PET-RESUE CARE ANDRIOD APP USING TENSORFLOW

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***Abstract*—Pet-Rescue caring system is comprehensive system for welfare of stray pets. In present script many stray pets don't have sanctuary and also starve for food. Very constantly some dogs meet with severe road accidents and necessary care to be taken isn't known for numerous, in similar cases it's hard to find exigency contact. There's a necessity to control the population of slapdash dogs because they act as carriers for many contagious conditions like rabies, brucella etc. Pet adoption is an effective way to reduce stray canine population. This app helps is keeping track of number of pets saved and borrowed, also displays some necessary actions to be taken during an exigency. This app also provides a payment gate for charity. The entire jobs will be under administration of certain associations that work for the purpose of stray pets well-being.**

Keywords*— *Adoption, Charity, Exigency, Population, Stray pets, Rabies.

I. INTRODUCTION

Pet Rescue Caring system has risen to the call to help thousands of creatures in unfortunate situations like accidents, lack of sanctuary, starving, some creatures are being abandoned on the road by their owners. creatures have been left on the road with no access to food, water, sanctuary or exigency first-aid. They're being set up in a pitiable state of neglect, utmost of them is extremely dehydrated, starving and too weak to indeed walk to survive for themselves. At Ballari, we have a civil society organization named as “CARE FOR PETS” which helps to overcome above mentioned consequences. While taking the information about the data related to helpless creatures with the people of NGO, we noticed that the work carried at organization is more complicated as it had no digital support. So, we came up with an idea to develop an app that is easily accessible to any existent at their finger tip. According to the NGO, there are over 10,000 stray creatures within the demesne of Ballari City that are left homeless. It would be problem for the NGO to give sanctum or any necessary help for this huge population of stray creatures. So, this application promotes an idea of stray dogs’ relinquishment which comparatively reduces the stray dog population. Pet Rescue Caring System is an application that acts as a medium of communication for NGOs to help save stray creatures and feed necessary help in a smooth way. It provides a user-friendly interface where users can enter the application to seek help, take up pets, contribute or register themselves as a volunteer to serve for NGO. This app helps is keeping track of a number of dogs saved and borrowed, also displays some necessary conduct to be taken during an exigency.

II. LITERATURE SURVEY

In paper [1], The Author discussed recognizing emotions is automatically and subconsciously performed by humans. It is important process for communication, and to achieve better human-machine interaction, emotions need to be considered. There are three major approaches for quantifying namely, categorical, continuous and appraisal-based.

In paper [2], The author estimated that further than one million adoptable pet are euthanized in the world, simply because too numerous faves come into harbors and too many people consider relinquishment when looking for a pet. Pet manufactories are plant- style parentage installations that put profit above the weal of faves. creatures from pet manufactories are housed in surprisingly poor conditions with indecorous medical care, and are frequently veritably sick and behaviourally troubled as a result. When the pets become old and the vendor does not get money from it he simply kill the pet. So the author came with the idea of Hold My Pet to take care of your pet.

In paper [3], The author proposed the presence of pets harbors in Malaysia and around the world. In Malaysia, the NGO pets harbors make their online presence on their own sanctioned websites and social media. The author illustrated by, the SPCA, PAWS, Second Chance Animal Society and others, they've their sanctioned websites. In the websites, information regarding the harbors similar as background, ideal, events, news, connections and information

regarding the relinquishment details and creatures. While for social media, similar as Instagram and Facebook, the pets harbors have posted some information regarding the available relinquishment creatures, success relinquishment story, knowledge on drug and caring of creatures, the pets harbors situation, and others. The websites attracted by the people and they started to adopt the pets from the harbour.

In paper [4], The author describes about hunting pets into the disaster area, using their unique sense of smell to find the injured. The experimenters epitomize the design conditions in the hunt process from interviews with saviours , and construct a abstract prototype to confirm the commerce mode between the stoner and the canine. They proposed a model which includes a swatch and a smart collar. Smart seeing (twinkle, speed, temperature, and GPS) can ameliorate communication and increases the effectiveness of deliverance. The hunt area is large in numerous cases; thus, we named the Wi-Fi ultra-wideband module as the wireless transmission medium when the deliverance platoon enters this sphere. They pre-deploy bumps connect and place with the smart collars. The educator sends voice commands ever to prompt the canine to return when the temperature is high. This proposed work looks more at stoner's requirements through multi-disciplinary aspects of view, which enhance usability.

In paper [5], The author described about the population of stray dogs. How can we save the dogs from many of the spreading diseases in pets and also to get the accurate count of the dogs in each and every street. He also made the classification of dogs like how many dogs are been affected by the diseases. He also tried to get the accurate population of the pets where this count helps the NGO's and government to know the population of stray dogs and save them.

III. PROBLEM STATEMENT

To design and develop an android app that acts as an interface between NGO and people belonging to community to make their work easier for saving aimless pets and give them sanctuary and food, also help with adoptions.

IV. OBJECTIVES

- To safeguard and look out for the suffering and homeless pet animals.
- To have an obligation to prevent cruelty.
- To provide knowledge about pet care taking.
- To spread awareness about stray pets.
- To predict the breed of stray pets.

V SCOPE

- The software product is used by NGO to make their work flexible.
- The software product is accessible by common individuals to report stray pet animals to NGOs and adopt pets from NGOs.
- This software is used by volunteers of the NGO to track the pet and save its life.
- The software produced is limited within a city.

VI. EXISTING SYSTEM

In olden days there was no NGO's, hospitals which serves for the pets. Those time if pet animal is affected by any diseases, infection, it was spreading to many other animals after that those diseases were also harming the human lives. The pets were suffering till they die because of lack of treatment. After few years we have got some veterinary doctors who serve their duty for pet animals as well as stray animals. The clinic were very less like one clinic for one city, It was very difficult to take their pet to the clinic because they were far away . After few years some NGO's started taking care of pets by recruiting their own doctor to treat pets. For NGO 's it was a difficult task to go to every street and save the pet which are suffering from the diseases, To overcome from some of these difficulties they started adopting the pets for themselves, and started awareness of pets to the people and people started to adopt the stray pets and provide them food, shelter. Currently many people has no idea about NGO's how they help the pets, they have much information to share with the people but there is no mode to share information.

VII. METHODOLOGY

1. *Method:* The method which we have used in our app is tensor flow toolkit which is a open source machine which is developed by google. It provides comprehensive tools, libraries and coffers for structuring and training machine models. We can take have large scale machine knowledge which helped us to train the data and predict the animal breed. This is a API which can be easily accessible by python, java script, java where developer can easily handle the front-end structure of the app. It can be easily accessible by the Ios and android devices. Distributed trained data can be easily ran through this api, and it also increases the performance of the app. We have used firebase database to store and retrieve the data from the app. To know the exact location of the pet we have used google maps which is made by Dijkstra's algorithm where this algorithm is used to find the shortest path to reach the location as soon as possible. We have also used breed trained dataset to predict the breed of the animal.

The Implemented design has been discussed below

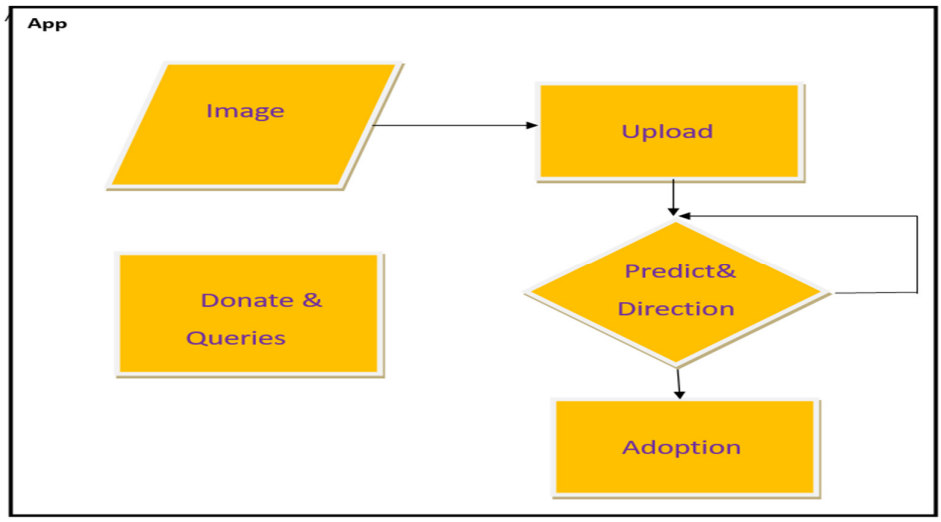

Fig 1 : System Architecture

2. Design & Architecture of the application

The architecture of this app is implemented in such a way that it acts as a interface for the User and Non-governmental organization that is NGO. User can access this app very easily at their finger tip. This app allows users to ask the help from NGO very easily. In this app the user can give charity for NGO, adopt pets from the NGO. The user can also communicate with the admin with respect to tsking care of pet. In this app anyone can register through this app and become user and volunteer themselves to serve for the welfare of pets. On exigency, this app provides exigency feature through which any person can login through our app and upload the picture of the pet and submit it where the NGO and other people who want to help stray pet can track the pet by using their app, Exigency request are handled by only the admin. We can also predict the breed of the stray pets so that we can easily treat the pets through the app.

a) Admin: He is the owner of the app where he can manage all the raised request from the user. User can take picture from the camera and post the stray pet picture into the application, Where the admin can request the volunteer to track the request and save that pet. Admin can also verify the users and volunteer who have register through our application.

b) User: End -Users can login themselves as a user by enrolling through app. On Successful enrolment into the app as user he/she can easily perform this operation such as charity to the pet care, User can ask queries where we have a chatbot which can help the user by answering the queries. They can also adopt the pet from others as well.

c) Volunteer: Any End-user can register as volunteer through app and serve for NGO to save pets. He can only see the announcement by the admin and track the request of the user and help them.

VIII. RESULTS

The implemented system results are shown below

a) User should enroll to access the application. Once the user is enrolled, they can login to the app with their own credentials such as username that is mobile number and password. After logging in they can see several types of menus, where the menu contains several types of operations such as announcement, adopt pets, post pets, queries, predict breed and donations. In announcement menu we can see the announcement made by the admin about the current spreading diseases. Adopt pets menu is used to adopt the pets which are posted by the users which are approved by the admin. Post pet is menu where you can post your pets or stray pets which are in your street. Query menu is used to help the user by taking the question and answering the question by the use of chat bot which is trained. Animal Breed menu is used to predict the breed of the animal which will help the admin to treat the animal very fast by the means of queries. Donate menu is used to donate some money to the care pet from their personal interest.

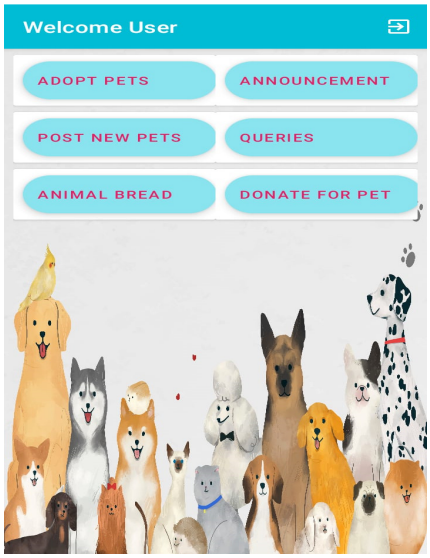

Fig 2: User Menu

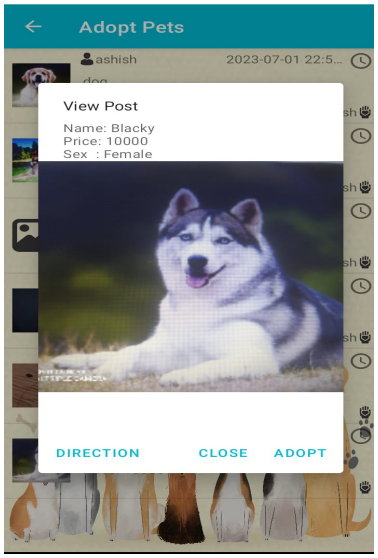

Fig 3: Adopt Pet

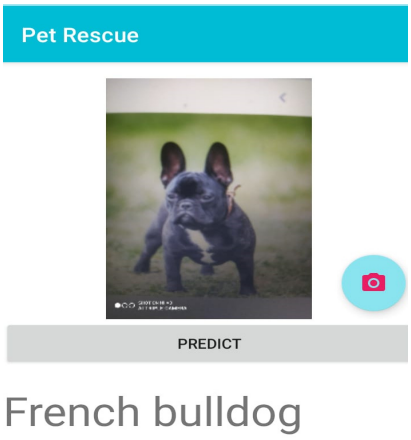

Fig 4: Predict animal breed

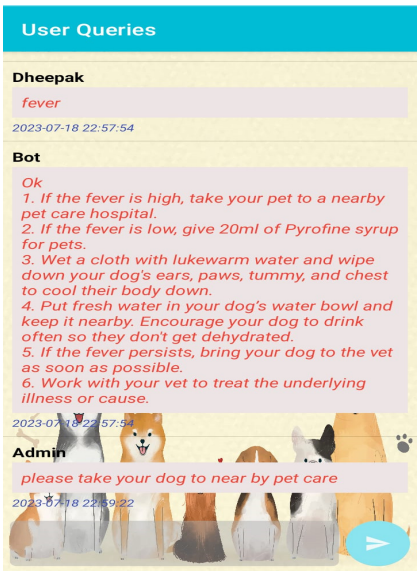

Fig 5: Query using chat bot

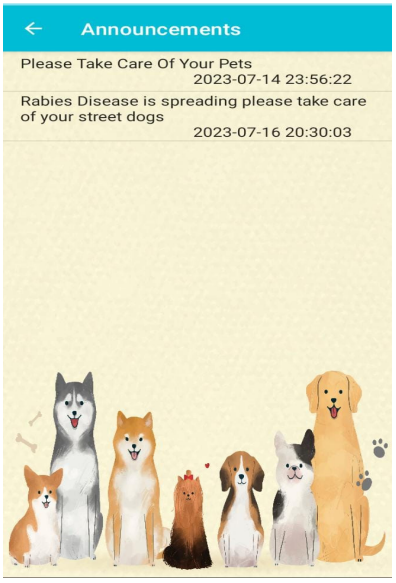

Fig 6: Announcement

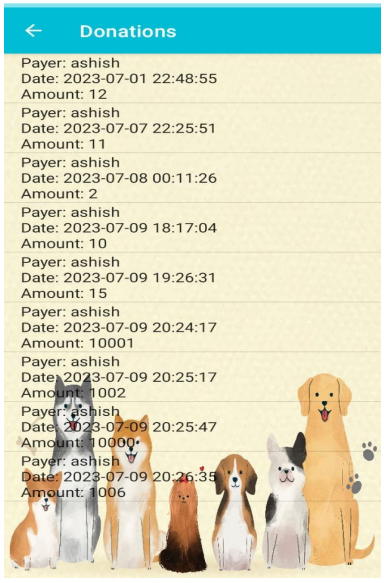

Fig 7: Donations

b) Volunteer should first enroll in the application. Once enrollment is done, they can login to the app with accurate credentials. They can be notified by the user when the user upload image and post the image then it should be track by the volunteer by the request of the admin. The volunteer can also adopt the pet which are posted by the user. Volunteer can track the pet using google map.

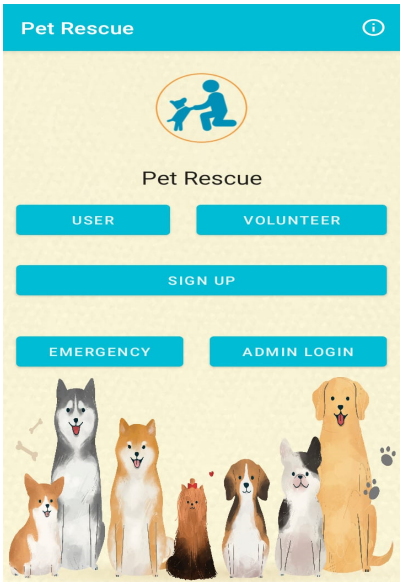

Fig 8: Pet Resue app

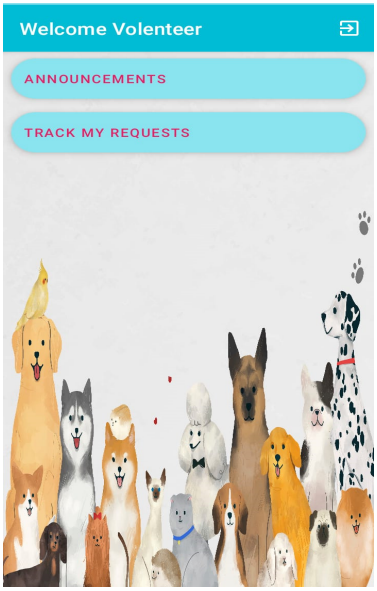

Fig 9: Volunteer Menu

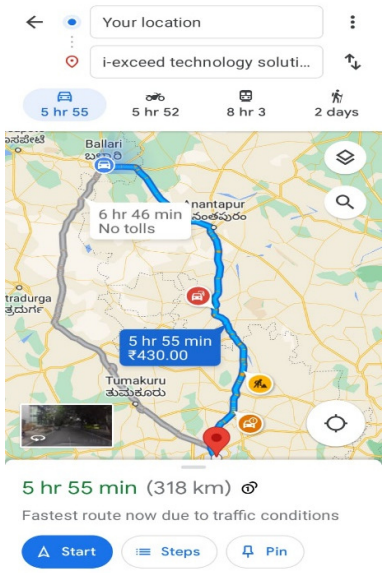

Fig 10: Direction by google map

c) Admin can login through their owners' credentials, where they can verify the active user/volunteer. The admin can be able to remove the data from database. They can also see the adoptions and make announcement; admin can see the charity made by the user. They can also answer the user queries related to pets.

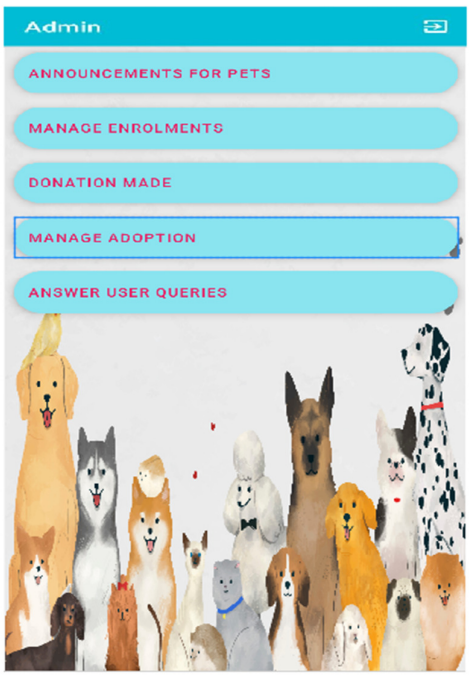

Fig 11: Admin Menu

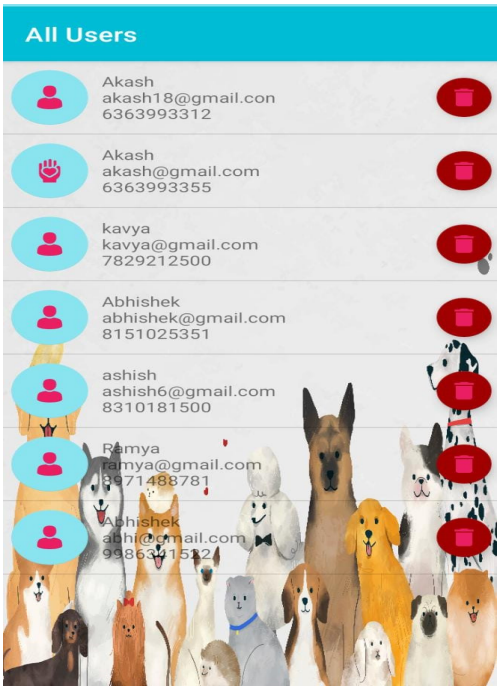

Fig 12: Manage user and volunteer

IX. CONCLUSION

We are building a android app which is used to save the pets life in exigency condition with the help of this app. The app will decrease the problems of stray pets in their community. People can easily login through our application and post the pet which are suffering from some diseases , the people can save the pet by just a single click and this app is also helpful to NGOs by easily knowing the information about the pet and give treatment directly through the app ,due to which the rescuing would be made in a more efficient manner.

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