



Adoptee

SAVE A LIFE. ADOPT A PET

PROPOSAL PRESENTATION

A Platform for Pet Adoption and Animal Support

SCS2202 - Group Project 1 - CS Group 26

Our Group - CS 26

Supervisor : Ms. A.L. Nanayakkara

Co-Supervisor: Mr. Dushan Dinushka



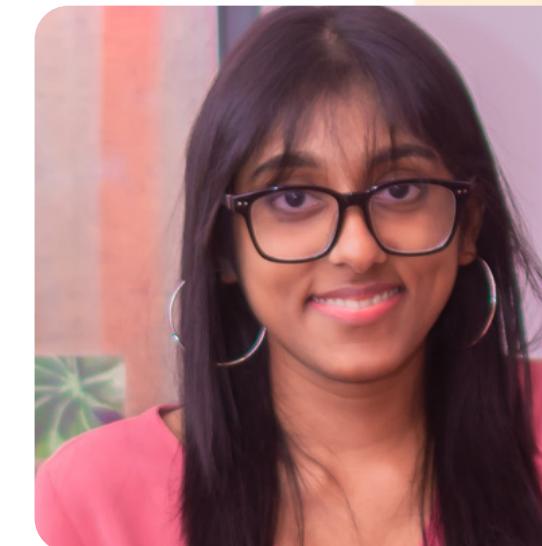
DALANA DHARMATHILAKE

2019/CS/



HIRUNI DAHANAYAKE

2019/CS/



OVINI MEDAGEDARA

2019/CS/

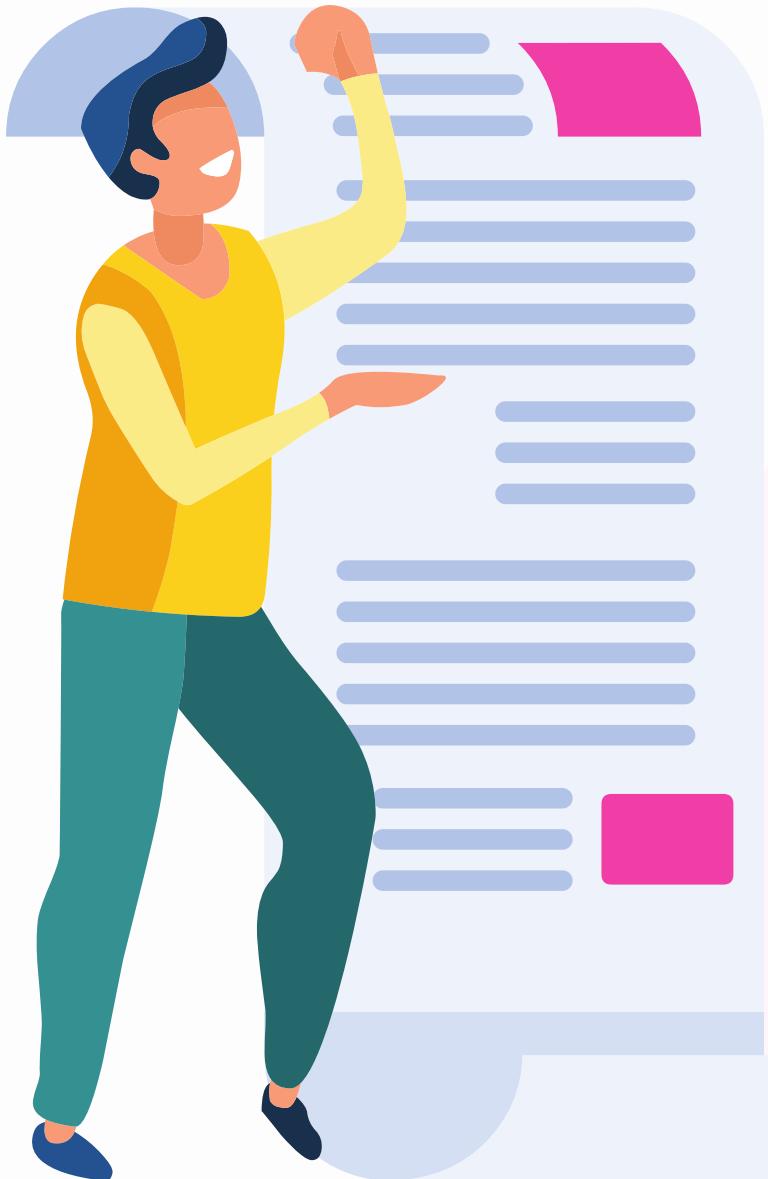


THARANI PERERA

2019/CS/

LINE UP

1. Introduction and Problem Definition
2. Project Goal
3. Requirements
4. A High-Level Architecture
5. Feasibility Study
6. Technologies
7. Workload Distribution



INTRODUCTION & PROBLEM DEFINITION

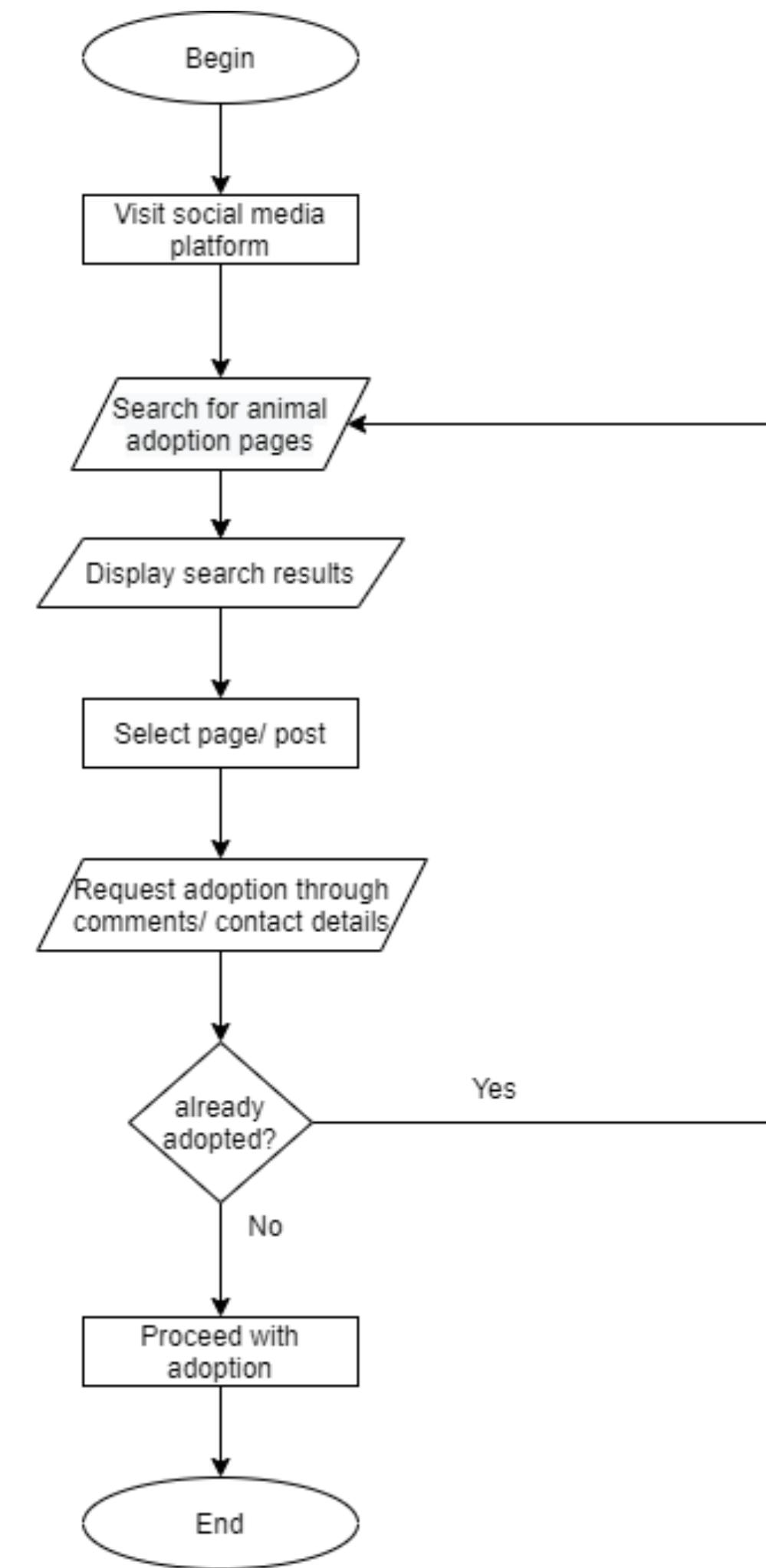
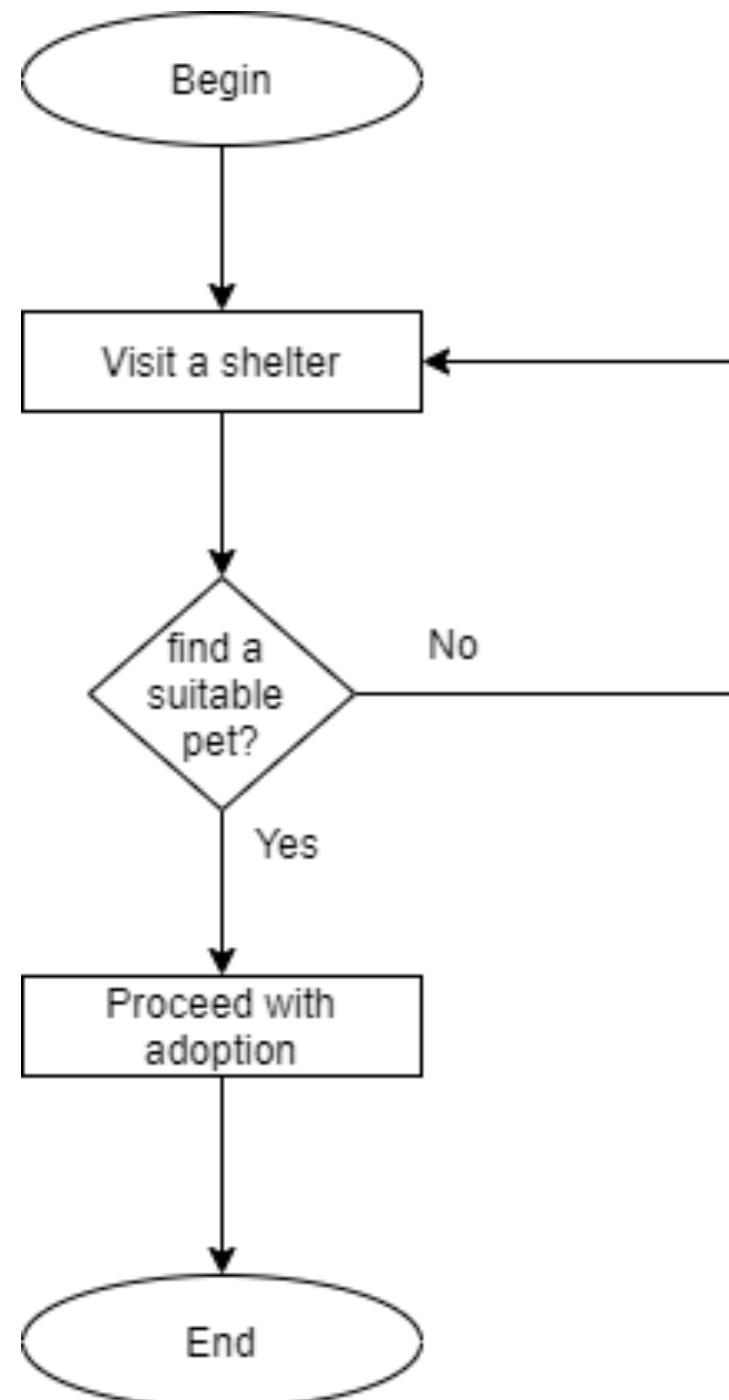
- Majority of the animal welfare organizations use social media platforms

Issues with these methods

- Less transparency
- Less convenient for users and organizations
- Vulnerable to scams
- Discourages users from adopting animals
- Low exposure for an organization
- Waste of time searching for relevant organizations



MANUAL PROCESS



WHAT WE PROPOSE



Adoptee

SAVE A LIFE. ADOPT A PET

A proper web based platform,

- For animal welfare organizations all around the island to,
 - announce adoptions & find adopters
 - receive donations
 - receive long term sponsorships
- For the public to,
 - adopt an animal
 - report, care for an injured animal
 - make veterinary consultations during emergency periods

PROJECT GOAL

- Introducing one web-based platform for animal shelter around the island to carry out pet adoption processes and rescuing processes.

SUB GOALS

- Facilitating veterinary doctor consultations during emergency periods
- Providing an efficient platform for donations, sponsorships and fundraising campaigns for shelters

Through that, we shall hope to encourage the society to adopt animals and to reduce the death rate of stray animals due to accidents and ignorance.



OBJECTIVES

- Identify requirements & develop a web application.
- Improve animal adoption & rescue processes.
- Provide facilities for animal welfare organizations including donations, merchandise sales & increased exposure.
- Improve accessibility for veterinary doctor consultations.
- Learn technologies and improve soft skills.



PROJECT SCOPE

In-scope

- Animal adoption process
- Report cases about injured/abandoned animals.
- Make donations / raise funds for animal shelters.
- Buy merchandise, subscriptions for sponsorships of animal shelters.
- Portal to consult veterinarians and to make payments for consultations.
- Generate Prescriptions & Maintain health records of animals.
- Maintain separate feeds for shelters containing shelter details and recent work.
- View reports of organizations such as average adoption rate, donations received popularity, merchandise sales etc.

PROJECT SCOPE CONT'D

Out of scope

- Managing transportation of animals to their destination.
- Stock Management for shelter/organization merchandise sales.
- Internal management functions/features of organizations

Assumptions

- All users have access to an internet connection and own an email address.
- Valid information is published by shelters and incident reporters.



DELIVERABLES



Web Application

Includes source code, initial database state and users can use the application once deployed.



SRS Document

Includes system design diagrams, descriptions and the requirements used to derive the design



Administrators Manual

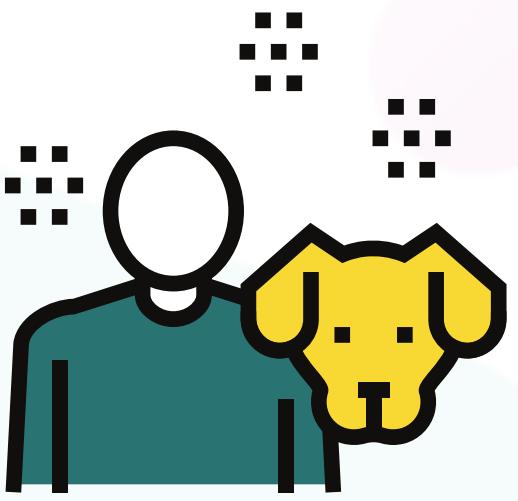
Deployment, and Administration Instructions



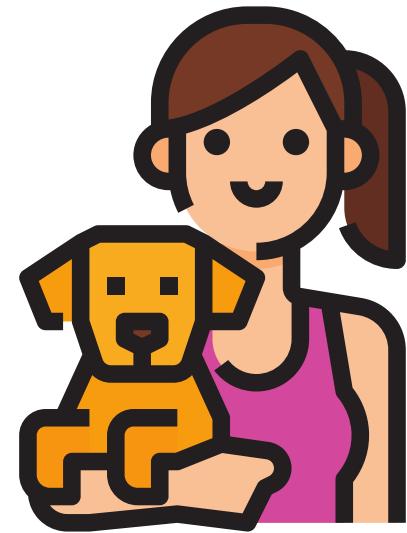
User Guide

Includes instructions for users on how to perform tasks

USERS



**UNREGISTERED
USER**



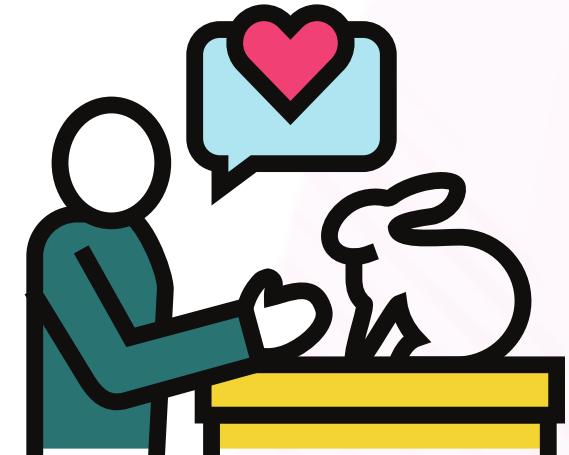
**REGISTERED
USER**



**ORGANIZATION
USER**



**ORGANIZATION
ADMIN**



**VETERINARY
DOCTOR**

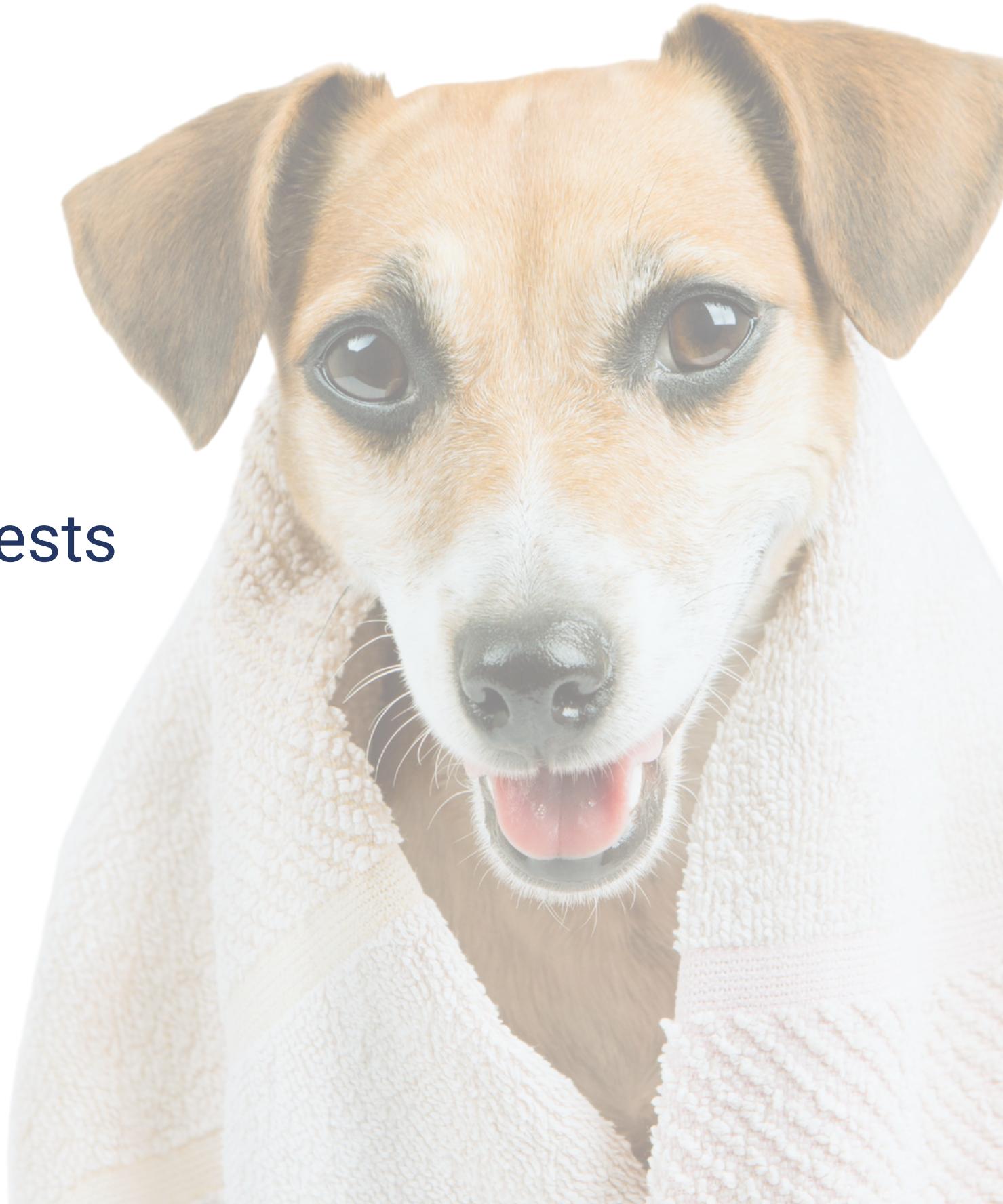
FUNCTIONALITIES

Pet Adoption

- Listing animals up for adoption.
- Browsing for pets
- Adoption requests
- Acceptance or rejection of adoption requests

Animal Rescues

- Reporting injured/ abandoned animals
- Respond to rescue requests.
- Updates on the reported animal



Animal Welfare Organisations

- Updates about organizations' welfare work
 - Complaints and feedback
 - Donations
 - Subscriptions for sponsorships
 - Pet merchandise
- *Multiple users in an organization

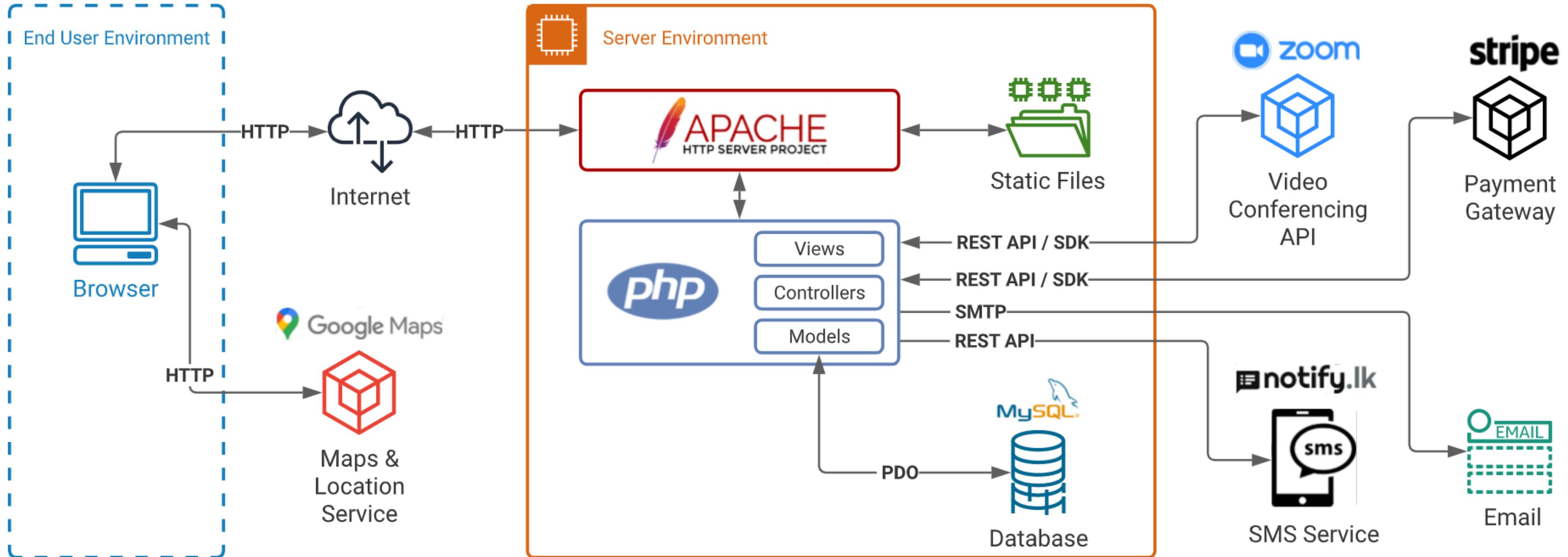


Veterinary Consultation

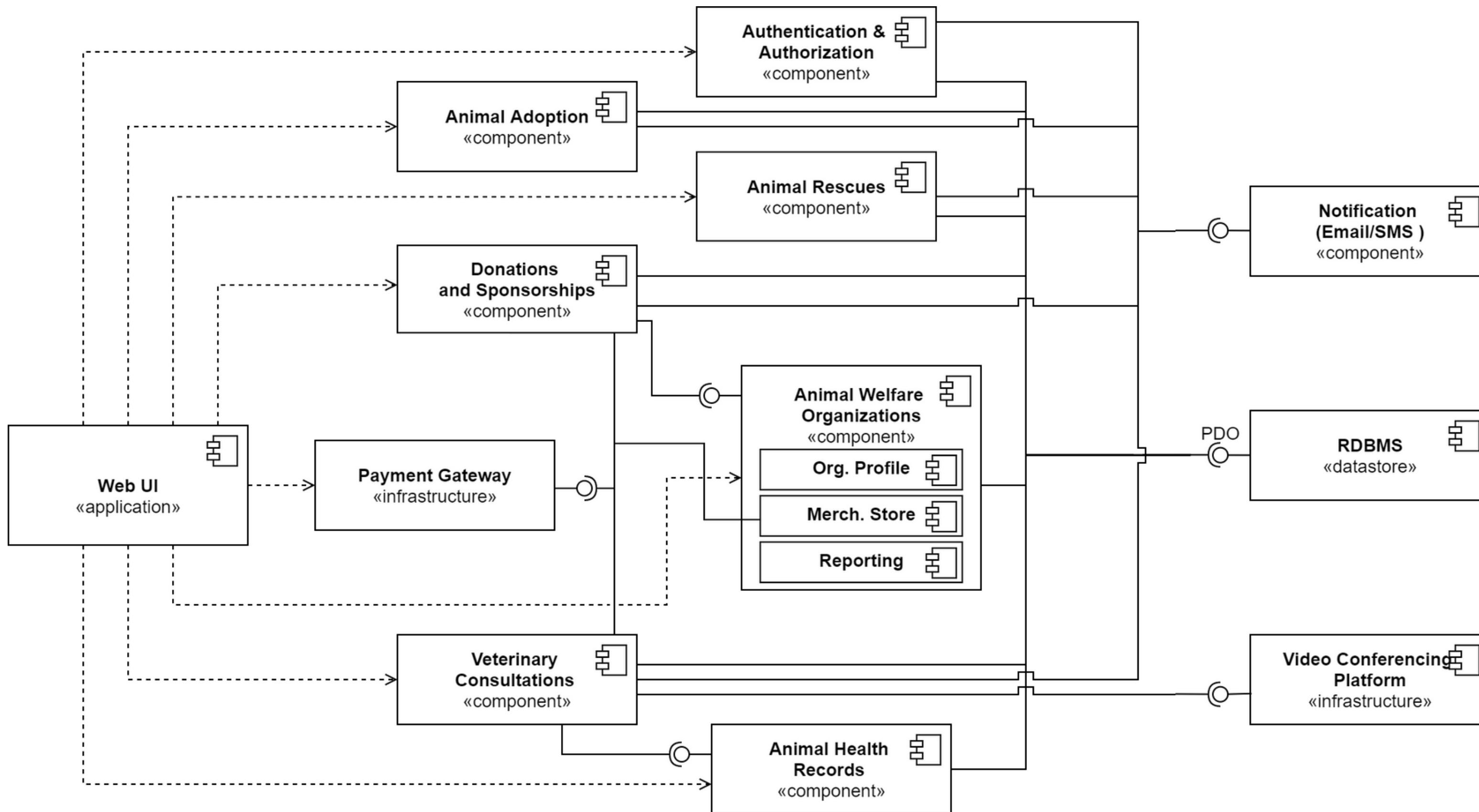
- Consultation through messaging, photograph, video call
- Prescription handling
- Animals' health records
- Payment for consultation



A High Level Architecture



Component Diagram

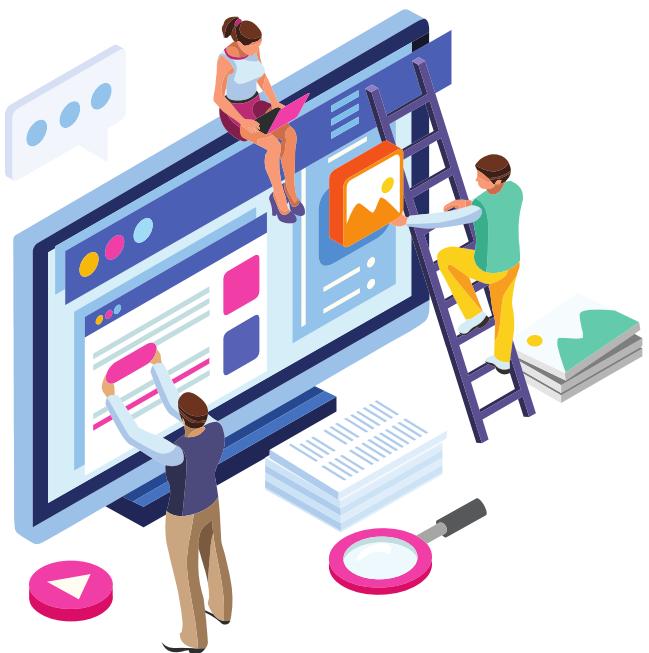


Quality Attributes

Available



Usable



Reliable



Secure



Maintainable



Portable





Usability

- A simple and uncluttered user interface
- Easily accessible - it's a website
- Supports multiple screen sizes - responsive



Performance and Reliability

- Database transactions
- Caching static content



Availability

- Deployed on the cloud
- Multiple replicas of the application



Security

- Hashing passwords & authentication details.
- HTTPS / SSL enabled
- Countermeasures against SQL injection and others attacks



Maintainability

- MVC architecture.
- Follows best practices and standards.
- Good developer documentation and comments



Portability

- Usage of proprietary or non-standard APIs is minimized
- Standard formats are used for data communication and storage.
- Abstraction of interfaces where possible

PROJECT FEASIBILITY



OPERATIONAL FEASIBILITY

To use the system,

- Users are required to have an internet connection.
- A mobile phone or a computer with a recent version of a web browser installed should be available.
- Users must have a basic knowledge of IT & using the internet.
- Payments & donations require an intermediate level of knowledge in online & card-based payments

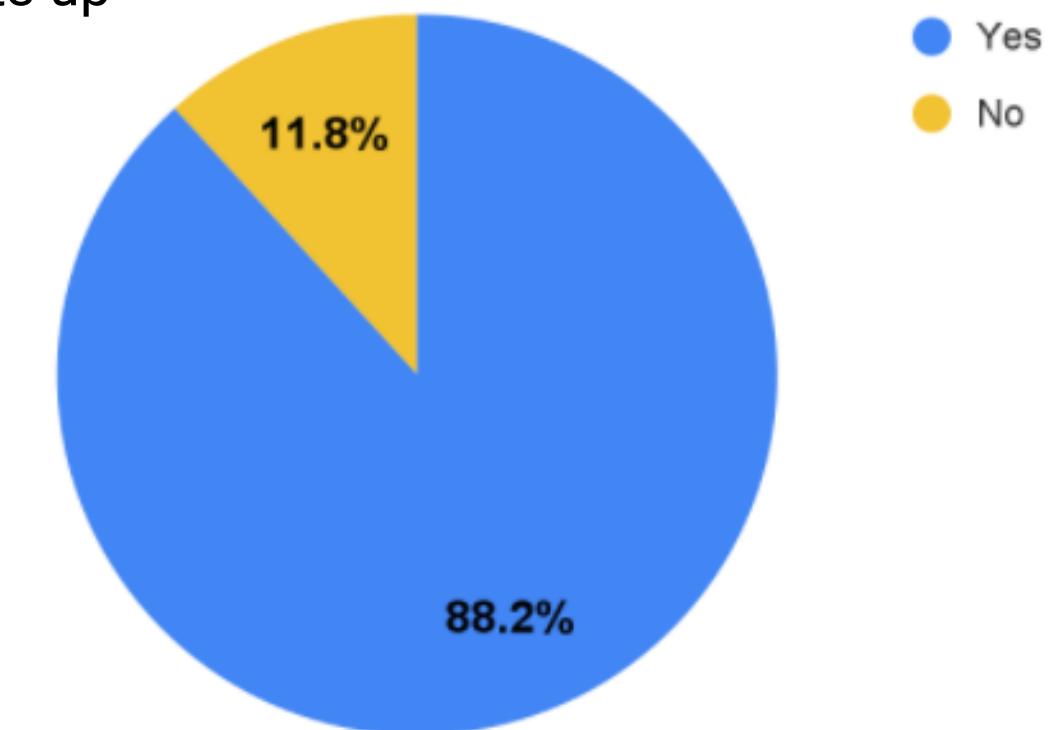


SOCIAL FEASIBILITY

- Positive public feedback from the survey.
- People are willing to use the application.
- Animal shelters and welfare organizations are interested in the system



Would you like to have an online platform to search for pets up
for adoption and to complete most of the process online?
101 responses



LEGAL & ETHICAL FEASIBILITY



- The identity of a user is verified at registration.
- The application is built in compliance with the licenses of the open-source software technologies that are used
- Building and deploying the system does not break any laws.

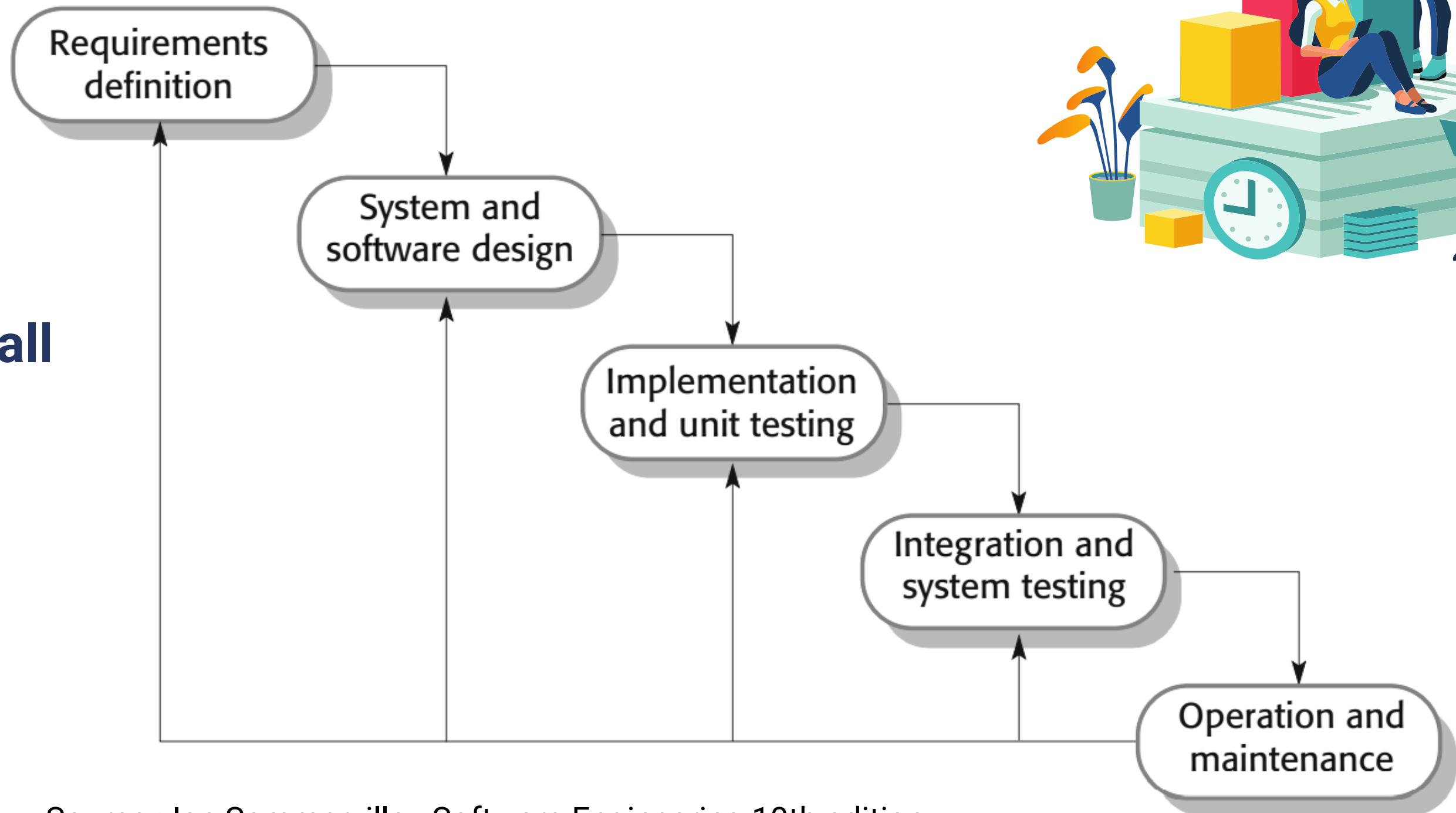
ECONOMIC FEASIBILITY

- Requires hosting for the application and the database.
- “The free tier” capacity is adequate for moderate traffic.
<https://cloud.google.com/free> (2vCPU + 1GB RAM)
- An increase in cost is expected when the user base grows.
- Rs 3000 a year for a “.LK” domain.
- An SMS costs around 80 cents.
- FOSS is used for the development



SCHEDULE FEASIBILITY

Iterative Waterfall Method



Source : Ian Sommerville - Software Engineering 10th edition

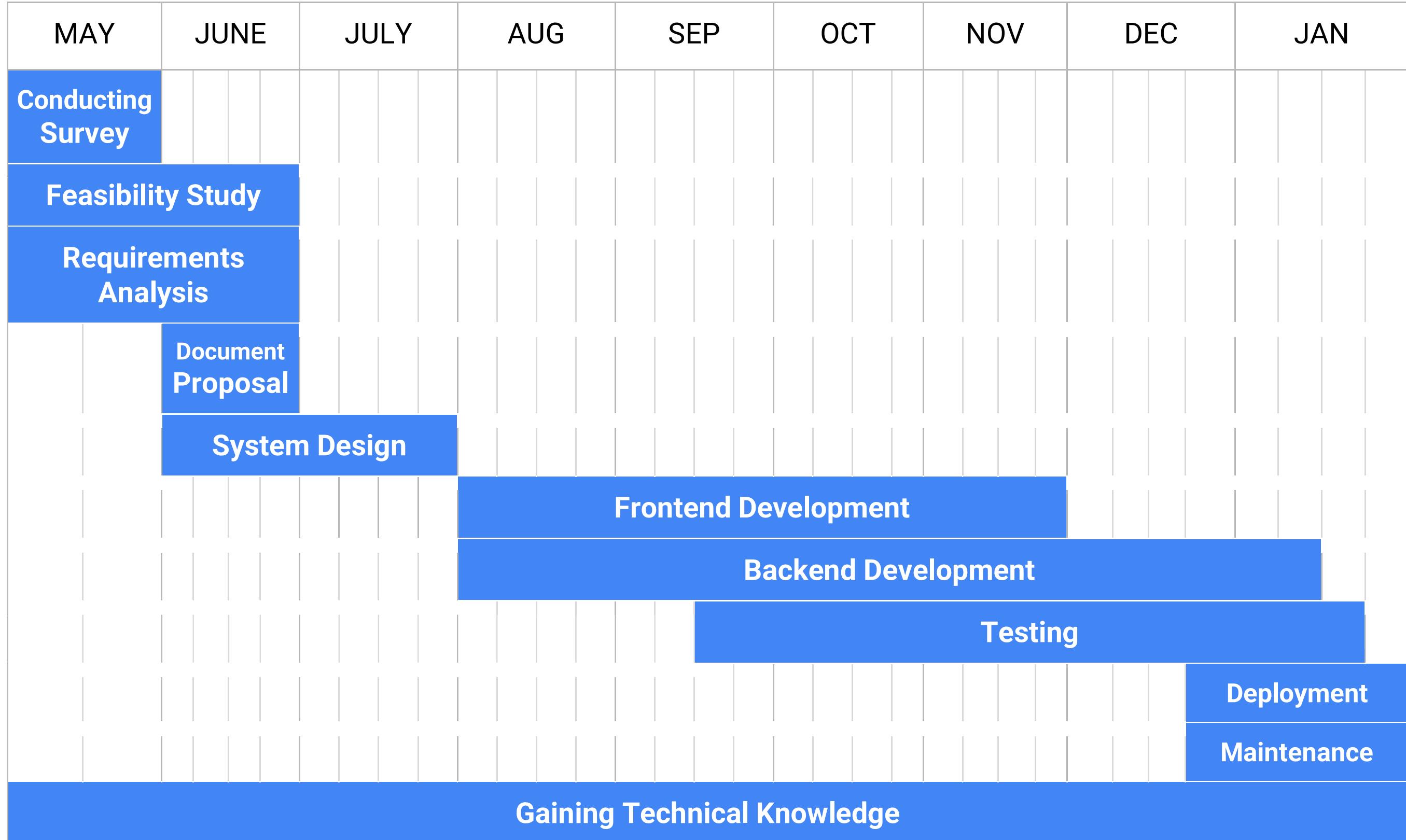
10 HOURS X 4 TEAM MEMBERS = 40 HOURS PER WEEK

40 HOURS/WEEK * 36 WEEKS=

1440 HOURS



PROJECT TIMELINE



TECHNICAL FEASIBILITY

- Used technologies are either open source or freely available
- The team has the adequate technical knowledge to properly utilize the technologies
- A sandbox environment is used to simulate the integration with the payment gateway.



TECHNOLOGIES

FRONTEND

HTML



CSS



BACKEND



INTEGRATIONS



Google Maps

stripe



COLLABORATION TOOLS

Google
Workspace



VERSION CONTROL





WORKLOAD DISTRIBUTION

Dalana Dharmathilake - Guest User, Organization Admin

Hiruni Dahanayake - Registered User

Ovini Medagedara - Organization User

Tharani Perera - Guest User, Veterinary Doctor

THANK YOU

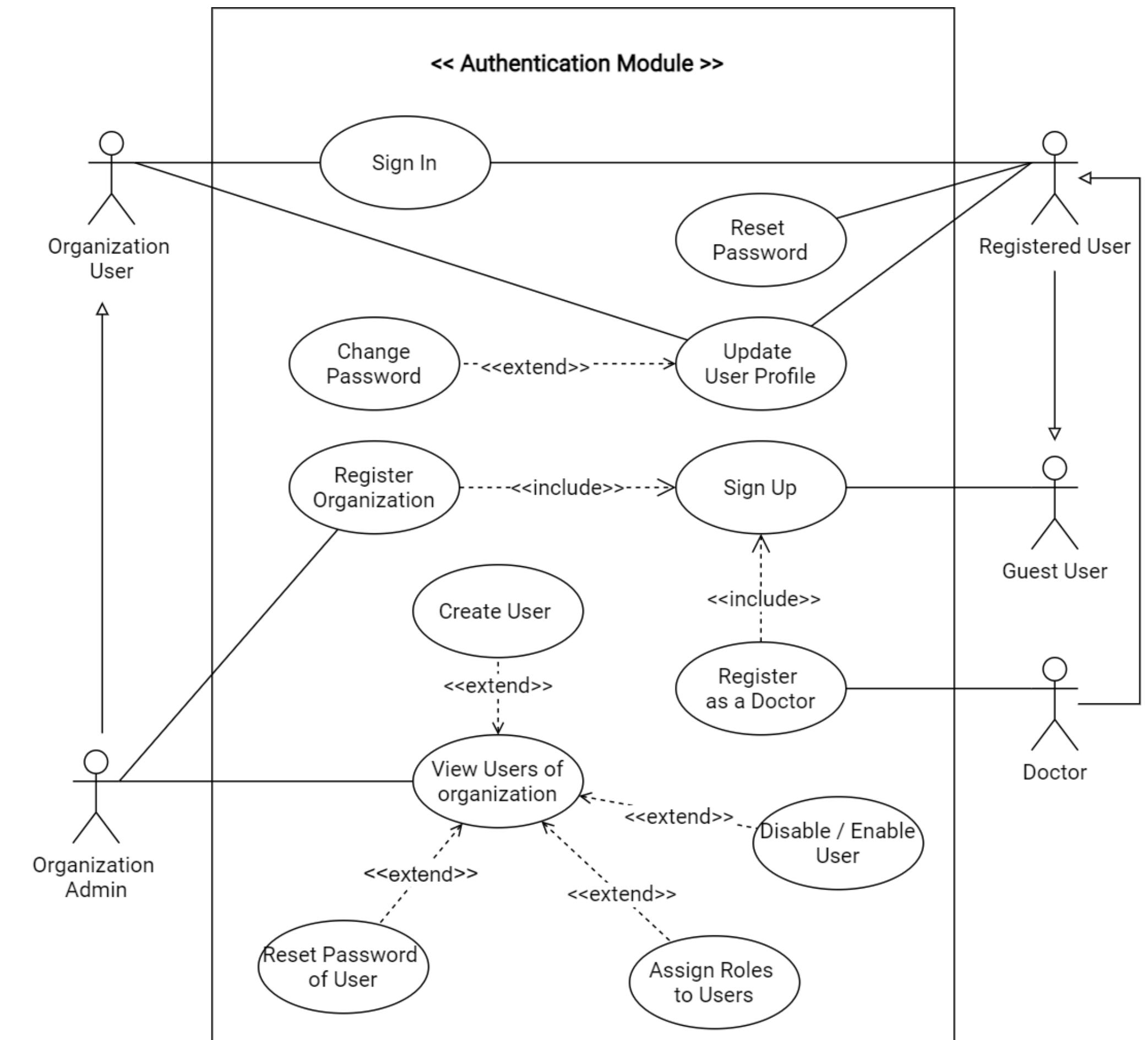
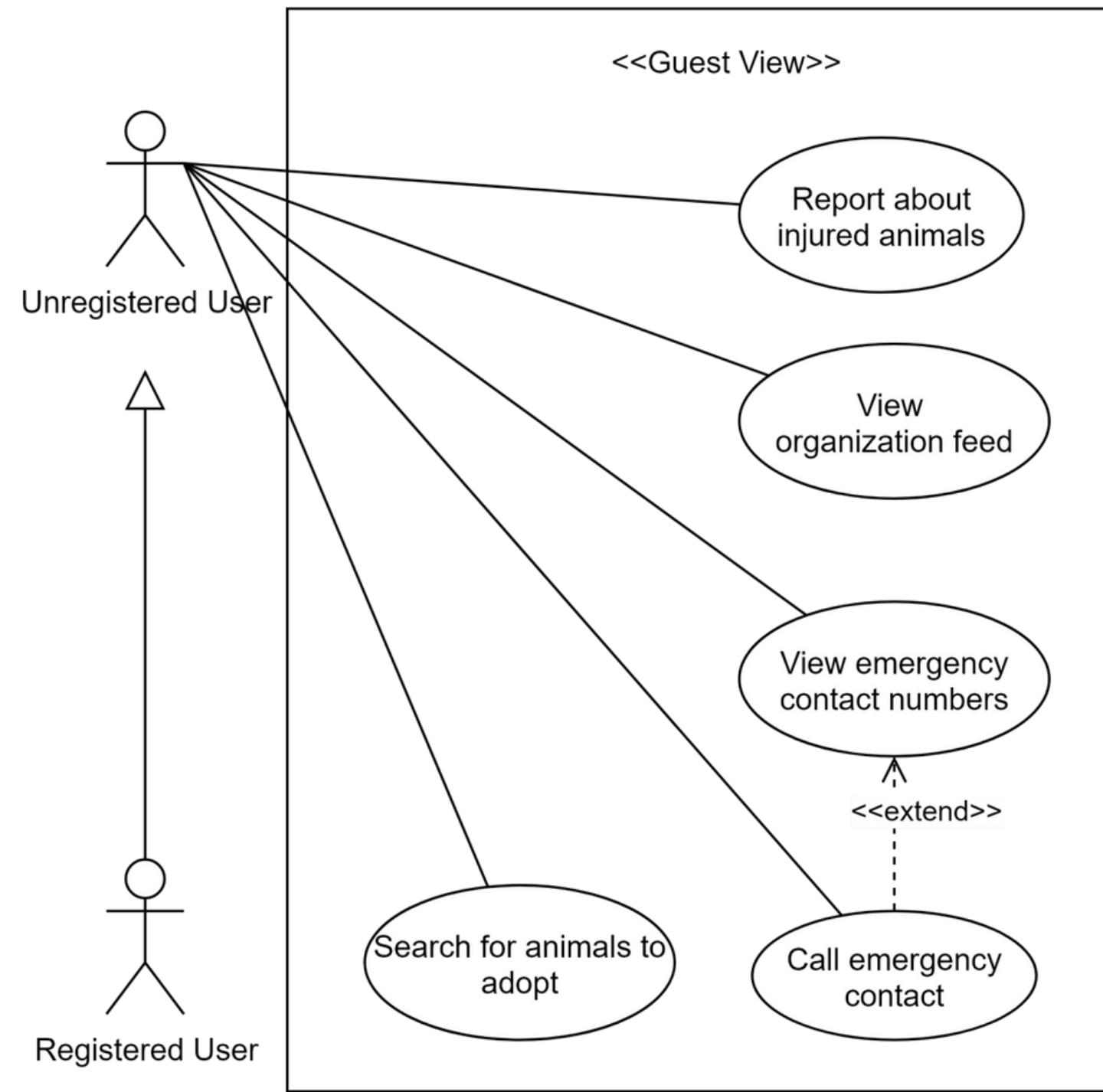
ANY QUESTIONS ?

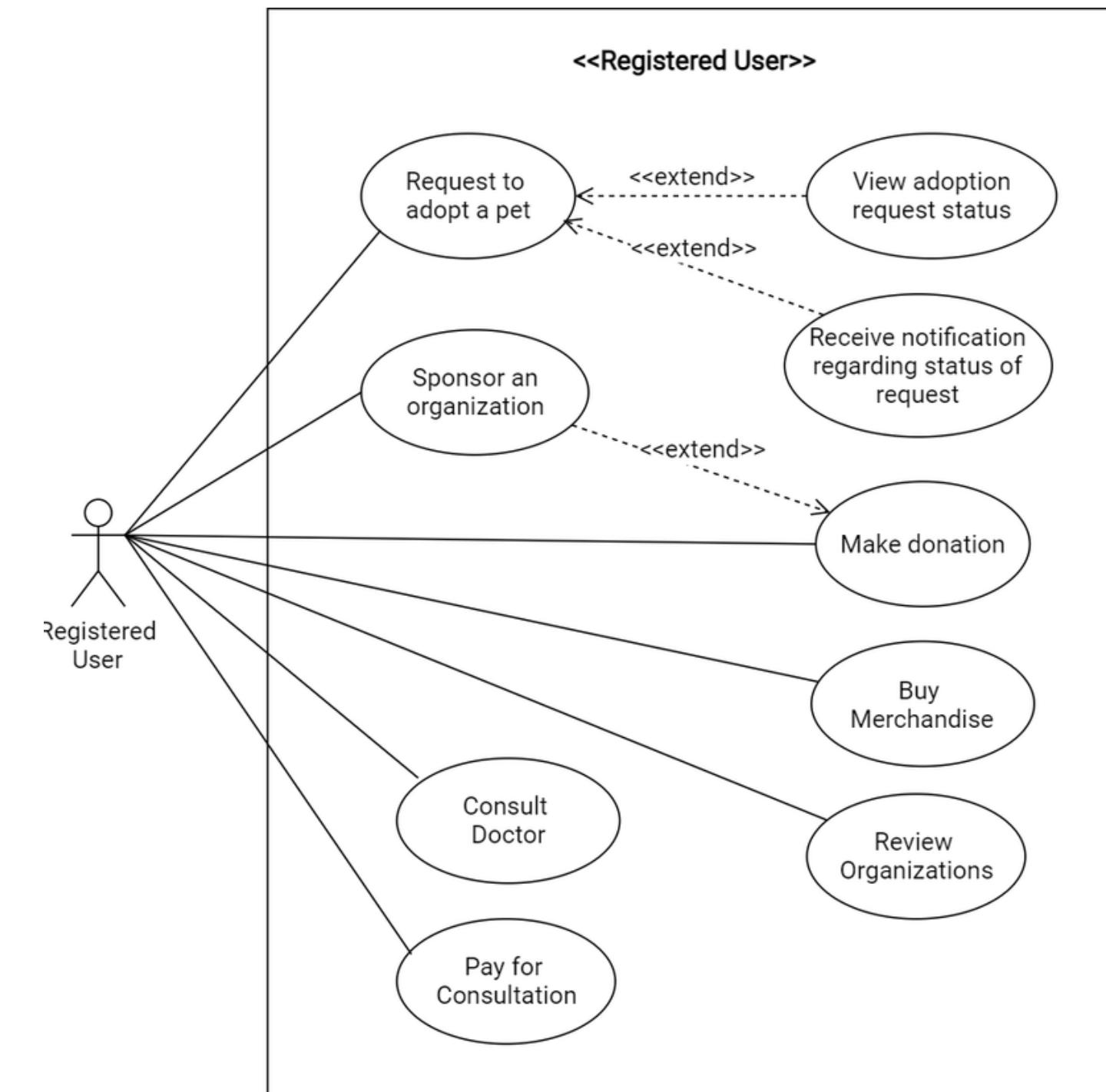
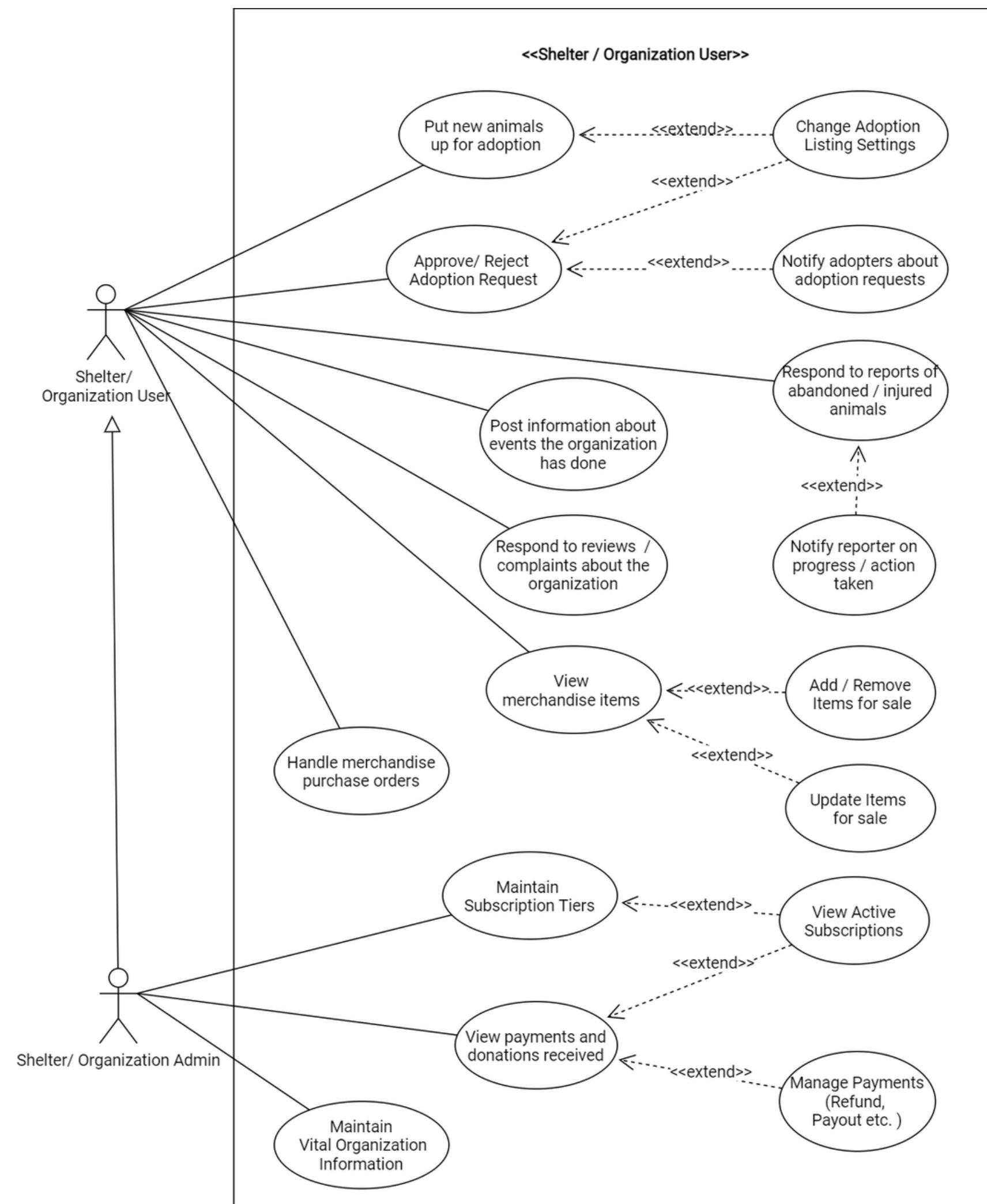


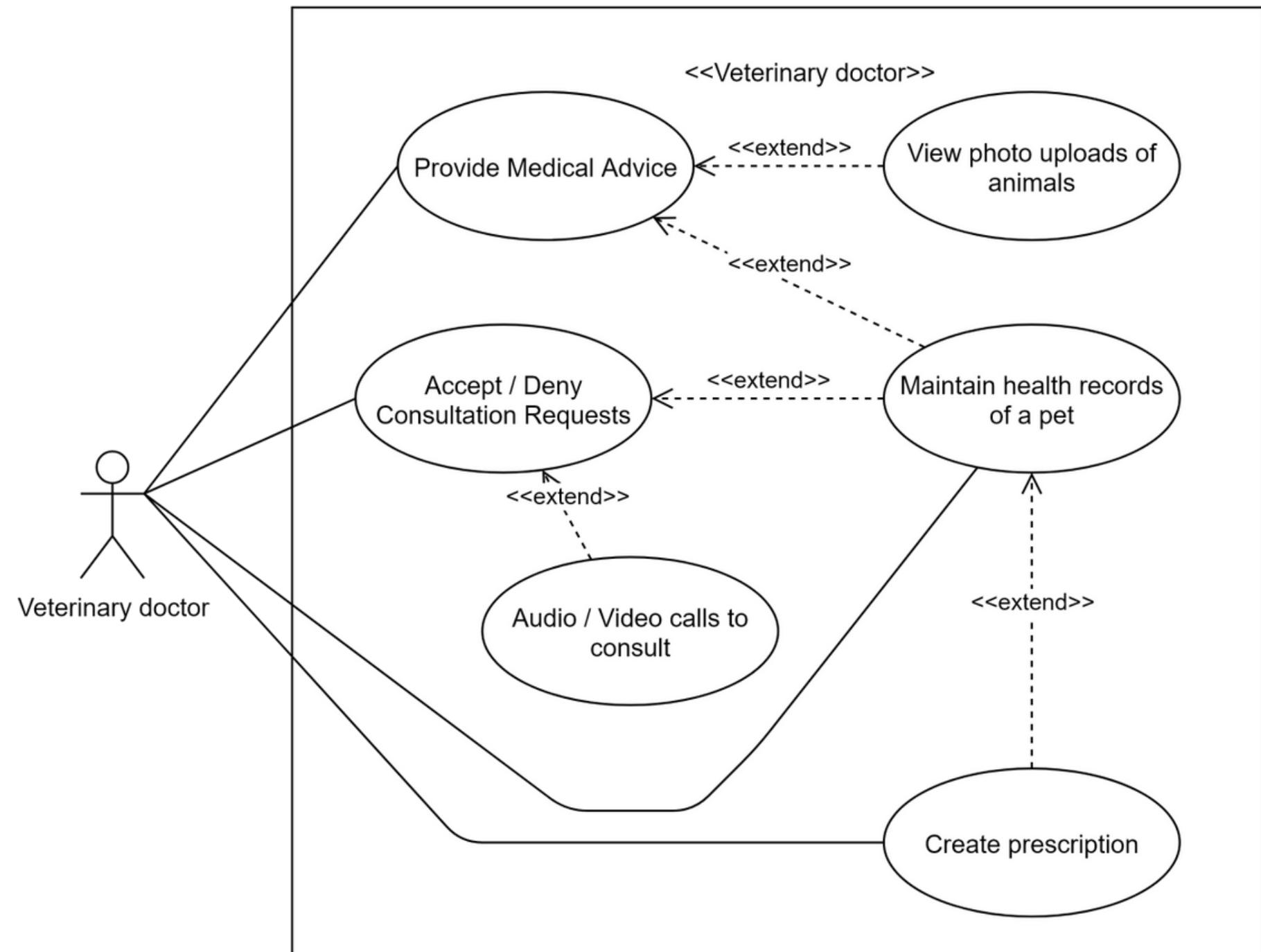
CONSTRAINTS

- Only one account per user
- Only registered users are allowed to request adoption
- An animal requested for adoption will be reserved for that user
- 48 hour time frame to complete an adoption request
- A case of an animal being reported can be allocated to only one organization
- A single time slot for a veterinary consultation can be allocated to only one user

USE CASE DIAGRAMS







USER FUNCTIONALITIES

Unregistered User

- Browse for pets
- View organization profiles
- Report injured/ abandoned animals
- View emergency contact numbers to handle injured/ abandoned animals
- Call emergency contact
- Receive updates on reported animal
- Sign up

Registered User

- Functionalities of unregistered user
- Sign in
- Update user profile
- Change password
- Request pet adoption
- View status of request
- Receive notification regarding update to request
- Make donations
- Sponsor an organization
- Buy merchandise
- View purchase, donation, sponsorship history
- Review organizations
- Consult veterinarians
- Pay for consultation

Organization User

- Sign in
- Update user profile
- Change password
- Create organization users
- Reset password of organization users
- Put new animals up for adoption
- Change adoption listing settings
- Approve/ reject adoption requests
- Notify adopters about approval/ rejection of adoption request
- Respond to reports of abandoned/ injured animals
- Update reporter on progress of reported animal
- Post information on the organization's past events
- Respond to complaints/ reviews about the organization

Organization User cont'd

- Add/ remove items for sale
- View merchandise items
- Handle merchandise purchase orders

Organization Admin

- Functionalities of organization user
- Register organization
- Sign up
- Reset password
- Maintain sponsorship tiers
- View active sponsorships
- View donations received
- Refund payments
- Enable/ Disable organization users
- View organization users
- Assign roles to users
- Reset password of organization user

Veterinarian Doctor

- Register as a veterinarian doctor
- Sign in
- Update user profile
- Change password
- Reset password
- View photo uploads of animals
- Provide medical advice
- Accept/ Deny consultation requests
- Consult through audio/ video calls
- Update health records of pets
- Create prescription

ACTIVITY DIAGRAMS

