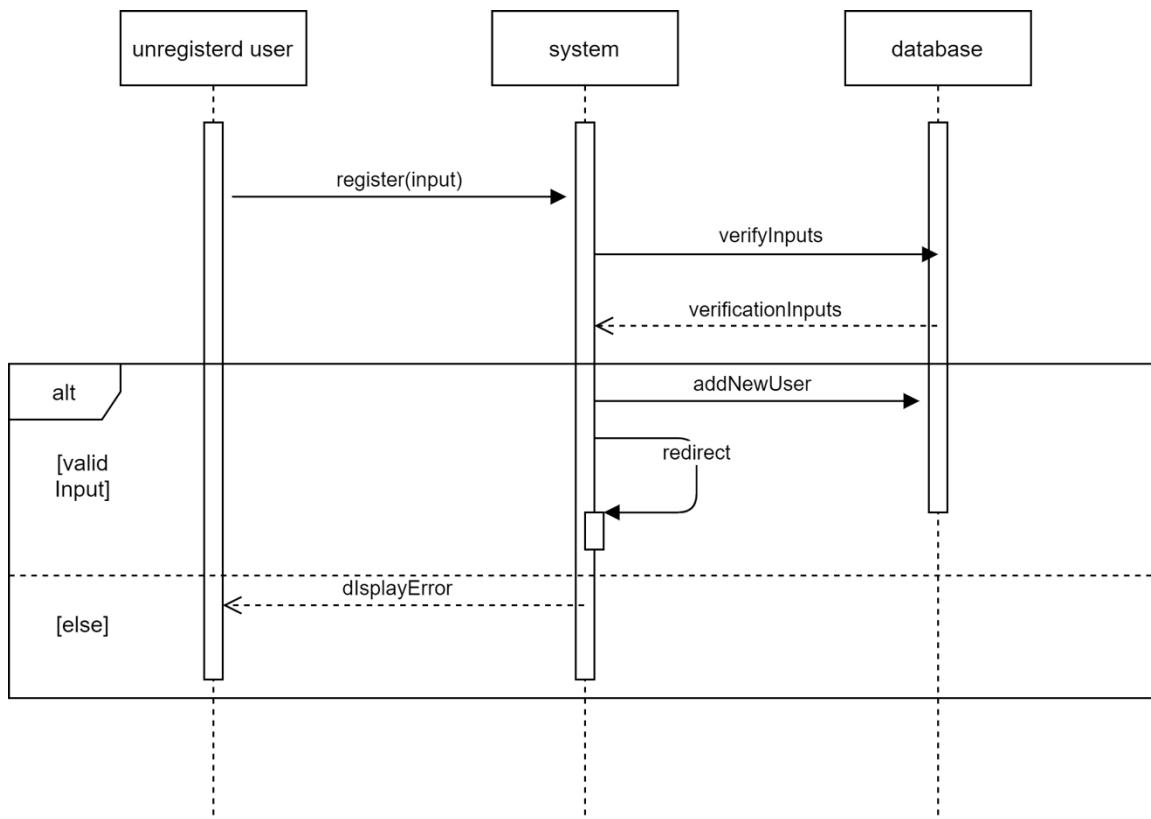
Use case 36 – Maintain health records of a pet



**Use case 37 – Create prescription**

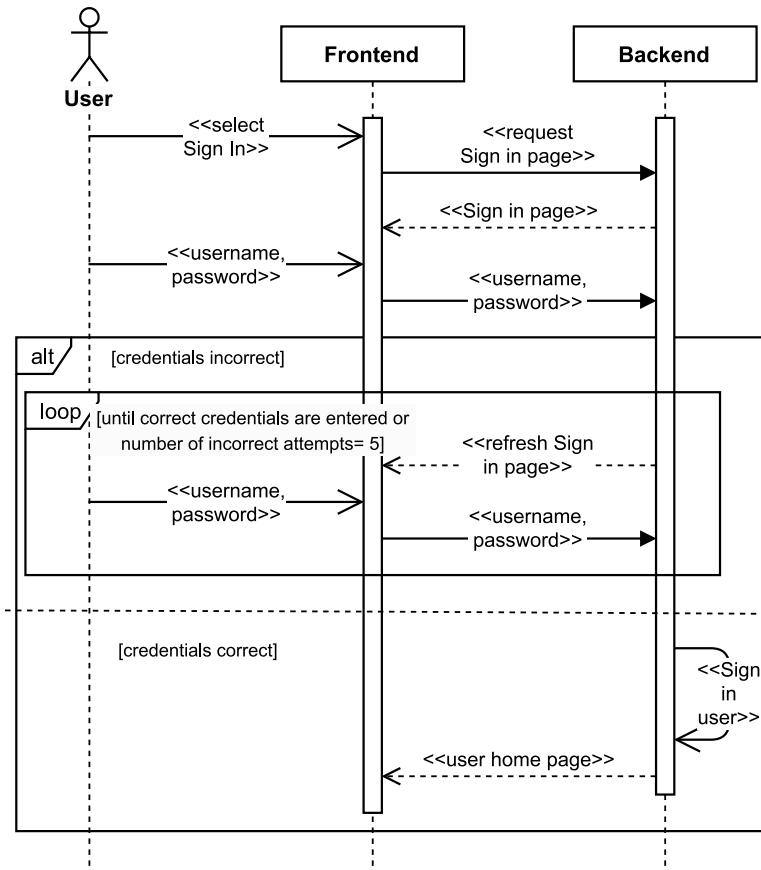


**Use case 44 – Register as a Doctor**

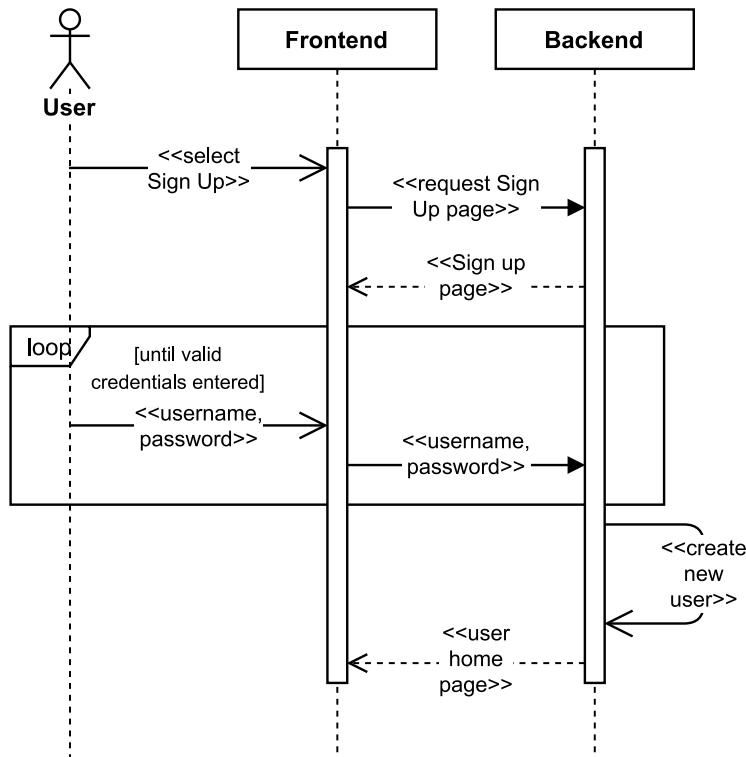


#### 4.3.6 AUTHENTICATION MODULE

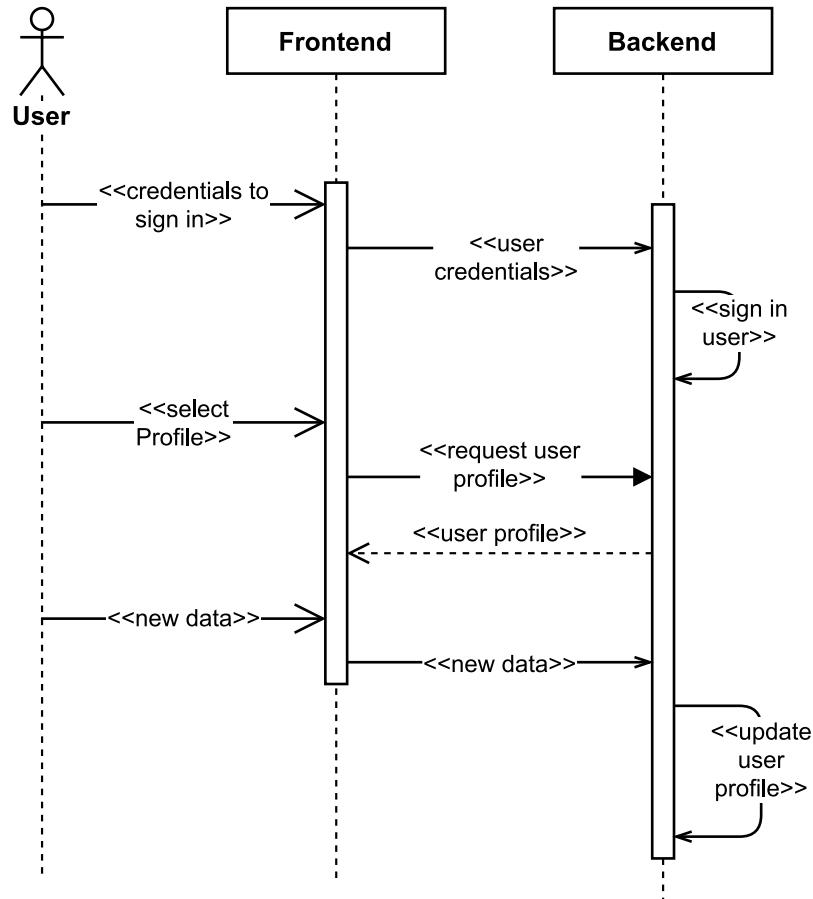
Use case 38 – Sign in



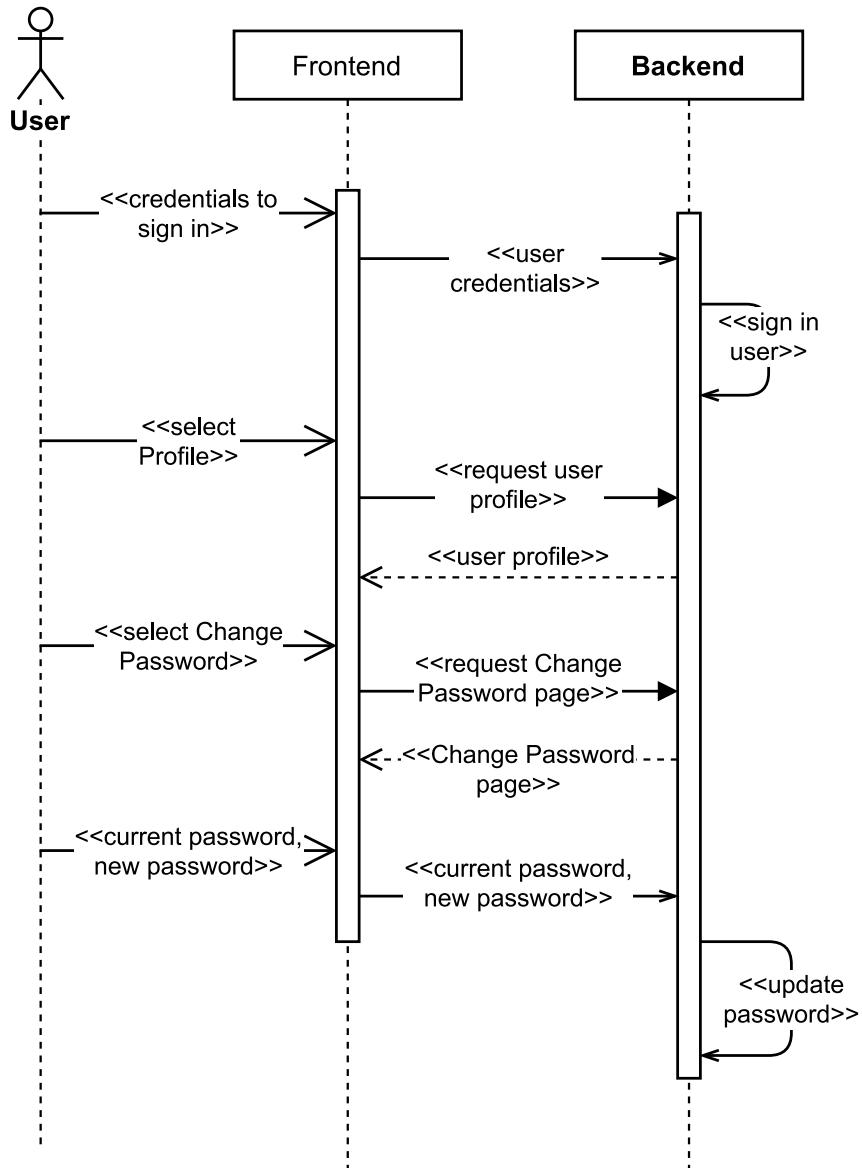
Use case 39 – Sign up



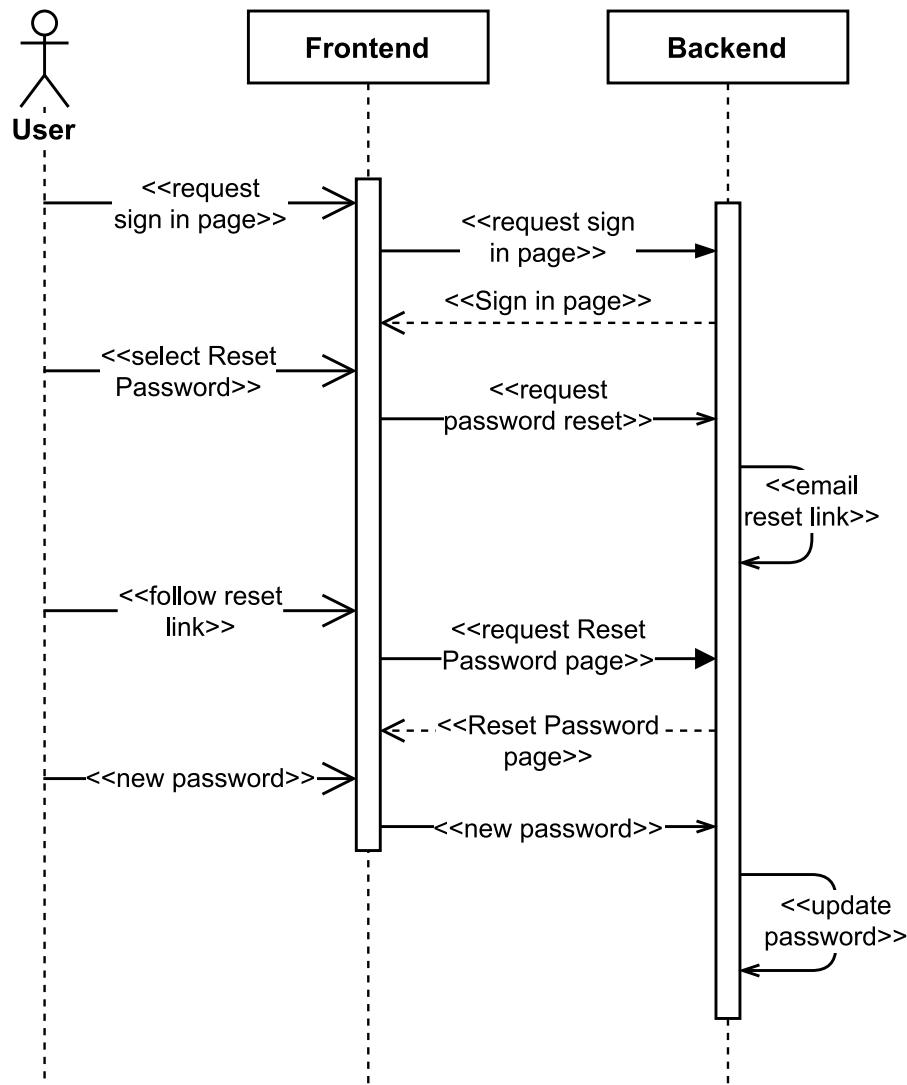
Use case 40 – Update user profile



**Use case 41 – Change password**



Use case 42 – Reset password



## 4.4 State Transition Diagrams

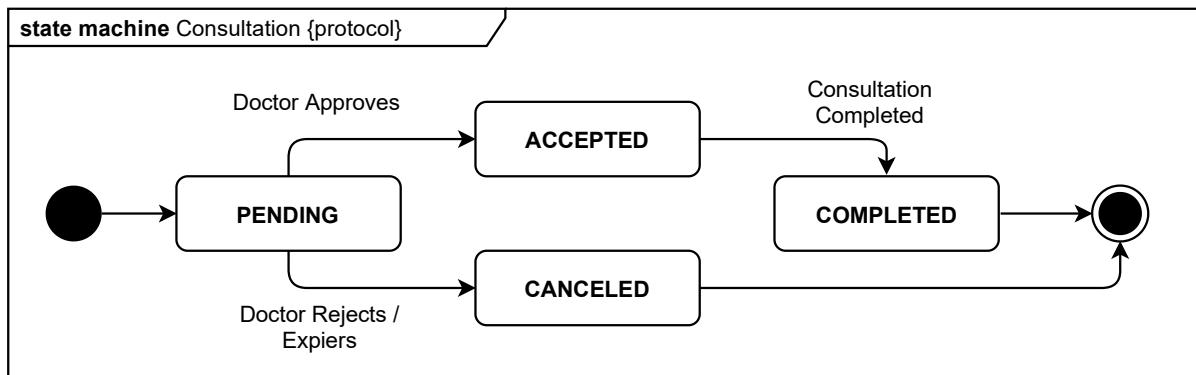


Figure 4.3: State Machine - Consultation

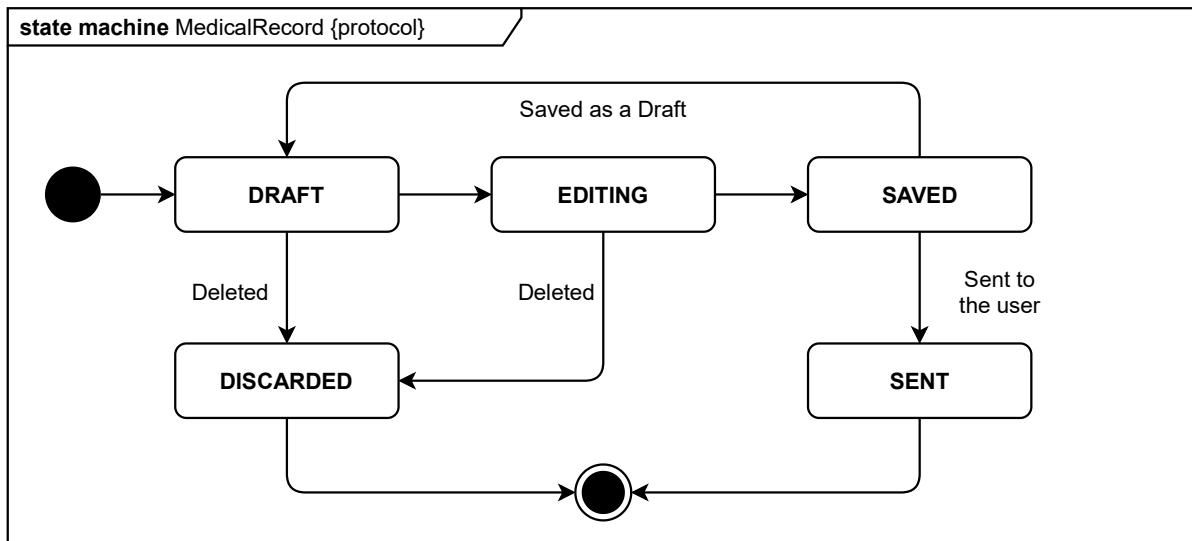


Figure 4.4: State Machine - Medical Record

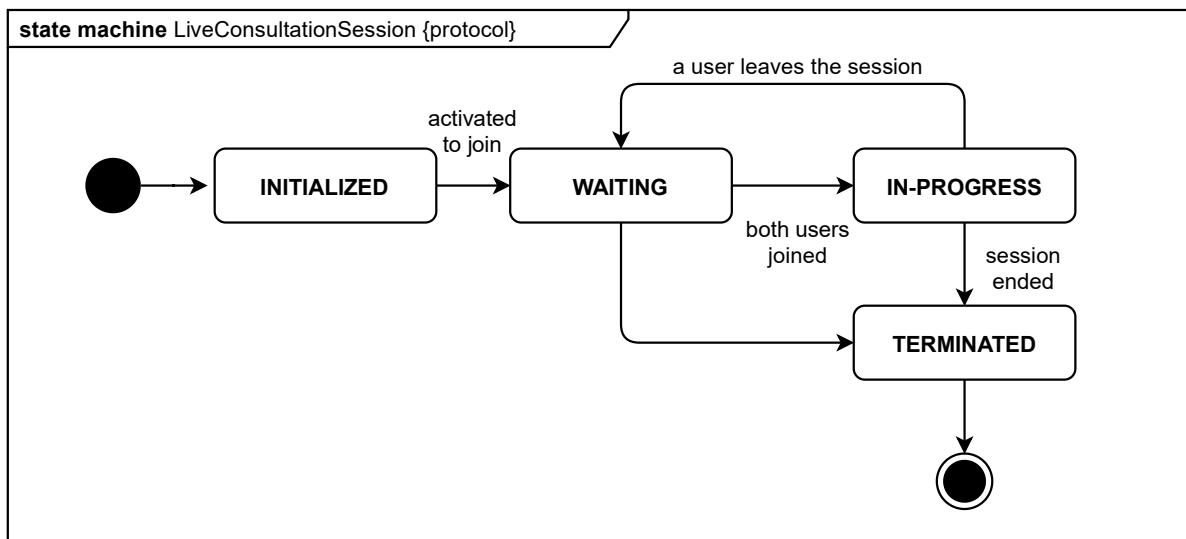


Figure 4.5: State Machine - Live Consultation Session

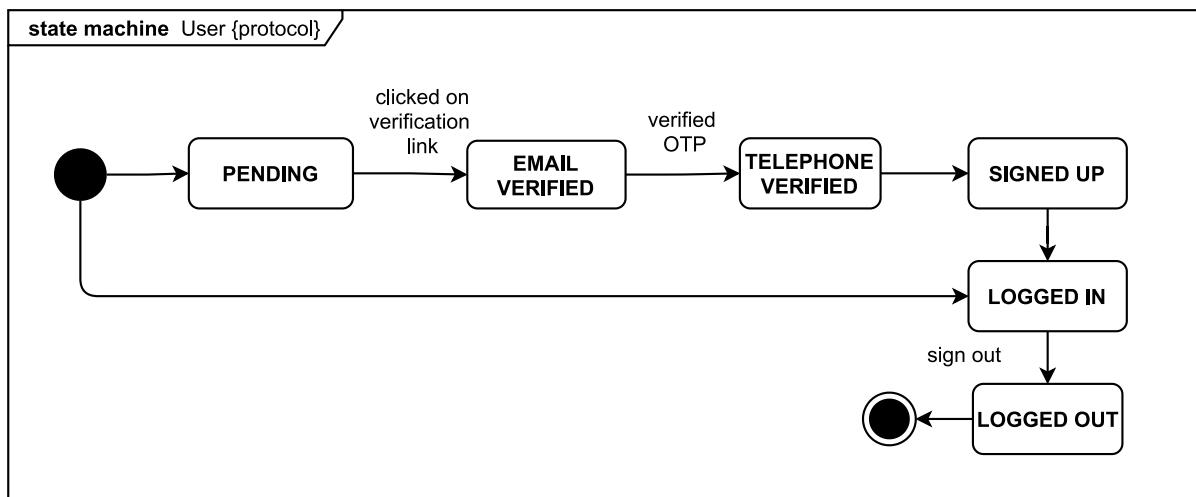


Figure 4.6: State Machine - User

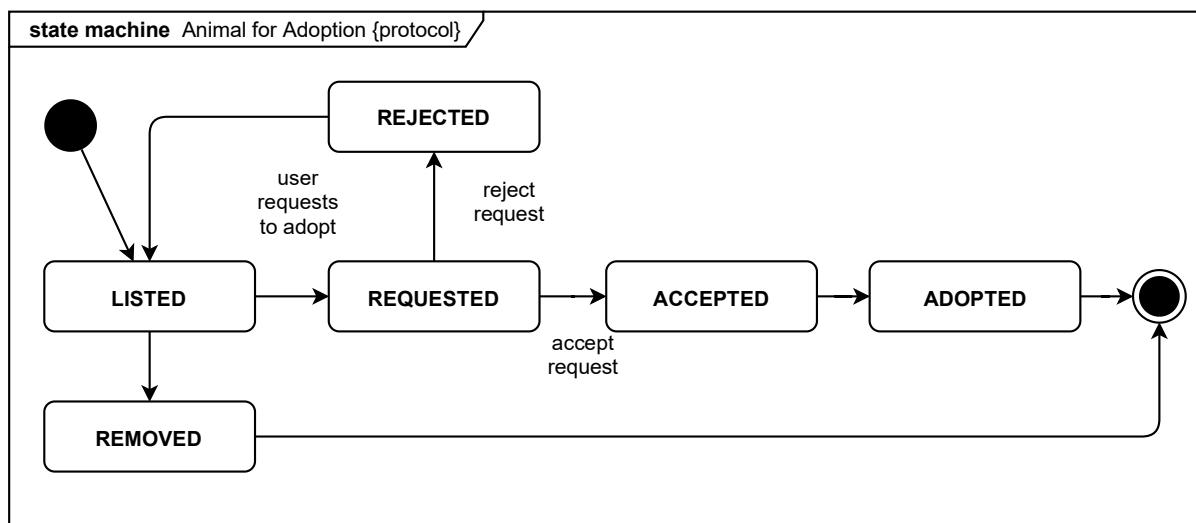


Figure 4.7: State Machine - Animal for Adoption

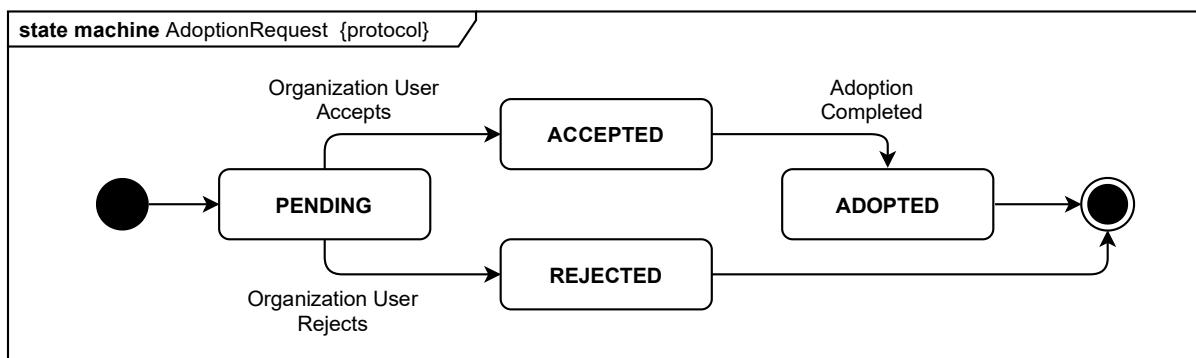


Figure 4.8: State Machine - Adoption Request

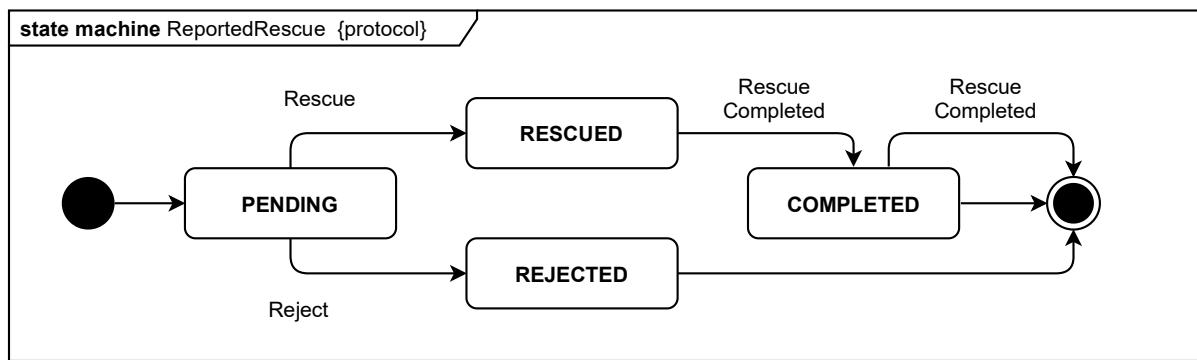


Figure 4.9: State Machine - Rescue Report

## 4.5 Test Cases

Test Case	Test Steps	Test Data	Expected Results	Actual Results	Pass/Fail
User Sign Up Process	<ul style="list-style-type: none"> <li>- Go to website</li> <li>- Click Sign Up</li> <li>- Enter Email</li> <li>- Enter Password</li> <li>- Enter Confirm Password</li> <li>- Fill Other user information</li> <li>- Click Submit</li> </ul>	<ul style="list-style-type: none"> <li>- Email = user@mailinator.com</li> <li>- Password = User@123#</li> <li>- Contact number = 0762344566</li> <li>- Address = No. 137, Pannipitiya Road, Kottawa</li> </ul>	<ul style="list-style-type: none"> <li>- Information Validated</li> <li>- Verification Email Sent</li> <li>- OTP set and verified</li> <li>- Account Created Successfully</li> </ul>	As Expected	Pass
User Sign In	<ul style="list-style-type: none"> <li>- Go to website</li> <li>- Enter Email</li> <li>- Enter Password</li> <li>- Click Submit</li> </ul>	<ul style="list-style-type: none"> <li>- Email = user@mailinator.com</li> <li>- Password = User@123#</li> </ul>	<ul style="list-style-type: none"> <li>- User logged into application</li> <li>- Redirected to Respective Homepage</li> </ul>	As Expected	Pass
User Sign In with invalid credentials	<ul style="list-style-type: none"> <li>- Go to website</li> <li>- Enter Email</li> <li>- Enter Password</li> <li>- Click Submit</li> </ul>	<ul style="list-style-type: none"> <li>- Email = user@example.com</li> <li>- Password = wrongpassword</li> </ul>	User should not Login into an application		
Update User Profile	<ul style="list-style-type: none"> <li>- Go to Profile</li> <li>- Enter new data</li> <li>- Click submit</li> </ul>	Name = Hiruni	user data updated	As Expected	Pass
Change Password	<ul style="list-style-type: none"> <li>- Go to Profile</li> <li>- Enter new data</li> <li>- Confirm password by email link</li> </ul>	new password = Qwerty1!	Password changed	As Expected	Pass
Reset Password	<ul style="list-style-type: none"> <li>- Go to login page</li> <li>- Select forgot password</li> <li>- Enter email address</li> </ul>	new password = Qwerty1!	Password changed	As Expected	Pass

	- Set password by emailed link				
Register Organization	<ul style="list-style-type: none"> <li>- Go to website</li> <li>- Select Register as Organization</li> <li>- Enter organization name</li> <li>- Enter contact number</li> <li>- Enter address line 1, line 2, city</li> <li>- Enter Email</li> <li>- Enter Password</li> <li>- Confirm password</li> <li>- Click Register</li> </ul>	<ul style="list-style-type: none"> <li>- Organization name = Pet Sanctuary</li> <li>- Contact number = 0762344566</li> <li>- Address = No. 17, Pannipitiya Road, Battaramulla</li> <li>- Email = petsanctuary@mailinator.com</li> <li>- Password = Qwerty1!</li> </ul>	<ul style="list-style-type: none"> <li>- Email verification link received.</li> <li>- OTP received</li> </ul>	As Expected	Pass
Register as a Doctor	<ul style="list-style-type: none"> <li>- Go to Website</li> <li>- Select Register as a Doctor</li> <li>- Enter Name</li> <li>- Enter Email</li> <li>- Enter Password</li> <li>- Confirm Password</li> <li>- Enter VCSL Registration number</li> <li>- Upload Proof of registration</li> <li>- Enter Mobile and Fixed Contact number</li> <li>- Enter Address</li> <li>- Enter qualifications</li> </ul>	<ul style="list-style-type: none"> <li>- VCSL Registration number = 1872</li> <li>- Password = Qwerty1!</li> <li>- Mobile number = 0761334567</li> <li>- Fixed number = 0112378976</li> </ul>	<ul style="list-style-type: none"> <li>- Email verification link received.</li> <li>- OTP received</li> </ul>	As Expected	Pass
Test adoption animal search and filter	<ul style="list-style-type: none"> <li>- Go to Adoptions Page</li> <li>- Select a Animal Type</li> <li>- Sort Using A Field</li> </ul>	<ul style="list-style-type: none"> <li>- Animal Types = Dog, Cat</li> <li>- Sort Fields = Age, Date Listed</li> </ul>	Results Should be filterd and sorted accordingly	As Expected	Pass
Report about injured animals	<ul style="list-style-type: none"> <li>- Go to Rescues Page</li> <li>- Enter description</li> <li>- Enter location</li> </ul>	<ul style="list-style-type: none"> <li>- Location = Colombo</li> <li>- Animal types = Dog, Cat</li> </ul>	- Resuce Report Successfully Created.	As Expected	Pass

	<ul style="list-style-type: none"> <li>- Enter contact number</li> <li>- Select animal type</li> <li>- Upload Photos</li> <li>- Click submit</li> </ul>	<ul style="list-style-type: none"> <li>- Contact number = 0711234567</li> </ul>	<ul style="list-style-type: none"> <li>- Organization Notified</li> </ul>		
Search for animals to adopt	Go to Adoptions Page		Animals for adoption displayed	As Expected	Pass
View Organization Profile / Feed	<ul style="list-style-type: none"> <li>- Go to Organizations Page</li> <li>- Select an organization</li> </ul>		View organization profile	As Expected	Pass
Request to Adopt a pet	<ul style="list-style-type: none"> <li>- Go to the adoption request page</li> <li>- Enter description about pet and child safety</li> <li>- Click submit</li> </ul>	<ul style="list-style-type: none"> <li>- Has children</li> <li>- No other pets</li> </ul>	<ul style="list-style-type: none"> <li>- Request created.</li> <li>- Listed under requests for relevant organization</li> </ul>	As Expected	Pass
View adoption request status	Go to the adoption request page		<ul style="list-style-type: none"> <li>- Submitted data shown.</li> <li>- Pending status shown.</li> </ul>	As Expected	Pass
Make donation	<ul style="list-style-type: none"> <li>- Go to organization profile</li> <li>- Select Donate option</li> <li>- Enter amount</li> <li>- Select/ Deselect option to state user name</li> <li>- Enter payment details</li> <li>- Click submit</li> </ul>	Amount = 1200	<ul style="list-style-type: none"> <li>- Payment made.</li> <li>- Success of payment shown</li> </ul>	As Expected	Pass
Subscribe to a sponsorship of an organization	<ul style="list-style-type: none"> <li>- Go to organization profile</li> <li>- Select Sponsorships tab</li> <li>- Select Subscribe</li> <li>- Enter payment details</li> </ul>	<ul style="list-style-type: none"> <li>- Organization = Pet Haven</li> <li>- Sponsorship = Bronze</li> </ul>	Successfully subscribed	As Expected	Pass
Review organizations	<ul style="list-style-type: none"> <li>- Go to organization profile</li> <li>- Select Review option</li> <li>- Select ratings</li> <li>- Enter comments</li> <li>- Click submit</li> </ul>	<ul style="list-style-type: none"> <li>- Pet living conditions = Good</li> <li>- Pet healthcare = Low</li> <li>- Rescue Report Response = Very good</li> </ul>	<ul style="list-style-type: none"> <li>- Review submitted.</li> <li>- Review displayed in organisation review tab</li> </ul>	As Expected	Pass

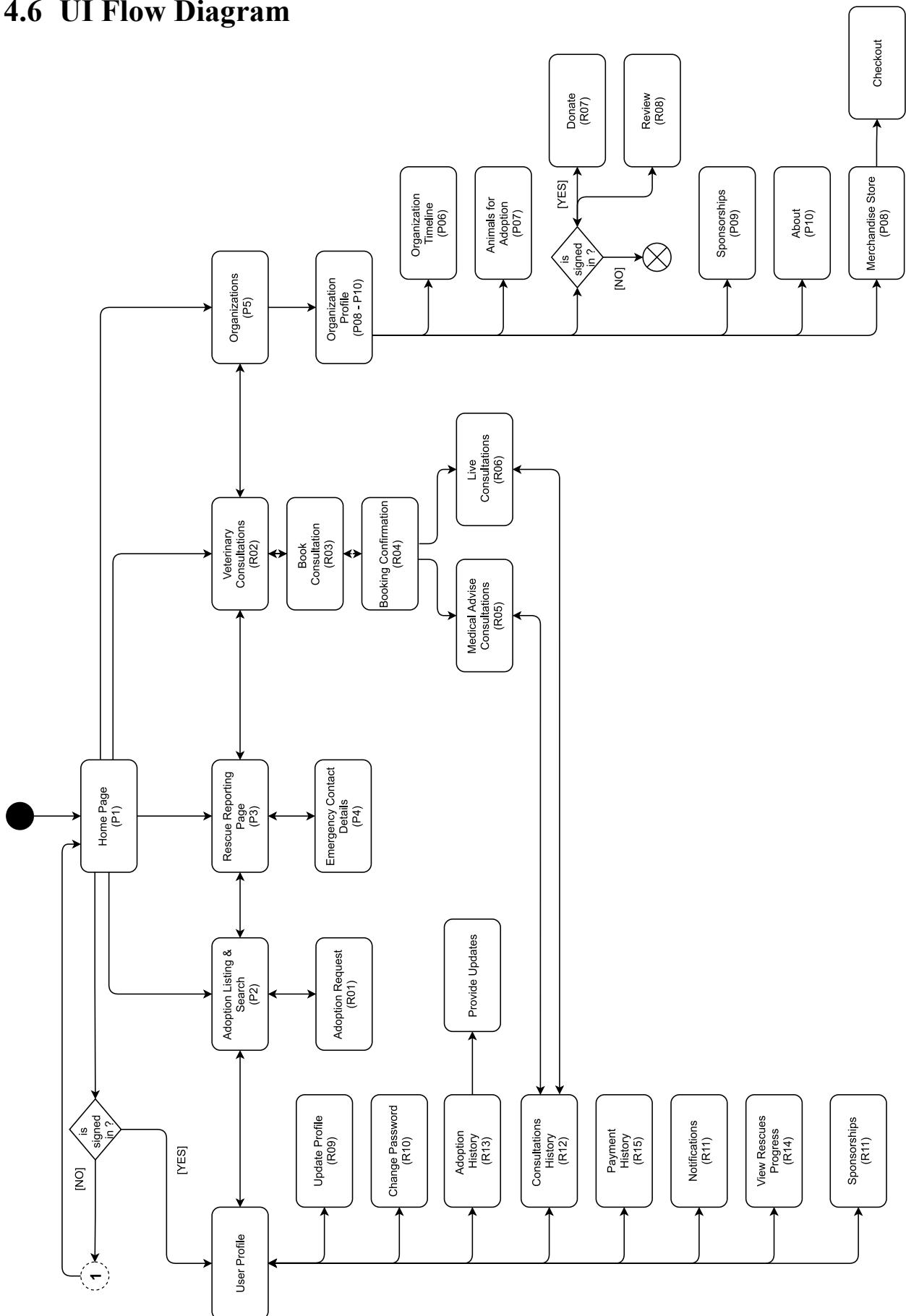
		<ul style="list-style-type: none"> <li>- Adoption request handling = Good</li> <li>- Resource handling = Neutral</li> </ul>			
Consult doctor	<ul style="list-style-type: none"> <li>- Go to Veterinary Consultation Page</li> <li>- Select Doctor</li> <li>- Select method</li> <li>- Select date, time</li> <li>- Select pet</li> <li>- Click Go to Payment</li> <li>- Enter card details</li> </ul>	<ul style="list-style-type: none"> <li>- Doctor = Dr. Weerasinghe</li> <li>- Date = 09/04/2022</li> <li>- Time = 10.30 am</li> <li>- Pet = Milo</li> </ul>	<ul style="list-style-type: none"> <li>- Consultation request made.</li> <li>- Redirected to payment gateway for payment.</li> <li>- redirected back to system after completion</li> <li>- Doctor notified</li> </ul>	As Expected	Pass
Put new animals up for adoption	<ul style="list-style-type: none"> <li>- Go to adoption listing page</li> <li>- Select Add New Animal</li> <li>- Enter name, gender, type, DOB, Colour, description, vaccine dates and dewormed date</li> <li>- Upload proof of vaccination</li> <li>- Upload avatar and other photos of the pet</li> </ul>	<ul style="list-style-type: none"> <li>- genders = male/ female</li> <li>- type = dog/ cat</li> <li>- DOB = 09-07-2021</li> </ul>	New animal added to the adoption listing	As Expected	Pass
Approve/ Reject Adoption Request	<ul style="list-style-type: none"> <li>- Go to Adoption requests page</li> <li>- Select Accept/Reject for active request</li> </ul>	Selection = Accept, Reject	<ul style="list-style-type: none"> <li>- Pet is marked as Accepted/ Rejected</li> <li>- Notification is set to User</li> </ul>	As Expected	Pass
Respond to reports of abandoned / injured animals	<ul style="list-style-type: none"> <li>- Go to Reported Cases page</li> <li>- Select Accept on pending report</li> </ul>	Selection = Accept	Report status is marked as In Progress	As Expected	Pass
Post information about events the organization has done	<ul style="list-style-type: none"> <li>- Go to News and Events Page</li> <li>- Select Add New Event</li> <li>- Enter event name</li> </ul>	Event name = Clinic	<ul style="list-style-type: none"> <li>- Event is added to News and Events Page</li> <li>- Event is displayed</li> </ul>	As Expected	Pass

	<ul style="list-style-type: none"> <li>- Enter description</li> <li>- Upload photo</li> <li>- Click Add Update</li> </ul>		in Organization Profile for Registered users		
View Organization Reports	<ul style="list-style-type: none"> <li>- Login as organization user</li> <li>- Select Organization Reports</li> <li>- View the Required Report</li> </ul>		<ul style="list-style-type: none"> <li>- Reports displayed with Information</li> </ul>		
Respond to reviews / complaints about the organization	<ul style="list-style-type: none"> <li>- Go to Feedback Page</li> <li>- Select Respond,</li> <li>- Enter response,</li> <li>- Click send/</li> <li>- Select acknowledge</li> </ul>		<ul style="list-style-type: none"> <li>- Email is sent to the user/</li> <li>- Feedback is marked as Acknowledged</li> </ul>	As Expected	Pass
Maintain Sponsorship Tiers	<ul style="list-style-type: none"> <li>- Go to Organization Settings</li> <li>- Go to Sponsorships Tiers</li> <li>- Select Edit Tier</li> <li>- Enter new amount</li> <li>- Click Save</li> </ul>	<ul style="list-style-type: none"> <li>- Tier = Bronze</li> <li>- Amount = 1200</li> </ul>	New value is added to the tier	As Expected	Pass
View Active Sponsorships	<ul style="list-style-type: none"> <li>- Go to Organization Settings</li> <li>- Go to Sponsorships</li> </ul>		All sponsorships are displayed	As Expected	Pass
View payments and donations received	<ul style="list-style-type: none"> <li>- Go to Donations page</li> </ul>	<ul style="list-style-type: none"> <li>- Organization = Pet Hevan</li> </ul>	All donations are displayed	As Expected	Pass
Organization Information Gets Updated Correctly	<ul style="list-style-type: none"> <li>- Go to Organization Settings</li> <li>- Go to General Page</li> <li>- Change Name</li> <li>- Change Address</li> <li>- Change Telephone</li> <li>- Submit Form</li> </ul>	<ul style="list-style-type: none"> <li>- Name = Pet Shelters</li> <li>- Address = Main Road, Gampaha</li> <li>- Telephone = 0112233444</li> </ul>		As Expected	Pass
Provide Medical Advice	<ul style="list-style-type: none"> <li>- Go to Medical Advise</li> <li>- Select Animal</li> </ul>	message = How about water intake?	Message sent	As Expected	Pass

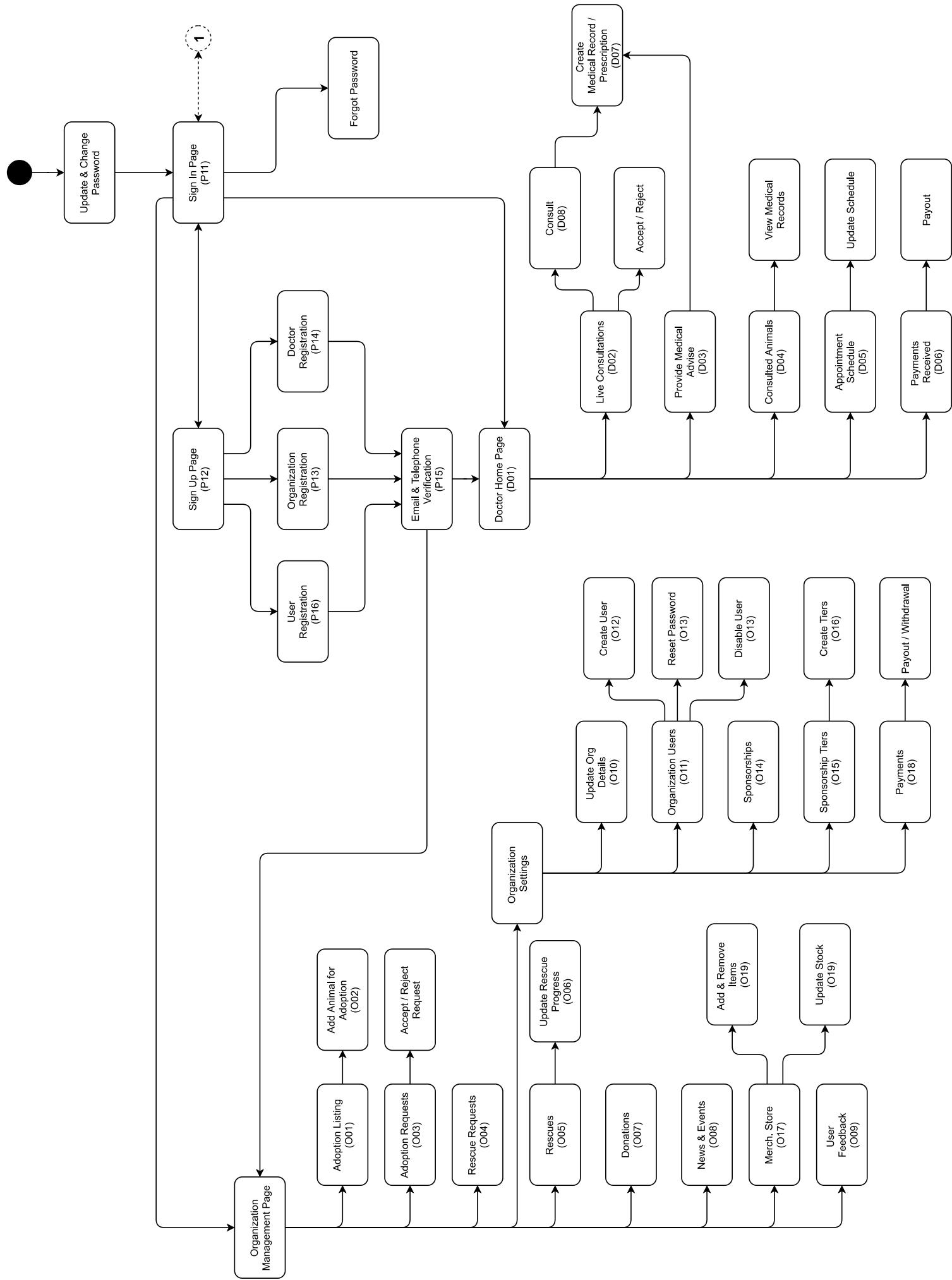
	- Enter message - Click Send				
Accept / Deny Consultation Requests	- Go to Live Consultations - Select Accept/ Cancel	Selection = Accept	- Request marked as Accepted - Live consultation option is enabled	As Expected	Pass
Audio / Video calls to consult	- Go to Live Consultations - Go to an Accepted Consultation - Select Consult - Click on Join Session			As Expected	Pass
Create prescription	- Go to Medical Advise - Select Chat - Click on New prescription - Enter Drug name, dose, directions and duration - Click Add - Enter Remarks - Click Send	- Drug name = Dexamethsone - Dose = 125 mg - Direction = twice a day - Duration = 3 days	Prescription is sent	As Expected	Pass
View users of an organization	- Go to Organization Settings Page - Select Users		Organization users displayed	As Expected	Pass
Create a Organization User	- Go to Organization Settings Page - Select Users - Select New User - Enter name - Enter Password - Enter Email - Enter contact number	- Password = Qwerty1! - Email = orguser123@mailinator.com - Contact number = 0762334356	New User added to the organization	As Expected	Pass
Disable / Enable User	- Go to Organization Settings Page - Select Users		User is disabled	As Expected	Pass

	- Select Deactivate User - Select Disable				
Assign Roles to Users	- Go to Organization Settings Page - Select Users - Select Change Role - Select Role - Click Change	Role = Admin	User is granted admin privileges	As Expected	Pass
Update Details of Organization User	- Go to Organization Settings Page - Select Users - Edit User - Set new email - Set new password	- Email = orguser2@mailinator.com - Password = OUser@123#	User Information gets updated	As Expected	Pass
View Donation & Sponsorship History	- Go to user profile - Select payments tab		Past payments displayed	As Expected	Pass
Request Payout	- Login as Doctor - Go to Payments Page - Click Withdraw		- Redirected to payment Gateway with Correct amount - Redirected back to system with success - Transaction created for withdrawal	As Expected	Pass
Vaccination Reminders	- Set Vaccination Date of a animal to an year before current date - SMS & Notification generated with one hour		- SMS & Notification properly sent	As Expected	Pass

## 4.6 UI Flow Diagram



# Adoptee - An Application for Pet Adoption and Animal Support



## **5 INDIVIDUAL CONTRIBUTIONS**

Student ID : **19000332**

Student Name : **M.D.D.P Dharmathilake**

### **Name of the component (s)**

1. Features of the Doctor Role
  1. Registration
  2. Doctor Dashboard
  3. Live Consultations
  4. Medical Advice
  5. Consulted Animals History
  6. Doctor Availability Schedule
  7. Doctor Payments Handling
2. Features of the Organization Admin Role
  - a. Organization Information Management
  - b. Organization User Management \*
  - c. Sponsorship Tiers Management \*
  - d. Donations & Sponsorships Handling \*
3. User Authentication ( Partially completed by Dahanayake H.N. - 19000235 )
4. Vaccination Reminders & Notifications
5. Site Home & Navigation Bar
6. Animal Rescue Report \*
7. Payment Gateway (Stripe) Integration
8. Common styles for buttons & form controls.
9. Request Routing & Web Server Configurations

\* These were partially (views & some functionality) implemented by J.A.T.T. Perera (19001142)

### **Description of the component(s)**

1. Includes all the features for the veterinary consultations & maintaining animal history. Doctor schedule and payments management is also included.
2. Sign In, Sign up and checking user role & authenticated status on respective pages
3.
  - a. Update Organization information such as address, location, tel, logo etc
  - b. Create users, enable / disable them & edit details.
  - c. CRUD for sponsorship tiers.
  - d. View donations & received sponsorships, withdraw money from the system
4. A reminder (sms & notification) to vaccinate pets yearly is sent according to the last vaccinated date recorded in the system.
5. Fully Responsive site home & navigation bar including graphics & animations
6. Form for reporting an injured animal including selecting the location with GMaps. And follow-up UIs.
7. Configuration of payment gateway and writing methods for the interfacing with it.
8. A set of styles for common elements such as buttons, form controls & links etc. used to make the UIs consistent with each other.
9. Matching requests to a controller method based on the path & other access control and caching configurations.

Student ID : **19000235**

Student Name : **H. N. Dahanayake**

**Name of the component (s)**

1. Features of the Unregistered User Role
  - a. Available Pets Filter
  - b. Breed Information
  - c. Organization Profile
2. Features of the Registered User Role
  - a. Sponsorship and Donation
  - b. Organization Review
  - c. Pet Adoption
  - d. Veterinary Consultation Booking
  - e. User Profile
  - f. Pet Management

**Description of the component(s)**

1.
  - a. Filter for viewing and sorting pets available for adoption, according to several filters.
  - b. Breed Information with filters and system administrator's form to add new breed information
  - c. Timeline, Adoptee Listing, Sponsorships, Reviews and About pages
2.
  - a. Subscribe to and unsubscribe from sponsorships, make donations with options to send personal information and subscribe to donate.
  - b. Form for making reviews, calculation of the rating given by the user and the organization's overall rating.
  - c. View for requesting adoption, pending requests and recently adopted pets
    - i. \*This was partially completed by Dharmathilake M.D.D.P
  - d. Form and functionality to book a date, time, doctor for a specific pet.
  - e. User's personal details, notifications, upcoming and past pet consultations, adoption history and ability to update relevant organization, rescue report status, sponsorships and past payments
  - f. Functionality for adding a new pet, editing and viewing their medical history and deleting pet

Student ID : **19000952**

Student Name : **M.M.O.H.Medagedara**

**Name of the component(s)**

1. Features of the Organization User
  - a. Analytics dashboard & analytic report generator
  - b. Animal listing & filtering
  - c. Adoption request listing & filtering
  - d. Reported case listing & filtering
  - e. Organizational rescues listing & filtering
  - f. Organizational timeline management
  - g. Manage adoption requests and rescues

**Description of the component(s)**

1.
  - a. Display analytics of the organization graphically and to generate reports according to different requirements.
  - b. List all the animals available for adoption in the organization and filter accordingly.
  - c. List adoption requests received by the organization and filter accordingly.
  - d. List the cases reported by users and filter accordingly.
  - e. List, filter and add updates to rescues done by the organization.
  - f. List, filter, manage and add new items to the organization timeline.
  - g. Accept / Reject and manage adoption requests and rescues done by the organization.