# "HELPING PAW"
# AN APPLICATION TO HELP STRAY ANIMALS

A PROJECT REPORT

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR
THE AWARD OF THE DEGREE
OF

MASTER OF DESIGN
IN
PRODUCT DESIGN

Submitted by

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# CANDIDATE'S DECLARATION

I, **Prachi Tirpude**, Roll No - **2K21/MDPD/11**, student of M.Des (**Department of Design**), hereby declare that the project Dissertation titled **"HELPING PAW AN APPLICATION TO HELP STRAY ANIMALS"** which is submitted by me to the **Department of Design**, Delhi Technological University, Delhi in partial fulfillment of the requirement for the award of the degree of Master of Design is original and not copied from any source without proper citation. This work has not previously formed the basis for awarding any Degree, Diploma Associateship, Fellowship, or other similar title or recognition.

Place: Delhi

Date: 26.04.2023                                                   Prachi Tirpude

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## CERTIFICATE

I hereby certify that the Project Dissertation titled **"HELPING PAW- AN APPLICATION TO HELP STRAY ANIMALS** which is submitted by **Prachi Tirpude**, Roll No - **2K21/MDPD/11**, **Department of Design**, Delhi Technological University, Delhi in partial fulfillment of the requirement for the award of the degree of Master of Design, is a record of the project work carried out by the students under my supervision. To the best of my knowledge, this work has not been submitted in part or full for any Degree or Diploma to this University or elsewhere.

Place: Delhi                                                                     Prof. Partha Pratim Das

Date: 26.04.2023                                                                     SUPERVISOR

# ACKNOWLEDGMENT

# ABSTRACT

This study describes the development of a mobile application called Helping Paw, designed to provide a platform for people to assist stray animals in need. Stray animal populations, mainly dogs and cats, have been increasing each year, and as cities expand and animal welfare organizations remain scarce, these animals struggle to find basic necessities. The first phase of this research involved an in-depth examination of the causes of stray animal populations, their increasing numbers, behaviour, present situation in India, and solutions proposed by the government. The second phase emphasized connecting with people to understand their views on helping stray animals. The concept of Helping Paw and methods to evaluate its effectiveness are also discussed in detail. The application's design is based on people's interactions with different applications. The research results indicate that the Helping Paw application is an effective way to help stray animals.

# TABLE OF CONTENTS

# TABLE OF FIGURES

# CHAPTER 1

# INTRODUCTION

Stray animals, also known as feral animals, are domesticated animals that have either been abandoned or have become lost and are living without the care and control of humans. These animals can include cats, dogs, and other domesticated animals. Some stray animals are innocent and friendly, while others can be dangerous and pose a threat to humans and other animals.

Innocent stray animals are often victims of neglect or abandonment by their owners, while dangerous ones may have been mistreated or raised in the wild. Stray animals can pose a variety of risks to humans, including biting and transmitting diseases. Additionally, they may cause damage to property or disrupt local ecosystems by hunting local wildlife.

Nowadays, mobile applications are gradually emerging as the preferred platform for most people. There is an increasing number of applications being developed to ensure that services available on desktop computers can also be accessed via mobile devices. Consequently, the market for these applications is expanding rapidly. With the constant influx of fresh and inventive ideas, the selection of services and functions offered is continually widening to cater to a broad range of consumers.

To address the issue of stray animals, many organizations and individuals have developed mobile applications that aim to help track and manage stray animal populations. These apps can be used to report sightings of stray animals, find and contact local animal control services, and even help connect lost pets with their owners.

Mobile applications can also provide information on how to safely interact with stray animals and what to do in case of an encounter. This information can be especially helpful for those who live in areas with high stray animal populations or who work in industries that regularly encounter stray animals, such as law enforcement and animal rescue.

## 1.1. Introduction to the Project

This project proposes the development of a mobile application that aims to guide people in helping stray animals. The application will use location-based services to help users locate stray animals in their vicinity and report any cases of animal cruelty or abandonment. Furthermore, the app will facilitate the adoption process by connecting users with animal shelters and rescue organizations. This initiative has the potential to make a significant impact on the lives of stray animals and create awareness among the public about animal welfare.

## 1.2. Need of the Project

This project proposes the development of a mobile application that aims to guide people in helping stray animals. The application will use location-based services to help users locate stray animals in their vicinity and report any cases of animal cruelty or abandonment. Furthermore, the app will facilitate the adoption process by connecting users with animal shelters and rescue organizations. This initiative has the potential to make a significant impact on the lives of stray animals and create awareness among the public about animal welfare.

## 1.3. Objective of the Project

The objective of this project is to create a mobile application that can assist in the rescue and care of stray animals by providing a platform for users to locate and report stray animals, connect with animal shelters and rescue organizations, and create awareness about animal welfare. The application aims to improve the lives of stray animals by enabling users to take action towards their protection and well-being.

## 1.4. Design Process of the Project

In this project, to find the solution of the given project the five phases of design thinking process have been used.

The five phases of design thinking process are:

- Phase 1: Empathize
- Phase 2: Define
- Phase 3: Ideate
- Phase 4: Prototype
- Phase 5: Test.

## 1. 5. Result of the Project

In conclusion, the idea of creating a mobile application to connect animal lovers with NGOs, veterinary clinics, and animal shelters is a promising one. Such an app could make it easier for people to help stray animals in need, report cases, and contact organizations that can provide assistance. Key considerations for the project include user experience, security and privacy, partnerships with relevant organizations, scalability, and testing and feedback. With the right approach, this app has the potential to make a positive impact on animal welfare and help address the needs of animals in a user-friendly and convenient way.

# CHAPTER 2

# EMPHATHIZE

## 2.1 Secondary Research

## 2.1.1 Literature Review

There are approximately 6.2 crore stray dogs and 91 lakh street cats in India, with 77% of the country's population reporting seeing a stray dog at least once a week. 1 The problem of stray animals in India is not only a humanitarian issue but also a public health concern. Stray animals can carry diseases such as rabies, which can be passed on to humans. In addition, such animals can also cause traffic accidents, and property damage, and can be a problem for local communities. Fortunately, there is a solution to this problem – adoption, according to the blog by Raj Kantak in Times of India.

He also mentioned that raising awareness about stray animals is a critical step towards creating a more compassionate and humane society. Education about the laws protecting strays, the importance of animal adoption, and ways in which people can help is necessary to achieve a stray-free nation. Prevention of Cruelty to Animals Act provides guidelines on how to feed and care for stray dogs, and people must be educated on these laws to prevent animal abuse. Furthermore, animal welfare organizations rely heavily on volunteers to help spread awareness, raise funds, and assist in caring for animals. Volunteers can use their skills and talents to create compelling stories, write, advertise on social media, or take photographs to help promote animal adoption and encourage others to get involved.

Besides, raising awareness about stray animals is not only limited to individual efforts. Businesses and corporations can also play an essential role in creating a more compassionate society by supporting animal welfare organizations and promoting animal adoption. For example, companies can donate a portion of their profits to animal welfare organizations, encourage employees to volunteer, and create

social media campaigns to raise awareness about stray animals. By working together, individuals, businesses, and animal welfare organizations can make a significant impact on the lives of stray animals and make India a stray-free nation.

Ministry of Fisheries, Animal Husbandry & Dairying gave some insight about stray dogs. National level of information regarding Livestock population is collected every 5 years. The last livestock census was conducted in 2019 and next census is due in 2024. As per 2019 census, total population of stray dog and stray cattle in the country was 203.31 lakh. The management of public health, sanitation and cattle pounds comes under the purview of the State/UT Government and the local bodies need to evolve the mechanism to control stray animals in order to protect the citizens.

The Constitution of India places the responsibility of preserving, protecting, and improving animal stock and preventing animal diseases, as well as organizing agriculture and animal husbandry on modern and scientific lines, on the state. As part of this mandate, states may establish and run cattle pounds or Gaushala shelters to control stray animal populations. It is the duty of every person responsible for an animal to ensure its well-being and prevent unnecessary pain and suffering, and failure to provide sufficient food, drink, or shelter is punishable under the Prevention of Cruelty to Animals Act, 1960. While the central government has rules for animal birth control, it is the responsibility of local bodies to implement these programs. The Animal Welfare Board of India provides financial assistance to recognized Gaushalas, animal welfare organizations, NGOs, SPCAs, and local bodies for shelter establishment and maintenance, animal medicine and equipment purchase, veterinary camps, and rescued cattle maintenance. Additionally, financial assistance is provided for ambulance services for animals in distress. Annexure-I contains state-wise data on animal-related deaths from 2018-2020, and no Gaushalas have been established under the Rashtriya Gokul Mission in the past three years.

In India today Abhishek Anand wrote about "Humans vs strays: Why dog bite cases are on the rise in India" and he mentioned that, Dogs have been a loyal companion to humans for thousands of years, but in India, the increasing population of stray dogs has become a major issue. The rise in the number of packs has led to a scarcity of resources, which is causing aggressive behavior in dogs and incidents of attacks on humans and other animals. Overpopulation also contributes to the problem,

as one female dog can give birth to 20 puppies in a year. The issue of aggressive dogs is controversial and needs to be addressed practically. Feeding dogs at designated places away from homes is important to prevent territorial tendencies that can lead to disputes with other dogs and humans.

One of the reasons for the increasing population of stray dogs is the lack of spaying and vaccination drives by civic agencies. The Supreme Court order of 2001 makes it the responsibility of civic agencies to control the population of stray dogs by spaying them. However, the lack of will and resources has resulted in a failure to launch effective drives. Although there are NGOs and individual dog lovers who help in spaying and vaccinating strays, it is challenging for them to control the stray dog population without adequate support from civic bodies.

Aggressive behavior in dogs is another issue that needs to be addressed. Not all stray dogs are aggressive, but one aggressive dog can form a pack of two, three or more dogs as it becomes the alpha of the pack. Dogs in the pack tend to become aggressive and dangerous for humans and other animals, including pet dogs and stray bovines. If any dog feeder spots the first sign of aggression in any stray dog, it should be immediately reported to the civic agencies. The dogs should be sent to a dog shelter for the safety of others, as ignoring signs of aggression and defending aggressive dogs can lead to a disastrous situation.

In conclusion, the issue of stray dogs in India is a complex problem that requires a multi-pronged approach. Civic agencies should take responsibility for spaying and vaccinating stray dogs, while NGOs and individual dog lovers can provide support. Aggressive behavior in dogs should be identified and addressed, and dogs should be fed at designated places away from homes to prevent territorial tendencies. With the cooperation of all stakeholders, the issue of stray dogs in India can be effectively tackled.

### 2.1.2 Competitive Analysis

Comparative Analysis of the application "Let It Wag" which is available in the market and have the same objective for stray animals are done to identify its user flow. Analyze the Let it Wag app along with other relevant apps to understand.

Here's a breakdown of each application with an overview, strengths, and weaknesses in the context of helping stray animals:

**Wag!:**

Overview:

Wag! is an on-demand pet care application that specializes in dog-related services such as dog walking, pet sitting, and boarding. It operates in several cities across the United States and has a large network of trusted pet care professionals.

Strengths:

- Strong brand presence and recognition.
- Real-time GPS tracking and in-app messaging for pet owners.
- Provides photo updates to pet owners during the service.
- Offers a wide range of dog-related services.

Weaknesses:

- Primarily focused on dog care, may not cater to other types of pets.
- Limited availability in certain areas.
- Mixed reviews regarding the quality and reliability of some pet care professionals.

**Rover:**

Overview:

Rover is a popular pet care platform that connects pet owners with local pet sitters, dog walkers, and boarding services. It operates in multiple countries and offers a wide range of pet care options.

Strengths:

- Large network of pet care providers, offering flexibility in scheduling and service options.
- Robust review system and comprehensive profiles of caregivers.
- Provides insurance coverage for services booked through the platform.
- 24/7 customer support available.

Weaknesses:

- Similar to Wag!, Rover is primarily focused on dogs and may not cater as extensively to other pet types.
- Some users have reported issues with inconsistent service quality.
- Limited availability in certain regions outside of major cities.

**Care.com:**

Overview:

Care.com is a comprehensive online platform that connects users with caregivers for various needs, including pet care. It provides a range of services such as child care, senior care, and pet care.

Strengths:

- Wide range of services available, including pet care.
- Detailed caregiver profiles and reviews.
- Scheduling and payment capabilities within the platform.
- Provides options for different types of caregivers, including pet sitters and dog walkers.

Weaknesses:

- Lack of specialization and focus on pet-specific needs compared to dedicated pet care platforms.
- Limited availability in certain areas, especially outside of major cities.
- Varying quality of caregivers, requiring careful vetting by users.

**PetBacker:**

Overview:

PetBacker is a global pet care marketplace that connects pet owners with local pet sitters, dog walkers, and other pet care providers. It operates in multiple countries and covers a wide range of pet care services.

Strengths:

- Extensive global presence, offering services in various countries.
- Allows users to browse profiles, read reviews, and directly communicate with caregivers.
- Provides a diverse range of pet care options.

Weaknesses:

- Lack of localized approach and personalized features compared to more specialized platforms.
- Inconsistent service quality reported by some users.
- Limited availability in certain regions.

**Let It Wag:**

Overview:

Let It Wag is a specialized pet care application that focuses on providing comprehensive services for various pet types, including dogs, cats, birds, and more. It offers services such as pet sitting, dog walking, grooming, and veterinary care.
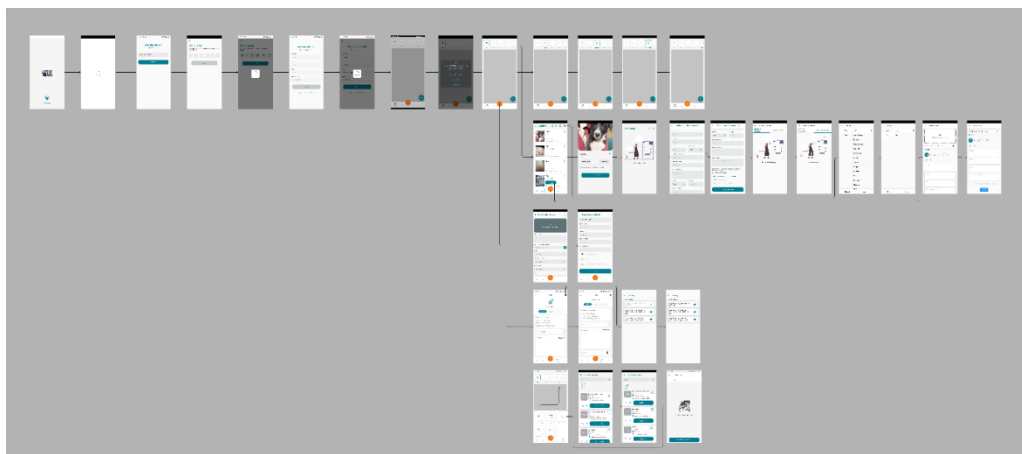


Fig 1 Screens for competitive analysis

Strengths:

- Emphasis on personalized care and attention for pets.
- Availability of experienced and vetted professionals.
- Inclusion of various pet types, catering to a wide range of pet owners.
- User-friendly interface, real-time updates, and in-app communication for convenience and reliability.

Weaknesses:

- Less brand recognition compared to larger platforms.
- Limited geographic availability compared to more established competitors.
- May have a smaller network of caregivers compared to larger platforms.
- Please note that the strengths and weaknesses listed above are based on general observations and user feedback. Actual experiences may vary for individual users.

## 2.2 Primary Research

## 2.2.1 User Study

For some quantitative and qualitive research about the people's feelings and actions towards the stray animals, I created some questions with options of answers and circulate among people, friends, family through social media. The outcome are as follows:
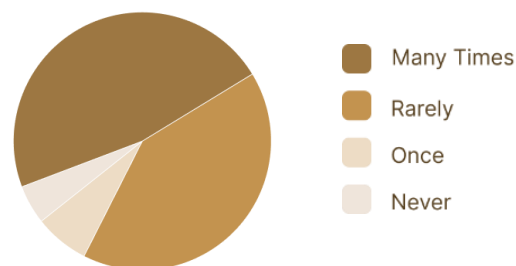
- Have you ever come across any hurt/starving animal?



Fig 2 Survey data interpretation

- Have you ever come across any hurt/starving animal?



Want to help but don't know what to do
Gave food
Assume someone will help
Call Vet or NGOs
Other
Ignored

Fig 3 Survey data interpretation

## 2.2.2 Personal Interview

I took interview of some people who live in the society and some friends talked about issues with stray animals.
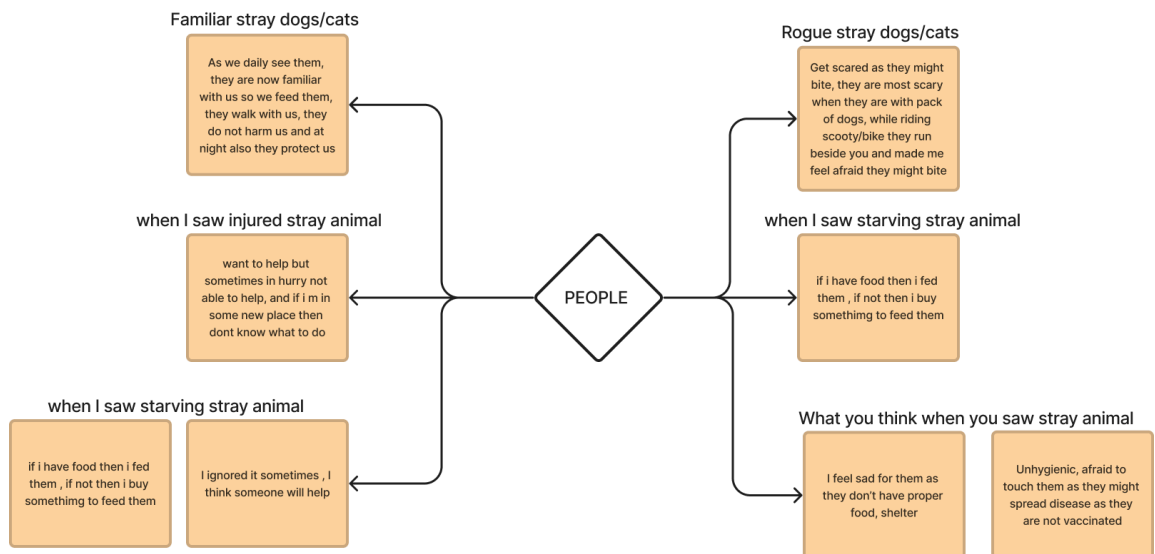
And outcome is as shown below:



Familiar stray dogs/cats

As we daily see them, they are now familiar with us so we feed them, they walk with us, they do not harm us and at night also they protect us

Rogue stray dogs/cats

Get scared as they might bite, they are most scary when they are with pack of dogs, while riding scooty/bike they run beside you and made me feel afraid they might bite

when I saw injured stray animal

want to help but sometimes in hurry not able to help, and if i m in some new place then dont know what to do

when I saw starving stray animal

if i have food then i fed them , if not then i buy somethimg to feed them

PEOPLE

when I saw starving stray animal

if i have food then i fed them , if not then i buy somethimg to feed them

I ignored it sometimes , I think someone will help

What you think when you saw stray animal

I feel sad for them as they don't have proper food, shelter

Unhygienic, afraid to touch them as they might spread disease as they are not vaccinated

Fig 4 Interview data

# CHAPTER 3

# IDEATION

## 3.1 Brainstorming

After conducting the competitive analysis of the above applications, let's brainstorm some ideas based on the insights gained:

- Niche Expansion: Since Let It Wag already offers comprehensive pet care services for various pet types, one idea could be to further expand its niche by targeting specific pet owners' needs. For example, focusing on specialized services like exotic pet care or elderly pet care could attract a specific segment of pet owners.

- Enhanced Localization: To overcome the limitation of geographic availability, Let It Wag could focus on expanding its services to more cities and regions. This would help reach a larger audience and establish a stronger presence in the pet care industry.

- Partnerships with Local Veterinarians: Collaborating with local veterinary clinics and professionals could be beneficial for Let It Wag. This partnership could provide added credibility and convenience for pet owners by offering integrated veterinary care services, such as vaccinations, check-ups, or access to telemedicine consultations through the app.

- Additional Features for User Engagement: To differentiate Let It Wag from competitors, incorporating additional features to enhance user engagement and satisfaction could be valuable. For example, adding a pet health tracking system, personalized pet care recommendations, or a loyalty program could encourage customer retention and repeat usage.

- Enhanced Background Checks and Safety Measures: Building a strong reputation for safety and trustworthiness is crucial in the pet care industry. Let It Wag can further strengthen its vetting process for caregivers, including more

thorough background checks, verification of credentials, and implementing safety measures like real-time photo updates during services to ensure transparency and peace of mind for pet owners.

- Social Community Integration: Creating a social community within the app could provide a platform for pet owners to connect, share experiences, and seek advice from fellow pet enthusiasts. This would foster engagement, user-generated content, and a sense of belonging, further enhancing the overall user experience.

- Specialized Training and Certification Programs: Let It Wag can offer specialized training and certification programs for caregivers to enhance their skills and expertise. This would attract more qualified professionals to the platform and instill confidence in pet owners knowing that their pets are being cared for by knowledgeable individuals.

- Collaborations with Local Pet Businesses: Partnering with local pet businesses, such as pet supply stores, grooming salons, or pet-friendly establishments, can create mutually beneficial relationships. This could include offering exclusive discounts, promotions, or bundled services to customers, generating additional revenue streams and increasing brand visibility.

- Seamless Integration with Smart Home Devices: Exploring integration with smart home devices, such as pet monitoring cameras or automated feeding systems, would provide added convenience and peace of mind for pet owners. This would enable real-time monitoring and control of pet-related activities directly from the Let It Wag app.

- User Reviews and Recommendations: Implementing a robust review and recommendation system within the app can help build trust and credibility. Encouraging users to provide feedback, ratings, and testimonials would assist potential customers in making informed decisions and choosing Let It Wag over competitors.

## 3.2 Point Focused on

- Less cluttering: To enhance user experience, the app should employ a clean and intuitive interface design that minimizes unnecessary elements, distractions, and visual clutter. By implementing a visually appealing layout with adequate spacing and clear typography, the app can improve readability and ease of use. Grouping related features and information together will provide a logical flow, reducing cognitive load and ensuring a seamless user experience.

- Upfront presentation of main points: The app should prominently showcase the primary features and functionalities on the home screen or main menu. It is crucial to prioritize essential actions, such as reporting a stray animal or accessing emergency services, making them easily accessible from the main interface. Clear and concise language should be used to describe the core purpose of the app, ensuring users immediately understand its main focus and benefits.

- Easy access to emergency call: Ensuring the safety of users and animals is paramount. The app should include a dedicated emergency call button or prominently display emergency contact numbers throughout the interface. The emergency call functionality should be easily accessible from any screen within the app, providing users with swift access to immediate assistance. Additional safety features, like GPS-based location sharing, can aid responders in locating users efficiently.

- Focus on important features: To optimize the user experience, the app should prioritize the most critical features aligned with its purpose. These may include reporting stray animals, accessing veterinary services, and connecting with animal welfare organizations. Streamlining the user flow and minimizing unnecessary steps or distractions will enable users to quickly navigate to these essential features. Clear instructions and tooltips should be provided to educate users about the app's core functionalities, empowering them to make a tangible difference for stray animals.

- Easy searching for NGOs, vets, and medical stores: The app should offer a robust search functionality, enabling users to effortlessly find nearby animal welfare organizations, veterinary clinics, and medical stores. Implementing filters and sorting options based on location, services offered, and user preferences will enhance the search experience. Detailed profiles for each entity, including contact information, operating hours, and user reviews, will assist users in making informed decisions and accessing the necessary resources conveniently.

- Chat with doctors: To provide real-time assistance and guidance, the app should integrate a chat or messaging feature that allows users to communicate directly with veterinarians or animal healthcare professionals. This feature should be user-friendly, secure, and ensure prompt responses from healthcare providers. Implementing push notifications will enable users to receive timely replies and important updates, further enhancing the effectiveness of the communication channel.

By incorporating these aspects into the app's design and functionality, it will deliver a user-centric experience that reduces clutter, highlights crucial features, facilitates emergency access, simplifies resource searching, and enables direct communication with healthcare professionals.

## 3.3 User Persona:



Fig 5 User Persona 1



Fig 6 User Persona 2

**3.4 Empathy Mapping**

**3.4.1 Type 1: Animal Lover**

**SAYS:**

- "I often come across stray animals in my neighborhood and feel helpless. I wish there was a convenient way to report their presence and help them."

- "It's heartbreaking to see stray animals struggling to find food and shelter. I want to make a difference and ensure their well-being."

- "I believe in the importance of animal welfare and want to contribute to creating a safer environment for both animals and people."

**DOES:**

- Actively searches online for information on how to help stray animals, such as tips for feeding and providing temporary shelter.

- Occasionally feeds stray animals in her neighborhood and sets up makeshift shelters during harsh weather conditions.

- Shares heartwarming stories and photos of stray animals on social media platforms to raise awareness and inspire others to take action.

**THINKS:**

- "There should be a mobile app specifically designed to report and assist stray animals easily. It would be great to have a centralized platform that connects me with local animal welfare organizations for guidance and support."

- "I want to connect and collaborate with other like-minded individuals in my community who share the same passion for animal welfare. Together, we can make a greater impact."

- "I believe that by providing a simple and accessible solution, we can create a more compassionate society and improve the lives of stray animals in our neighborhood."

**FEELS:**

- Priyanka feels a strong sense of sympathy and compassion towards stray animals and their struggles to survive in harsh conditions.

- She experiences frustration and helplessness when faced with limited resources and support systems for stray animals in her community.

- Priyanka has a deep sense of responsibility to make a positive impact in her neighborhood and wants to ensure the safety and well-being of both animals and people.

### 3.4.2 Type 2: Concerned Citizen

**SAYS:**

- "I'm increasingly concerned about the growing number of stray animals in our city. We need effective solutions to address this issue."

- "As a responsible citizen, I want to ensure the safety of my family and myself from potential harm caused by aggressive stray animals."

- "I strongly believe in the importance of animal welfare and want to actively contribute to making a positive change in our community."

**DOES:**

- Takes precautionary measures while walking or jogging in areas known for stray animal sightings, such as carrying a personal alarm or avoiding those areas altogether.

- Has called animal control in the past to report aggressive stray animals, prioritizing the safety of his family and the community.

- Actively shares informative articles and resources about animal welfare on social media to raise awareness and inspire others to join the cause.

**THINKS:**

- "There should be a convenient and user-friendly way to report and track stray animal sightings in our neighborhood. This would help us monitor the situation and take necessary precautions."

- "I want to have access to safety tips and guidance on how to handle encounters with stray animals, ensuring the well-being of my family and myself."

- "It would be fantastic to connect with other individuals who share a similar passion for animal welfare. By sharing experiences and knowledge, we can collectively work towards creating a more compassionate and safer environment for all."

**FEELS:**

- Rahul experiences a genuine concern and worry about the safety of his family and community, especially when encountering stray animals known for aggressive behavior.

- He empathizes with the struggles of stray animals and feels a sense of responsibility to ensure their well-being and prevent cruelty towards them.

- Rahul is motivated and driven to take action, as he believes that addressing the issue of stray animals is not only beneficial for the animals themselves but also for the overall harmony and safety of the community.

**3.5 User flow**

1. **Login and Forgot Password Flow:**

   - User opens the app and arrives at the login screen.

   - The login screen provides options to log in with an email or mobile number.

   - User selects the preferred login option and enters their credentials (email or mobile number) and password.

- After entering the required information, the user taps the "Login" button.

- If the user forgets the password, they can choose the "Forgot Password" option.

- The user is prompted to enter their registered email or mobile number.

- A password reset link or code is sent to the user via email or SMS.

- The user clicks on the received link or enters the code in the app.

- They are redirected to a password reset screen where they can set a new password.

- After setting the new password, the user can proceed to log in with the updated credentials.

2. **Care Center Selection Flow:**

- On the app's home screen, the user sees the option to "Find Care Centers" and selects it.

- The user is presented with a list of nearby care centers or can search for specific centers.

- They can scroll through the list or use search filters to find relevant options.

- Once the user finds a care center of interest, they can tap on it to view more details.

- The detailed view provides information about the care center, such as services offered, reviews, and contact information.

- If the user wants to contact the care center, they can tap on the provided contact information to initiate communication.

3. **Reporting a Case Flow:**

- From the app's home screen, the user chooses the "Report Case" option.

- The user is presented with different case options, such as emergency or other cases.

- If the user selects the emergency option, they can tap on it to proceed.

- In the emergency case screen, the user can tap a button to capture a photo using the app's camera feature.

- Once the photo is captured, the user can review it and send it immediately as part of the emergency report.

- If the user selects the other case option, they can tap on it to proceed.

- In the other case screen, the user can tap a button to add photos from their device gallery or capture new ones using the app's camera feature.

- The user can add multiple photos and review them before submitting the report.

- After adding the photos, the user fills out any additional details or descriptions related to the case.

- Once all the information is provided, the user submits the report.

4. **Adoption Flow:**

- On the app's home screen, the user selects the "Adoption" option.

- The user is presented with a list of available adoption options, such as stray animals or pets in need of a home.

- They can browse through the list and tap on a specific animal to view more details.

- The detailed view provides additional information about the animal, such as its type, breed, age, and location.

- If the user is interested in adopting the animal, they can tap on an "Apply for Adoption" button.

- The user is then directed to an adoption application form where they can provide their details, such as name, contact information, and living situation.

- After filling out the application form, the user submits it for review.

- The user is notified that their application has been received and is under review.

- Once the application is approved, the user is notified and provided with further instructions on how to proceed with the adoption process.

- The user can contact the organization or individual responsible for the adoption using the provided contact information.

5. **Donation Flow:**

- On the app's home screen, the user selects the "Donation" option.

- The user is presented with information about various donation options and campaigns.

- Details about the organizations or causes supported by the app are provided.

- The user can select a specific donation option or campaign to proceed.

- The app directs the user to a donation process or external donation platforms.

- The user can choose the desired donation amount and provide necessary payment information.

- After confirming the donation, the user receives a confirmation and acknowledgment of the donation.

By following these user flows, the app can provide a clear and organized experience for users, enabling them to accomplish their goals smoothly and efficiently.

## 3.6 Information Architecture

Information architecture for an animal application involves organizing and categorizing content related to animals, their care, and other relevant information. This includes creating a logical hierarchy, designing intuitive navigation systems, establishing a taxonomy and tagging system, implementing search functionality, understanding user goals and designing user flows, managing metadata and data, and considering accessibility standards. By employing these IA principles, the application

can provide users with a seamless and efficient experience in accessing and navigating animal-related information.
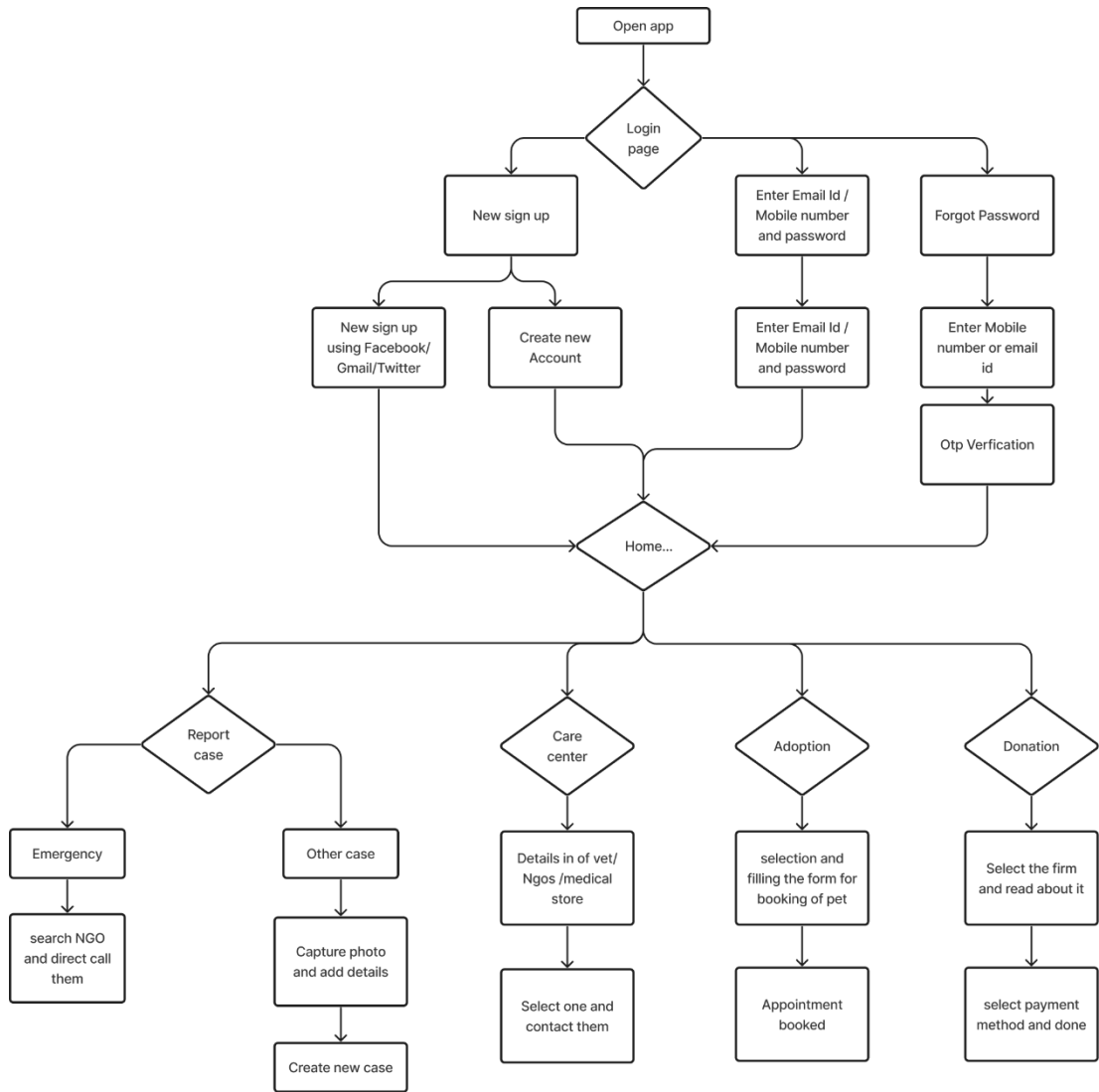
Information Architecture flow:
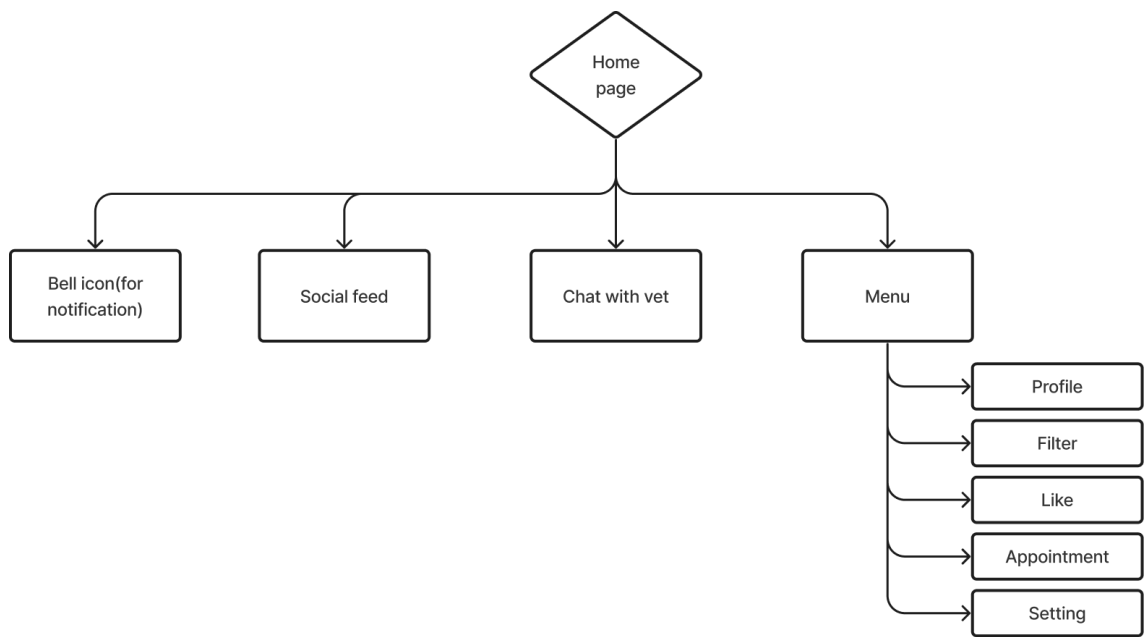


Fig 7 Complete information architecture

Fig 8 Information architecture of home page

# CHAPTER 4

# RESULT AND DISCUSSION

After conducting comprehensive research, including user interviews, market analysis, and competitive analysis, valuable insights were derived to inform the design and development of the application. The research process provided a deep understanding of the target audience's needs, preferences, and pain points, while also uncovering opportunities for improvement in existing pet care services.

Through user interviews, it was discovered that pet owners often face challenges in accessing reliable and convenient pet care services. Many expressed a desire for a comprehensive platform that not only offers pet care services but also provides a seamless experience in finding care centers, reporting cases, exploring adoption options, and making donations. This insight highlighted the importance of creating an all-in-one solution that addresses the various aspects of pet care and welfare.

Market analysis revealed the growing demand for digital platforms in the pet care industry. With the increasing adoption of smartphones and the convenience they offer, users are seeking efficient ways to manage their pets' well-being. This analysis underscored the need for an intuitive and user-friendly application that simplifies the process of finding and accessing pet care services, thereby improving the overall user experience.

Competitive analysis further emphasized the importance of differentiation and unique features. By studying existing pet care applications, valuable insights were gained regarding successful functionalities and areas for improvement. It was noted that integrating features such as easy reporting of stray animal cases, streamlined adoption processes, and seamless donation mechanisms can set the application apart from competitors.

Based on these insights, the screens for the application were carefully crafted to ensure a user-friendly interface, intuitive navigation, and a visually

appealing design. The user flows were designed to address the identified pain points and fulfill the users' needs effectively. Special attention was given to creating a clean and clutter-free interface, prioritizing essential features, and providing easy access to emergency services, care centers, and adoption options. The result is an application that aims to deliver a seamless and rewarding experience for both pet owners and animal welfare enthusiasts.
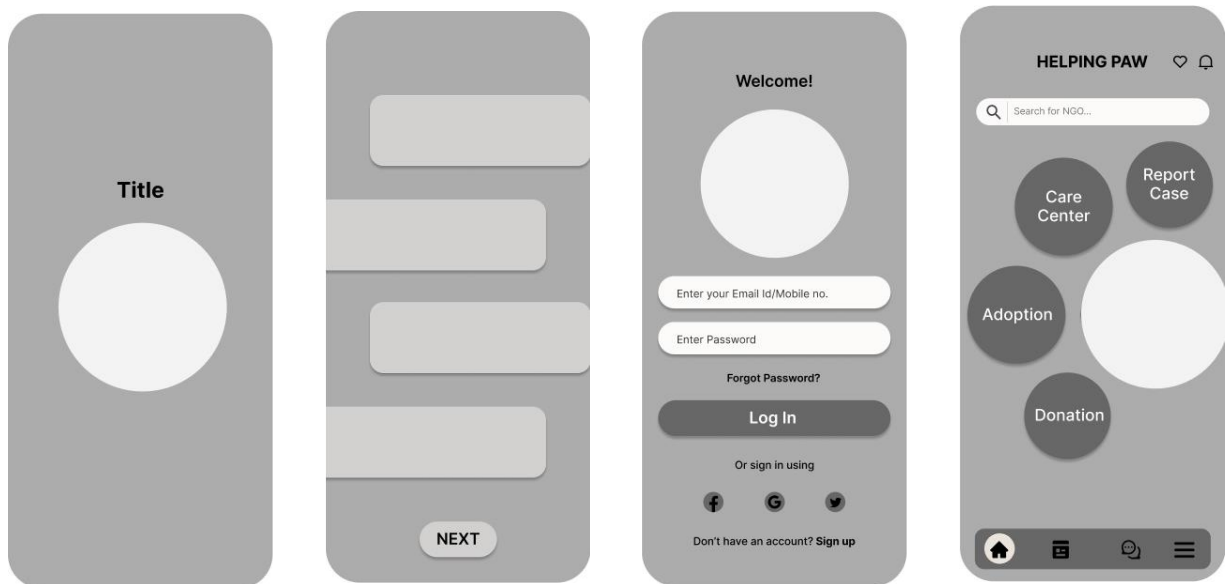
## 4.1 Low Fidelity Screens



Fig 9 Onboarding Wireframes



Fig 10 Emergency Wireframes
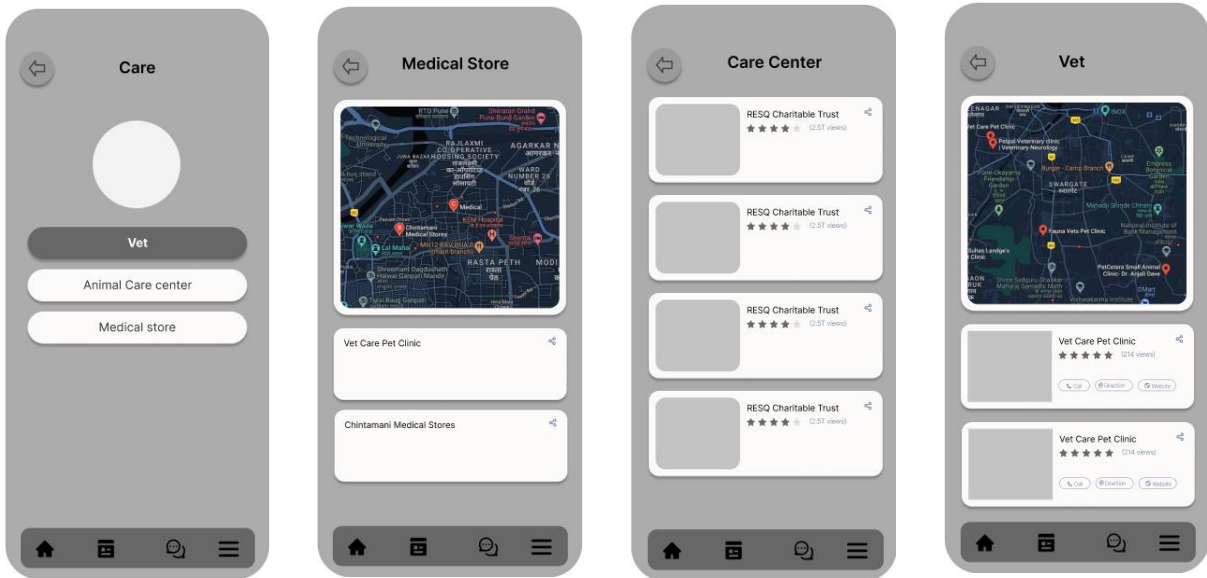
Fig 11 Medical Assistance Wireframes



Fig 12 Appointment Booking Wireframes

Fig 13 Donation Wireframes

## 4.2 Colour and Typography

### 4.2.1 Colour

The color scheme chosen for the app reflects the theme of animals and aligns with the app's purpose of promoting animal welfare and care. The following colors were used:

- Dominant Color - #ECE0D4

    The soft and neutral tone of #ECE0D4 serves as the primary background color, evoking a sense of calmness and serenity. This gentle hue resembles warm earth tones, reminiscent of the natural environment that animals inhabit. It creates a welcoming and peaceful atmosphere, providing a comforting backdrop for users as they interact with the app's animal-related content.

- Secondary Color - #CAA26A

  To add warmth and visual interest to the app, #CAA26A is used as the secondary color, especially for interactive elements such as buttons and icons. This color resembles rich, golden shades often associated with nature and the animal kingdom. It adds a touch of vibrancy and playfulness to the app's interface, capturing the spirit of animal companionship and adventure.

- Input Field Background - #FCFBFA:

  For text boxes and input fields, #FCFBFA is employed as the background color. This light and clean shade resembles fresh, pure snow, providing a crisp and inviting space for users to input information. The color choice enhances readability and ensures that users can easily engage with the app's text-based features, such as searching for information or entering details.

- Highlight Color - #9D7742:

  Occasionally, #9D7742 is used as a highlight color to draw attention to important buttons or actions. This warm and earthy tone adds a subtle touch of contrast and emphasis, guiding users to key functionalities within the app. It conveys a sense of importance and urgency, urging users to take action for the well-being and care of animals.

Overall, the chosen color palette harmonizes with the theme of animals and creates a visually pleasing and immersive experience for users. The combination of soft neutrals, warm tones, and clean backgrounds establishes a balance between a calming atmosphere and a sense of engagement, aligning with the app's focus on animal companionship, welfare, and exploration.
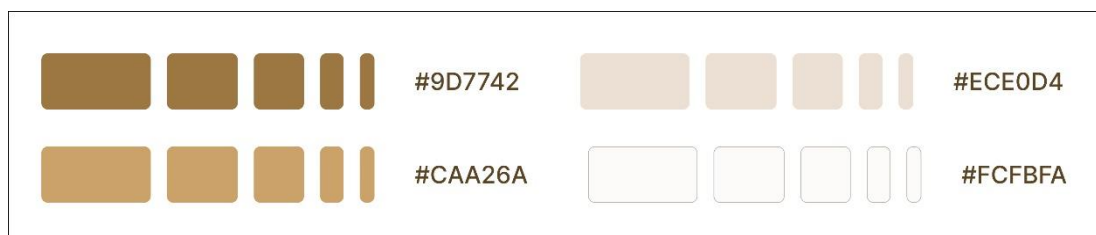


Fig 14 Colour Selection

**4.2.2 Typography**

The **Inter** font was thoughtfully selected as the primary font for the app to ensure readability, versatility, and a modern aesthetic. Here are the justifications for using Inter:

- Readability:

  Inter offers excellent legibility with balanced letterforms and generous spacing between characters. This enhances readability, allowing users to absorb information effortlessly, even when engaging with various types of content related to animals.

- Versatility:

  With its extensive font family, Inter provides flexibility in emphasizing different elements within the app. Different weights can be used to create a visual hierarchy, ensuring clarity and coherence in the presentation of information.

- Modern and Clean Aesthetic:

  Inter's geometric shapes and balanced proportions contribute to a modern and clean aesthetic. Its simplicity aligns well with contemporary design trends, conveying professionalism and sophistication.

- Multilingual Support:

  Inter has comprehensive language support, accommodating users from diverse linguistic backgrounds. This is particularly important for an app targeting a wide range of users who may speak different languages or reside in different regions.

- Consistency and Branding:

  The use of Inter as the consistent font throughout the app establishes a cohesive visual identity. Consistency in typography creates familiarity and reinforces brand recognition, contributing to a polished and professional appearance.

**4.3 High Fidelity Prototype**

A high-fidelity prototype was created to provide a realistic representation of the app's design and functionality. This prototype incorporates the insights gained from user research and incorporates the finalized visual elements, including the color scheme, typography, and layout.

The high-fidelity prototype consists of a series of screens that demonstrate the various features and user flows within the app. These screens were carefully crafted to ensure a seamless user experience and visually appealing interface.



Fig 15 Onboarding Screens
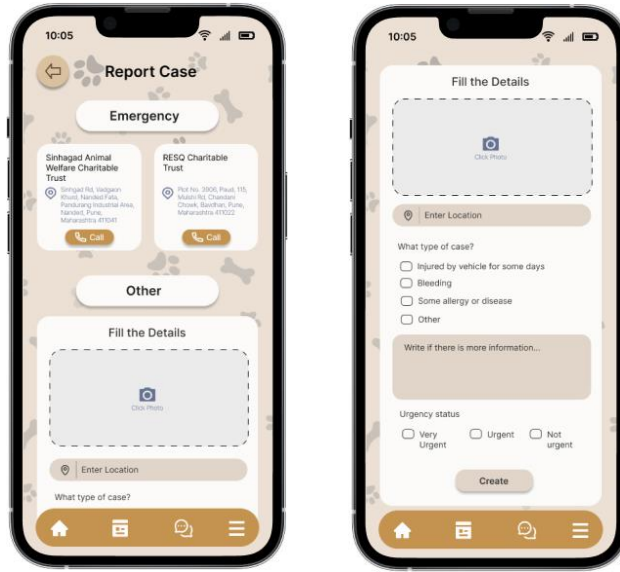
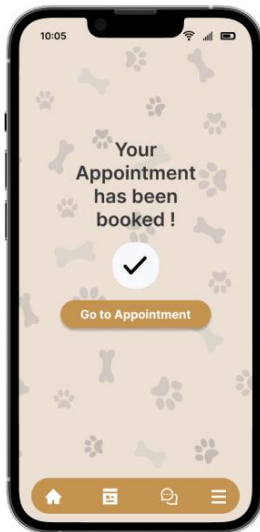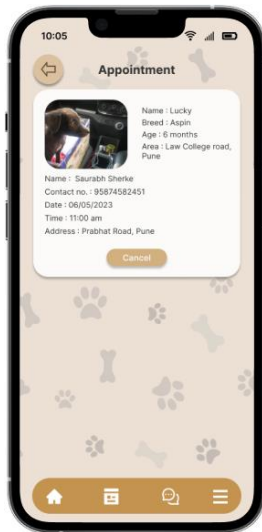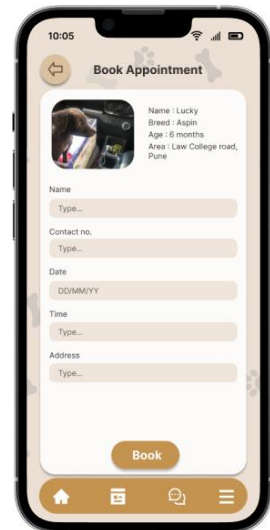Fig 16 Emergency Screens
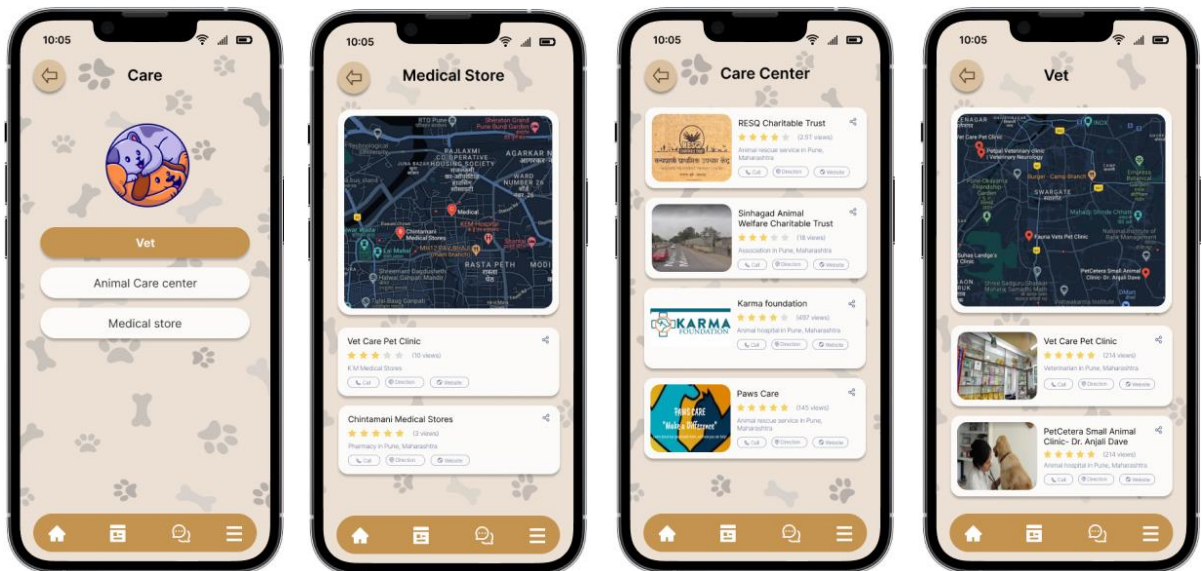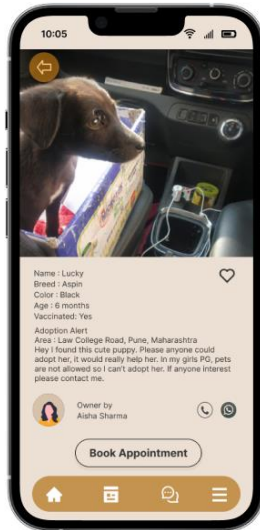

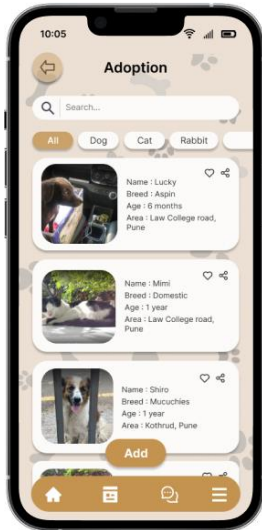
Fig 17 Medical Assistance Screens
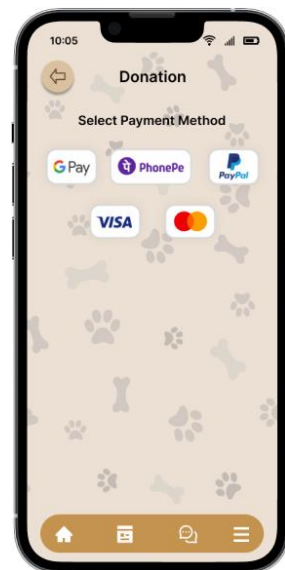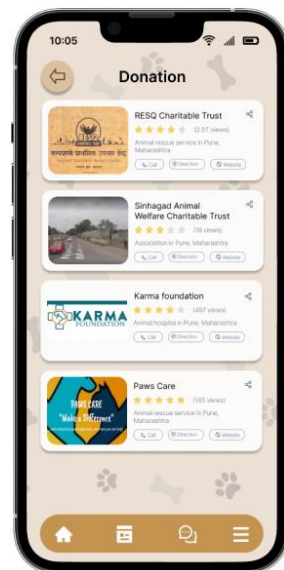
Fig 18 Appointment Booking Screens



Fig 19 Donation Screens

# CHAPTER 5

# CONCLUSION AND FUTURE SCOPE

## 5.1 Summary of the Project

The project has made significant progress in designing and developing an app aimed at providing assistance and support for animals in need. The work completed so far involved extensive research, user interviews, market analysis, and competitive analysis to gather valuable insights and understand the target audience's needs.

Throughout the project, I have strived to create a user-friendly interface, intuitive navigation, and visually appealing design. The low fidelity screens, high fidelity prototype, and carefully selected colors and typography have contributed to the development of a cohesive and engaging user experience.

Working on a project with a social cause has been both fulfilling and enlightening. The opportunity to contribute to animal welfare and make a positive impact in creating safer surroundings for animals has been a significant motivation.

## 5.2 Future Scope

While the project has reached an advanced stage, it is important to acknowledge that it is an ongoing endeavor. The next steps involve testing the app with users and gathering their feedback to gain further insights into usability and potential enhancements. This iterative process will allow for thoughtful refinements and revisions to improve the app's effectiveness and address any identified issues.

Additionally, the future scope includes collaborating with animal welfare organizations, veterinary clinics, and other stakeholders to establish partnerships and integrate their services into the app. This collaboration will enhance the range of support and resources available to users and create a comprehensive ecosystem for animal welfare.

The final product will be delivered after incorporating user feedback, conducting multiple rounds of testing, and ensuring that all necessary revisions have been made. The ultimate goal is to provide a reliable, user-friendly app that not only facilitates assistance for animals but also raises awareness and encourages more people to contribute to animal welfare.

In summary, this project has provided valuable learnings and a chance to work on a meaningful initiative as an individual contributor, promoting the well-being of animals and creating a safer environment for them. The continuous development and future iterations will allow the app to evolve and improve, ultimately making a positive difference in the lives of animals and those who care for them.

# CHAPTER 6

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