

# Animal Welfare-Based Mobile Application System for Kelab Pencinta Haiwan Universiti Utara Malaysia

**PETHERO KPH UUM**



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**A21EM0207**

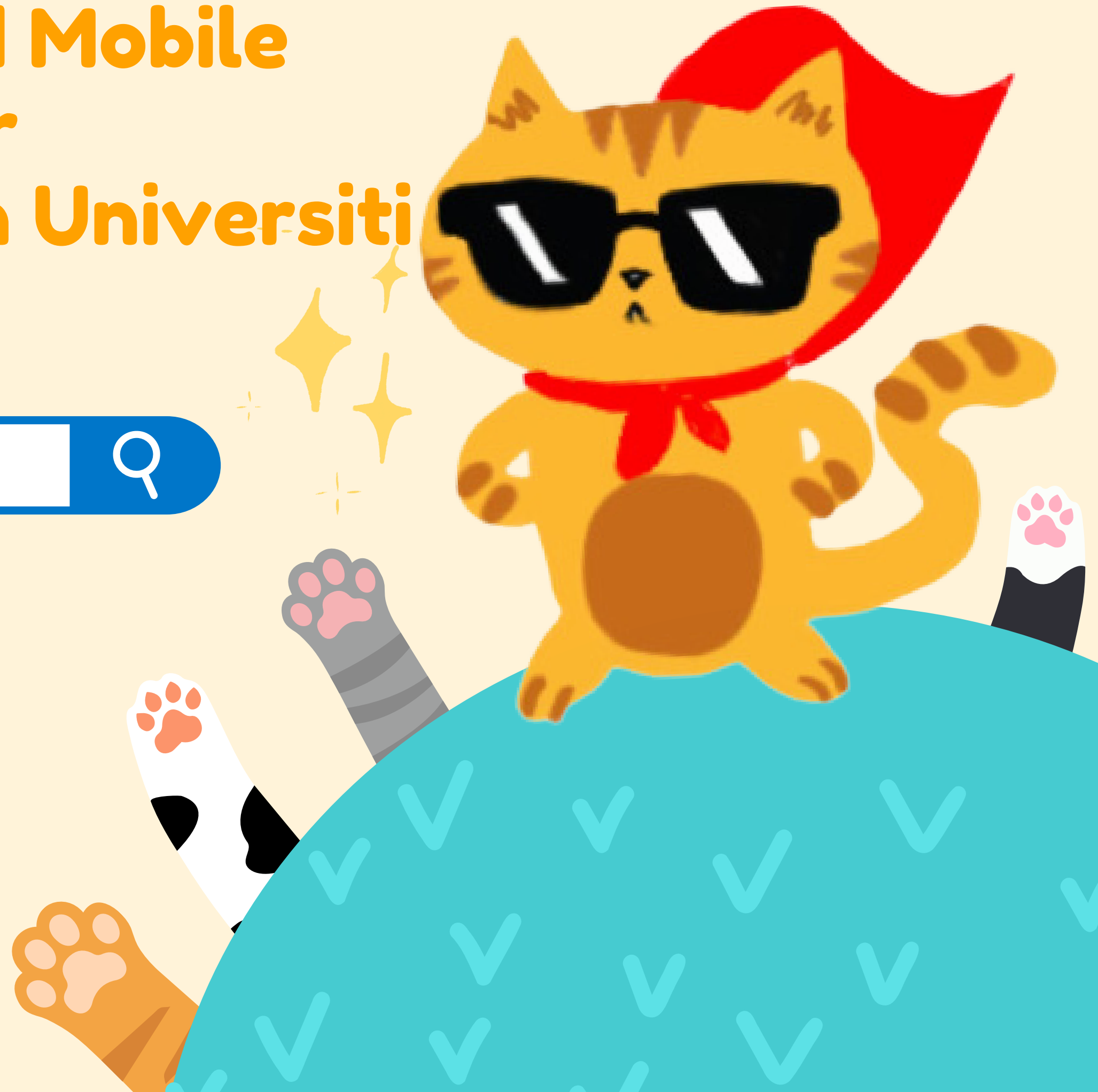
**TS. MARINA BINTI MD ARSHAD**

<https://youtu.be/S79TD39rfIA>

(Presentation Video)

<https://youtu.be/7EeCQ1SNyMY>

(Reflection Video)



# Introduction

Stray animals issues have become a significant problem around the globe



## RESPONSIBILITY

TO NOT NEGLECTING  
THEIR WELFARE IS VITAL  
PART OF BEING HUMANE  
AND EMPATHETIC



## INITIATIVES

LOCAL ORGANIZATIONS  
PLAY CRUCIAL ROLE TO  
ENSURE THE WELL-BEING  
OF THESE ANIMALS



## THE NEED FOR SUPPORT

NEED TO STREAMLINE  
MANAGEMENT, ENHANCE  
VISIBILITY & OPTIMISE  
RESOURCES

# Problems & Solutions

## Transparency Issues

Donation progress tracking,  
Animal's Updates

## Financial Strain

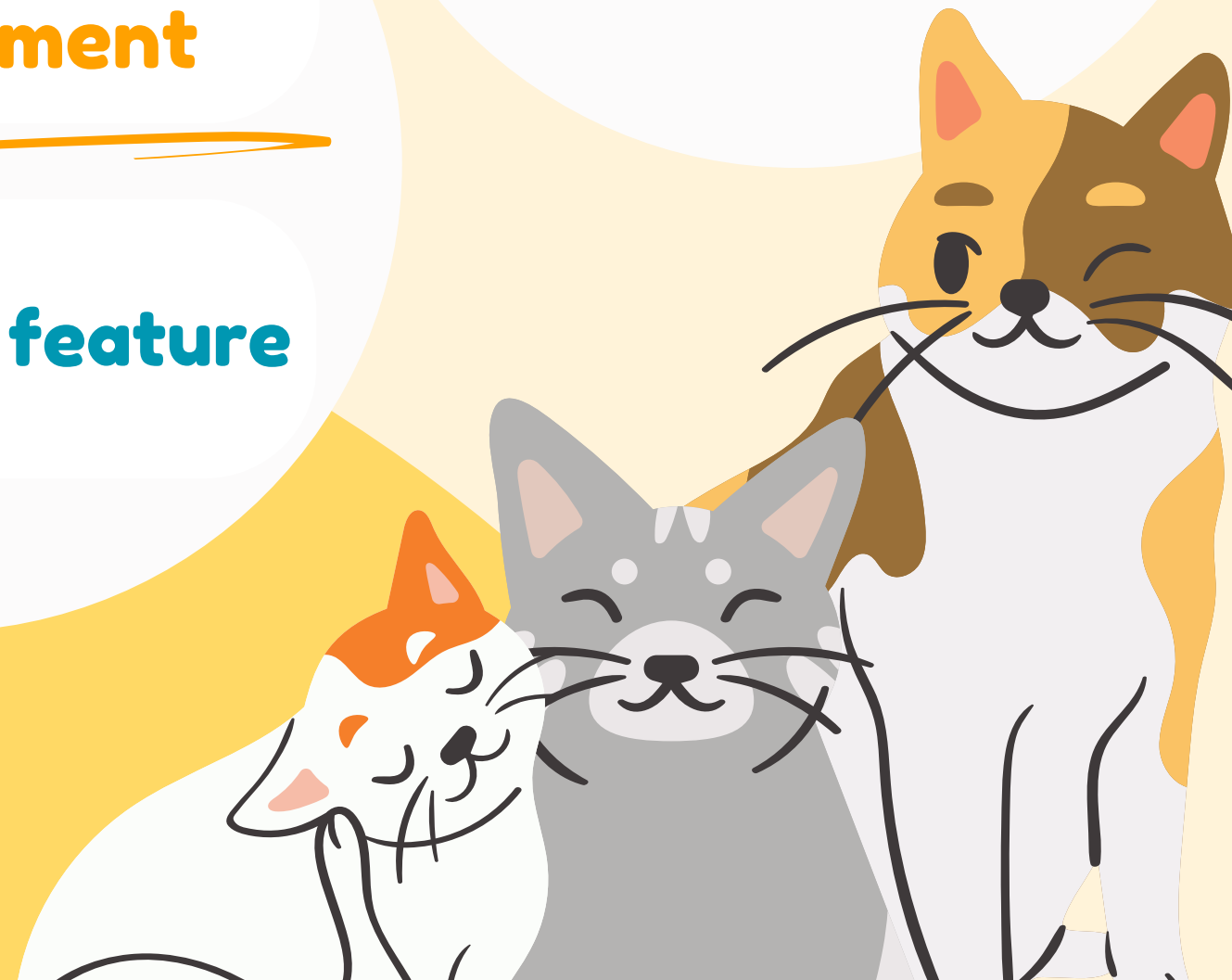
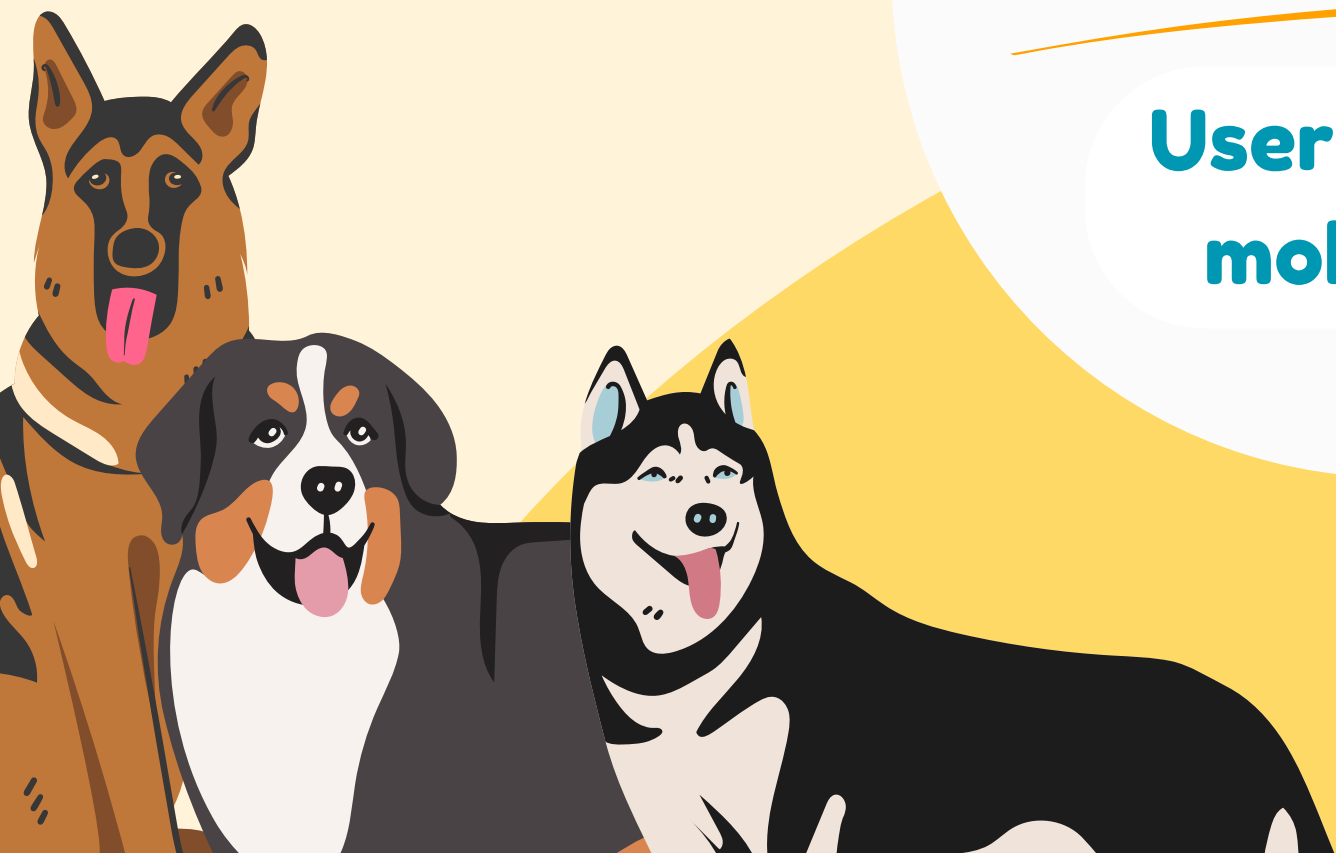
Donation feature

## Inefficient Information Dissemination

User-friendly mobile app

## Lack of Volunteer Engagement

Volunteer feature



# Objectives



**Review  
Current  
Inefficiencies**



**Develop a  
Centralized  
Application**



**Test and  
Evaluate  
Effectiveness**



# Scopes



**Enable donations,  
adoption, volunteer  
recruitment, animal  
updates, posting**

**Allow non-members  
to donate, adopt,  
volunteer, and submit  
report**

**Focus on KPH  
UUM, including  
students and  
staff**

**Only KPH  
UUM can  
upload and  
verify vet  
bills and  
report**

**Focus  
exclusively  
on stray  
animals**



# Project Aim



**Develop a centralized mobile app for KPH UUM to efficiently manage welfare initiatives, promote community engagement, and ensure transparent and trusted volunteering and donation processes for sustainable stray animal care.**



# Case Study

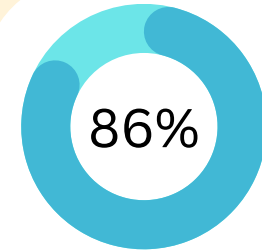
## KPH UUM



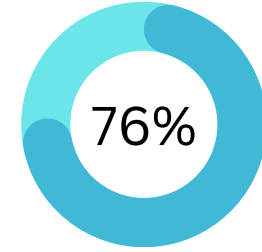
Established under  
Universiti Utara  
Malaysia

Founded  
**2012**

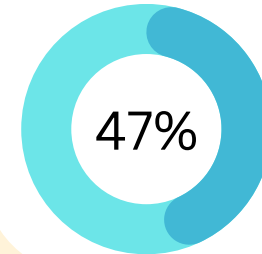
Registered  
**2023**



86% prefer donating:  
track how donations  
are used and monitor  
progress

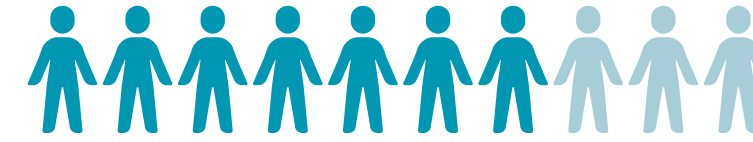


76% agreeing that  
continuous updates is  
very important

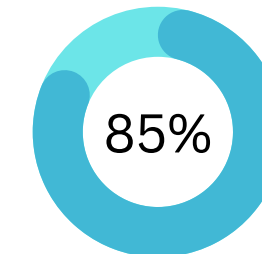


47% agreeing that  
there is a lack of  
information

66% follow KPH UUM on  
social media



50% unaware of donation posts



85% would donate  
if the process were  
more accessible via  
dedicated app.

87% are willing to volunteer  
using a dedicated app



Although 63%  
haven't volunteered  
at all

↑ Key Insights

## Manual Operation of Kelab Pencinta Haiwan Universiti Utara Malaysia

FOCUS **Stray Animals  
Welfare**

20  
committee

500  
volunteers

7

active bureaus

Cat Feeding, Protocol, Rescue  
Team, Public Relations, Shelter,  
Media, Entrepreneurship

Led by President Muhammad  
Najmi Zaim bin Md Zohir

Donation

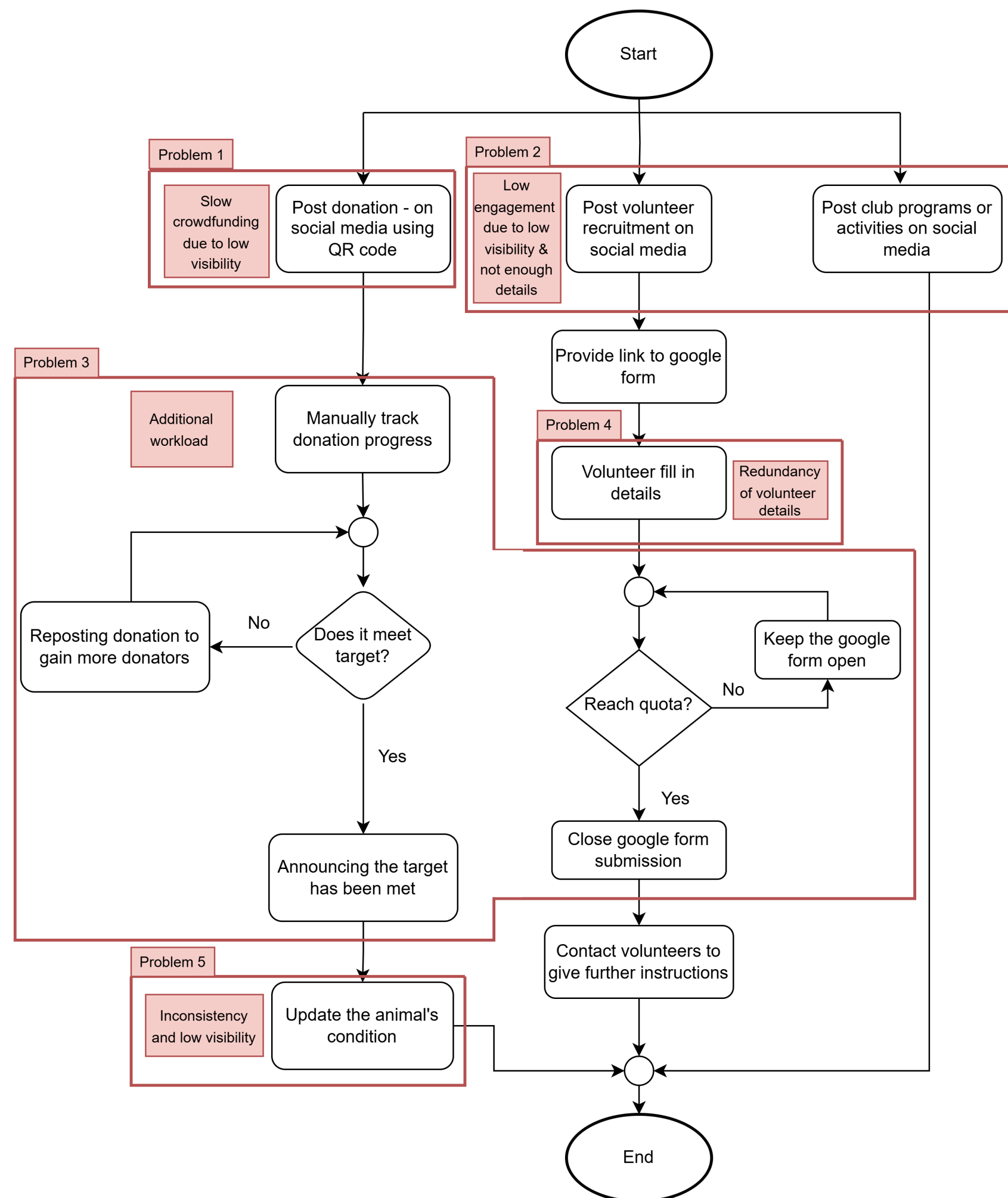
Progress  
Manual  
Tracking

Animal  
Updates

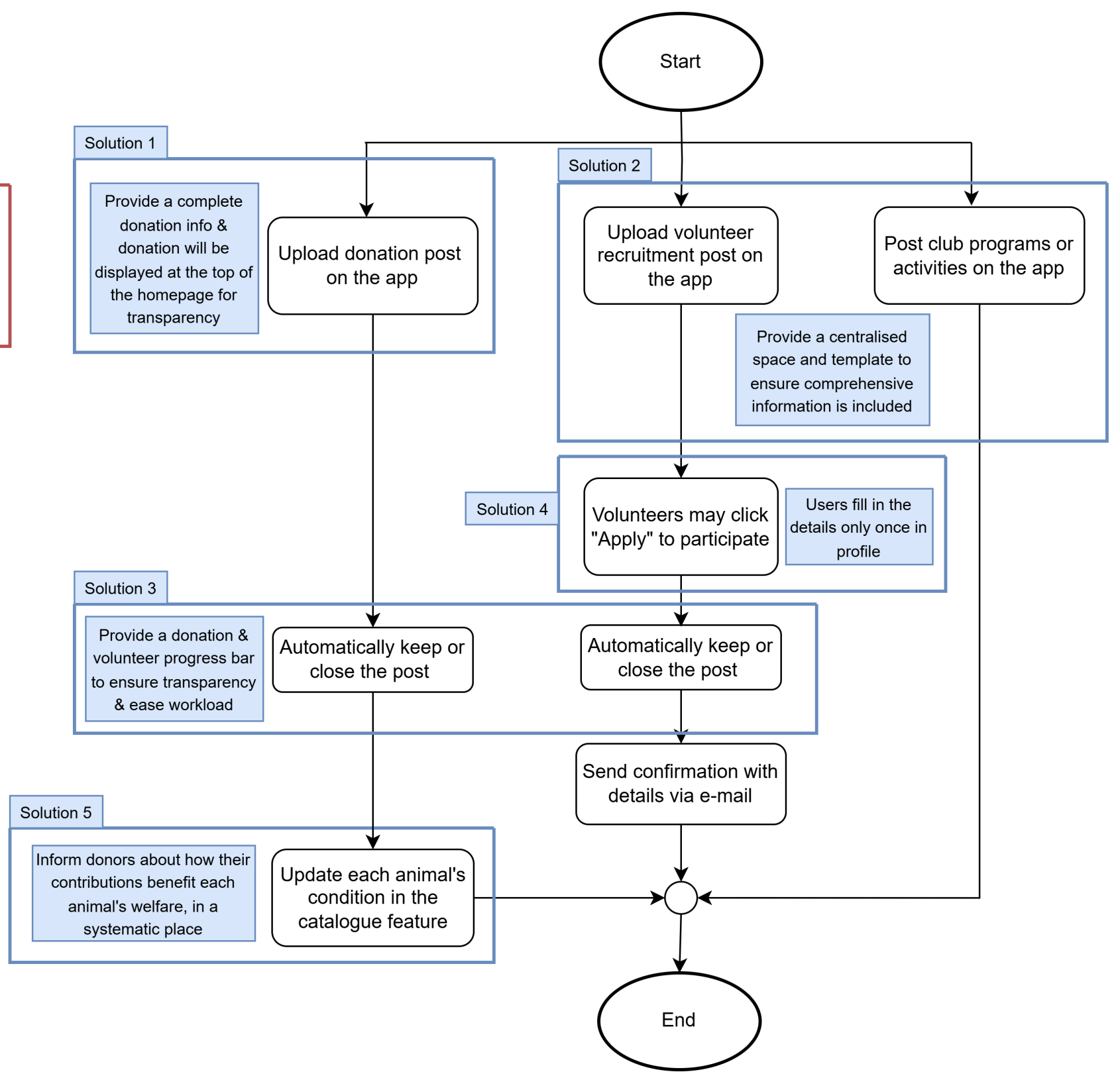
Advertise  
Programs

Volunteer  
Recruitment

# Manual Operation and Problems



# Application System and Solution



# Comparison

## with existing systems

Animal Welfare Application/ Functionalities	SRMS	PAW	SayangPet.my	<u>Pethero</u> KPH UUM
Application Type	Web Application	Mobile Application	Web Application & Mobile Application	Mobile Application
Donation	Yes	Yes	Yes	Yes
Updates on Rescued Animals	No	No	No	Yes
Volunteer	Yes	No	No	Yes
Report	Yes	No	No	Yes
News Posting	No	No	No	Yes
Fostering	Yes	No	No	Yes (Included in Volunteer)
Adoption	Yes	No	Yes	Yes
Lost and found	No	No	Yes	No

Application System / Donation Features	SRMS	PAW	SayangPet.my	Pethero KPH UUM
Progress Tracking	No	Yes	Yes	Yes
Details of Rescued Animal	No	Yes	No	Yes
Payment Gateway Integration	No	Yes	Yes	Yes
Separated Section for Vet Bills	No	No	No	Yes

Application System / Volunteering Features	SRMS	Pethero KPH UUM
Basic Details	Yes	Yes
Friendly User Interface	No	Yes
Wait for Admin Approval	Yes	No
Volunteer Capacity Update	Yes	Yes
Task and Information Details	No	Yes

Application System / Report Features	SRMS	Pethero KPH UUM
Report Status	Yes	No
Report on Animal	Yes	Yes
Report on Animal Updates	No	Yes

# Technology used

Firestore

**Firebase**



**VS Code**

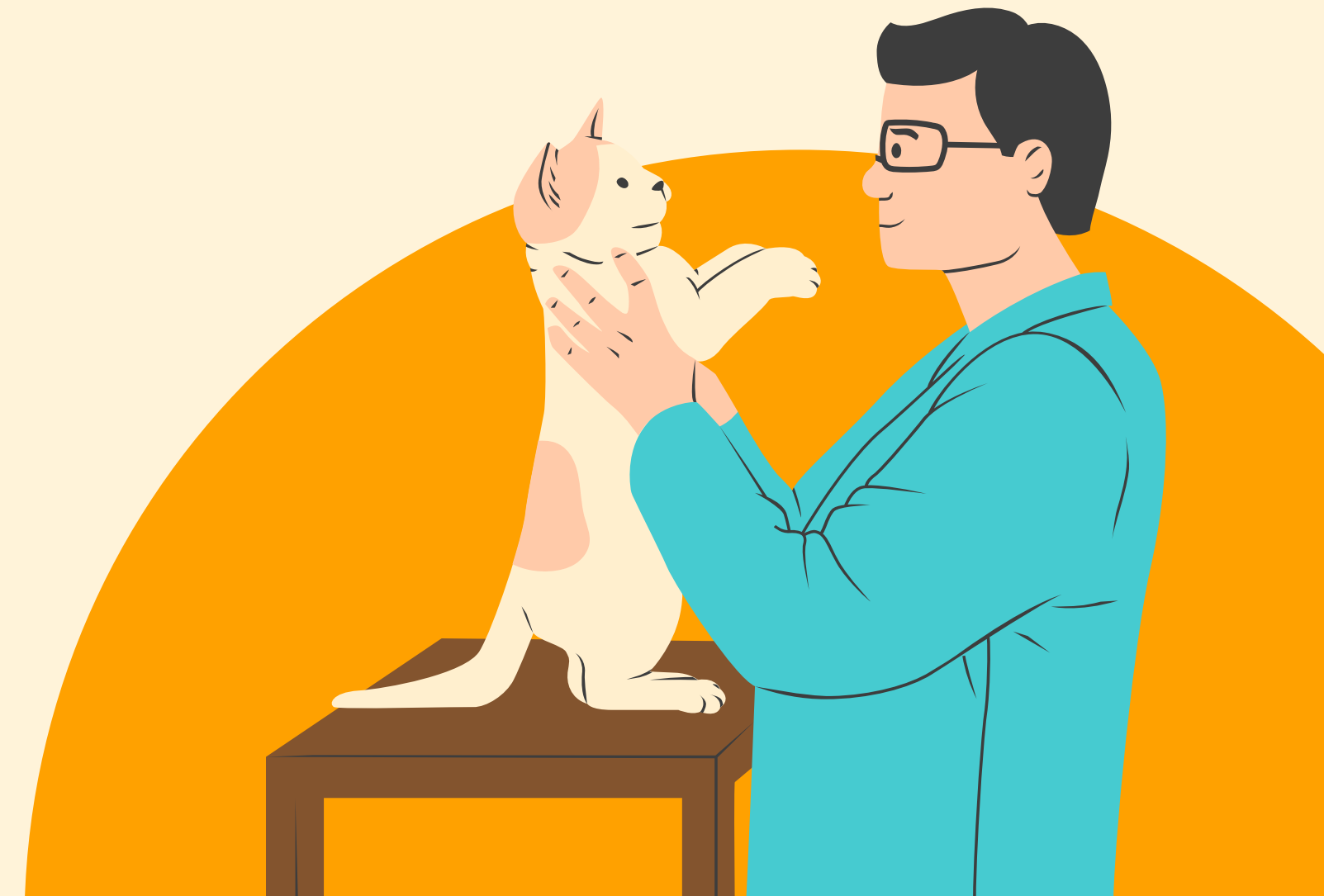


Visual Studio Code

**Expo**



**React Native**





# Methodology: **Rapid Solo Software Development (RSSD)**

**Agile-based,  
tailored for solo  
developers**

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**Prioritizes  
efficiency,  
modularity, and  
revisability**

## **PHASES:**

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**MEET  
PLAN  
DESIGN  
DEVELOP  
TEST  
EVALUATE**



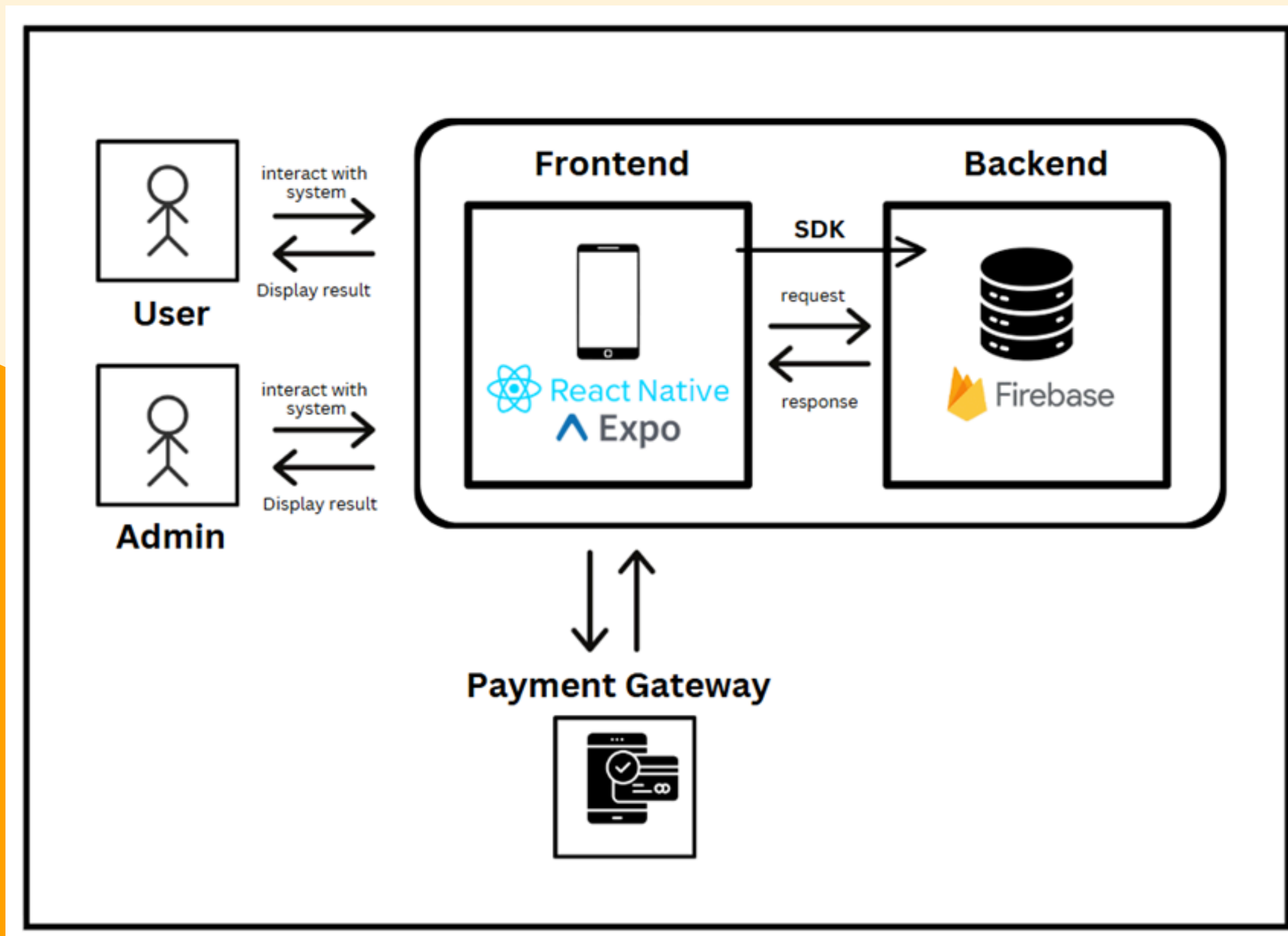
# DESIGN

## use case diagram

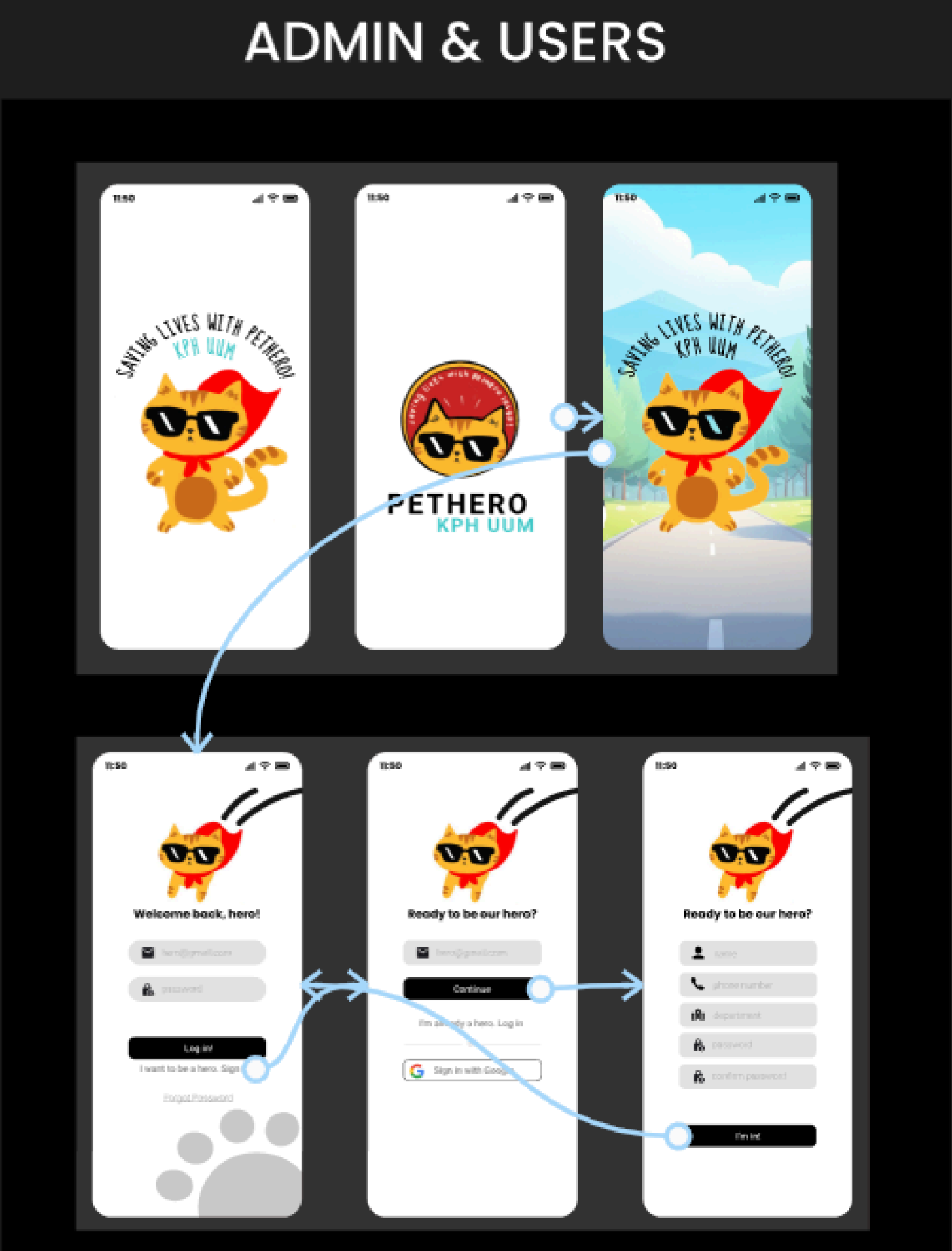


# DESIGN

## system architecture design



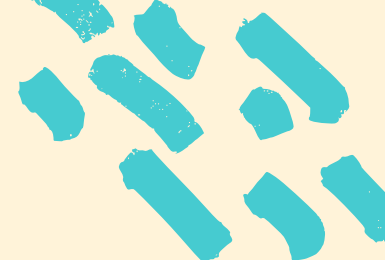
# Interface Design & Page Navigation







# Contribution



**Streamlining  
Donation and  
Volunteer  
Management**

**Encouraging  
Community  
Involvement**

**Ensuring  
Transparency  
and Building  
Trust**

**Enhancing  
Visibility and  
Information  
Sharing**





**THANK EOW**

