Helping Paw-Friends: An Animal Adoption App

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Abstract - *A legal animal adoption is nowadays a new option considered by the current generation who wish to get a new family member. This awareness of adopting local breeds or abandoned animals instead of buying expensive breeds has paved the way to decrease the number of animals in critical conditions. The process of adoption is popularly dedicated to NGOs and networks that are able to connect up to a certain boundary of an area or a state. The process is therefore limited to the counting numbers of adopters and sellers that act as a barrier for a nationwide or worldwide adoption. In order to overcome these problems of both parties, we have designed a modernized system that is compatible with the existing system, ethical, user friendly, and efficient. This application will help to connect animal owners to their potential adopters by addressing animals as living species rather than an object. Through this app, even the NGOs get a platform to upload the biodata of their in-house animals and get potential matches that can be further followed by a conversation through chat or any personal preference of communication apart from the provided application.*

Key Words: **Animal Adoption, Flutter, Dart, Firebase, Chat, Frontend, App Development**

1. INTRODUCTION

In recent years, the pace of people's life has accelerated which indirectly increased the number of abandoned pets. If not this situation, many animal owners, unfortunately, have to leave their animals for adoption due to genuine reasons like changing countries, lack of money to take care of the animal's need, lack of attention to the animal, and many more. These reasons often lead to people who further choose to give their animals to NGOs or the chaotic search of a minimal network to give for adoption. This process might be time-consuming specifically to connect with potential adopters/sellers according to a person's terms and conditions for the animal.

The "Helping Pawfriends" application has been developed to overcome the problem occurring in the case of in-person, regional, or adoption through an NGO. The app is supported to remove the obstacles faced by the existing applications. It is designed especially for the common people who wish to put their pets for adoption or someone who is in search of a pet by generating contacts through this app. This application reduces the possible errors or privacy issues while making contacts along with data security. It also proves to be user-friendly due to its clean UI which does not require any prior knowledge to be followed to start with the portfolio building stage. The added benefit of this app is its availability for android as well as iOS which gives access to all types of users to get its benefits

2. LITERATURE SURVEY

We have studied a few similar applications that are available on the Google Play Store with moderate ratings and reviews.

StraySavers App [1] has a major feature of social feeds where the user can post pictures and messages about their animals similar to other social media platforms like Facebook and Instagram but specifically dedicated to animals. It also has a section to post about suffering animals to get instant help that sends a notification to other users alerting them about an emergency nearby. Many other features include the location of nearby vet hospitals and rescue data updates on their app. All these features are primarily dedicated to the rescue of animals and had also faced an issue of interrupted services.

Pet Finders App [2] is a pet adoption application that provides its users a space for pet posting for different animal species, showcasing its portfolio through search options, and finally contacting the owners through chat or calls. It also has the information of pet owners of the adopting animal to show the in-house background. The application with context to its UI resulted to be confusing with the animals listed on the app like a product. This app, therefore, is inclined towards buying and selling animals rather than free adoption making it similar to a product-based app. One of the negative factors pointed out by its users is the problem of the forceful closing of the app due to technical glitches.

3. PROBLEM STATEMENT

Till now it is observed that there are many physically created NGOs that help the animals to find their new home, but the problem arises to look for eligible animal adopters. The search for someone fulfilling all the criteria in order to give any animal the perfect place for adoption plays a crucial role where the network points out to be the way.

The answer to the question "Why do pet owners give their pets to an adoption centre?" is that due to lack of networks and potential adopters within proximity, the owners finally conclude by giving their pets at a nearby adoption centre. The solution to the given situation is this app that can help them with its features. One of the crucial parts noticed is about the difficulty faced by the animal owners willing to give their animal for adoption is to locate the animal at a place with all of their agreement terms. With reference to the NGOs, they find it difficult to search for a potential adopting

family creating a problem of overpopulation of animals at their centres. Therefore, it is important to ensure that the animal owners and sellers are well known with the potential options nationwide and even simplify the adoption steps.

4. PROPOSED SYSTEM

"Helping Pawfriends" is an adoption app for all categories of animals. As the name suggests, it is an app designed to help animals in various ways. The idea to help the animals find a new home and the wish to create a community for animal owners and lovers gave the motive to build the app. The main objective of this application is to help the sellers and potential people to adopt animals in an easy way in one single click.

The app helps to create potential matches by the information provided by the seller and the adopter through a form at the beginning of the app. One of the prime focuses was on creating a space that respects the animals by treating them as living beings rather than a product that is fulfilled through this app. It has a swipe feature that gives the opportunity to adopters to either accept or reject the animal that has been flashed according to the information filled in the form. With a potential match, both the adopter and seller have the option to connect through chat on the app itself. During the chat as well, both the parties have the option to un-match the match created by the app. Even while using the app and being an existing user, they can change or switch the profile.
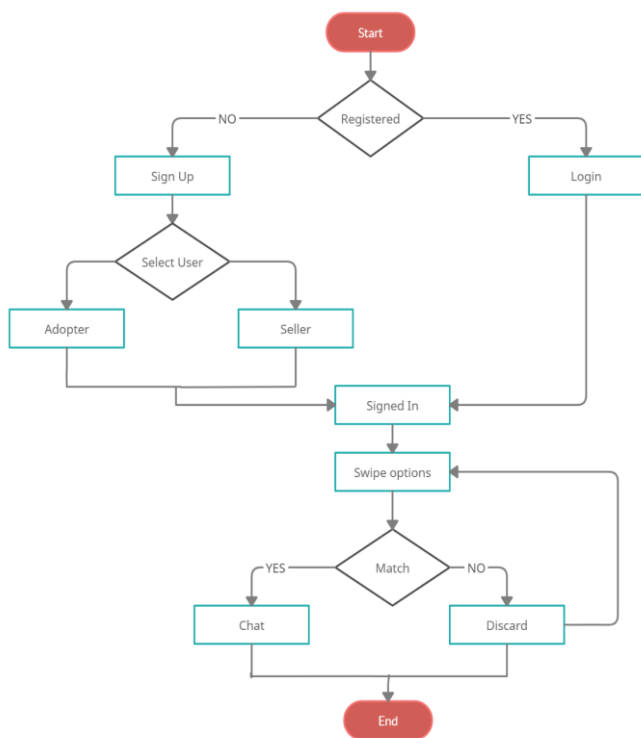
5. FLOW CHART

Fig -1: User Flow Chart

6. FEATURES

Following are the features of the application:

6.1 Login and Sign Up

The users will be able to set up their profile through the first screen of the app which is the Login and Sign Up page. While the existing app user will be able to Login to their profile by entering the registered username and password. As a new user, the Sign-Up section will help to create a new account by entering their email ID. An OTP will then be sent to the mentioned email ID to proceed further. After entering the user's name, the user will be shown an option to choose to be an adopter else a seller.

6.1.1 Adopt

The users who proceed as an adopter will be guided to a form that is divided into two parts, the adopter's preference, and information. For the preference section, the adopter can select their preferred state, breed, and age through a dropdown list. The personal information of the adopter includes the current state of residence followed by creating a new username and password.

6.1.2 Sell

The second type of user which is the seller will be guided to a form that includes entering the name of the animal, photograph, age, breed, state of residence, and a short description. The user can then create a new username and password to start with the app.

These sections also provide terms and conditions page to remove any future legal complications.

6.2 Swipe

Swipe is the main feature of the app which is generated through profile matching. The match is created only if both types of users have the same animal type, age, and state mentioned while filling the Sign-Up form.

Once the user is logged into the app, the adopter will be transferred to a swipe screen that showcases the picture and information of the animal that is open for adoption. The information includes the name, age, breed, and short information of the animal. As a potential adopter, the user can either swipe right to like the animal whom they wish to communicate with their owner else swipe left on those to reject.

6.3 Chat

The seller will be linked to the chat section to communicate with the potential adopter after a successful Login or Sign Up. Once an adopter swipes right onto a profile, a communication will be established in the chat section between the matched seller and the adopter. After a positive

communication, the connected users can even take it beyond the app to work on legal terms of adoption.
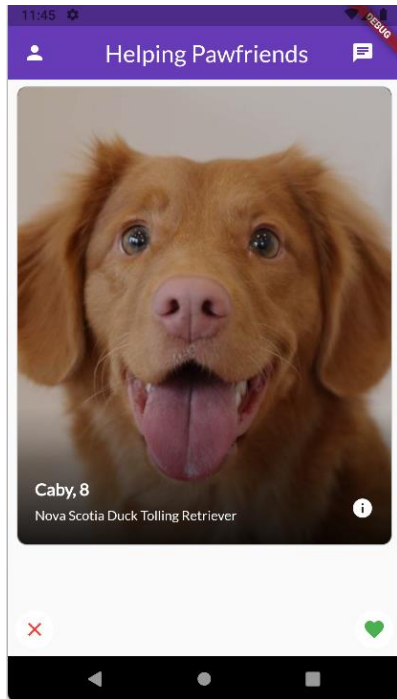
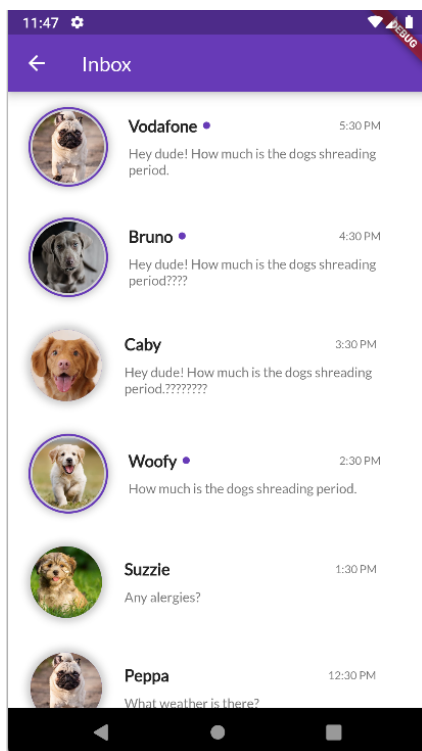## 7. SCREENSHOT

Fig -2: Swipe Screen

Fig -3: Chat Screen

8. ADVANTAGES

- It has a simple interface, easy to understand for the user.
- Easy to connect with potential adopters with an ethical UI dedicated to animals.
- A high level of security is provided with the help of authentication.

9. CONCLUSIONS

Helping Pawfriends aims to connect the people who wish to adopt an animal with a recommended individual who is willing to give their animal for adoption through a huge network connected on an app. With this app, the human effort of networking will reduce along with the decrease in the number of animals abandoned at animal shelters and NGOs.

To make it relevant to the current trends and systems, constant updates will be provided to the user that will include increased security, attractive UI, and adding new features to match the market. This application will focus on connecting owners and adopters, making it a dedicated platform for animal adoption.

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