

# Happy Paws – Android pet application

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**Abstract** - Mobile Technologies widely make significant impact on our lives, with an advancement technology a rule based expert system allows the end-user to enable new types of systems. Specially the availability of Android OS based more user friendly GUI and economical smart phones gives new possibilities for a continuously monitoring of pets such as dogs/cats. The proposed applications frequently serve to provide users with related facilities discussed here are broad and essential in health management. The pet mobile app can be used to know about the breed of pet the user wants to buy. User gets services like grooming for pets where your pet enjoys high quality grooming at home and also provides a unique cemetery service for your beloved companion where you don't have to bury your pet in your backyard anymore. In emergency time we can call the pets specialist by taking appointment through book a vet on call service using this app. Location button helps users to search for their desired location. Also pet owners get other services like blood donation for pets at top veterinary hospitals across state and pet exercise with instructions.

**Key Words:** Mobile application, veterinary, grooming, cemetery, blood donation.

## 1. INTRODUCTION

A pet, or companion animal, is kept primarily for a person's company or entertainment rather than as a working animal, livestock or a laboratory animal. The two most popular pets are dogs and cats; the technical term for a cat lover is an ailurophile and a dog lover a cynophile. Pets provide their owners to be physically and emotionally strong. Walking a dog everyday can provide both the human and the dog with healthy, fresh air and social interaction. Pets can give companionship to people who are alone, who are mentally stressed or elderly adults who do not have adequate social interaction with other people. There is a medically approved therapy for animals, mostly dogs or cats, that are brought to visit confined humans, such as children in hospitals or elders in nursing homes. With the diversity and power of pets, the pet care industry is growing dynamically and closely following the movements, also the development of human living environment and quality. The demand of pet care keeps increasing caused by the growing number of pets, the attitude of how pet owners treat their pets and the fast-changing of technology implication. The primary component

in pet care is dog and cat food. Dog and cat food products own approximate 70 percent of the overall pet care market size in retail value in 2016. Food is a nutritious substance that eaten by human or animal for maintains growth and life through absorption. It is the basic requirement for every pet to have pet food, the food that designed or chosen for each of them, in order to support every pets life.

For pet service, veterinary service is the core pet service among years; while pet grooming and training are wanted by the pet owners who are willing to spend more money on their pets in recent years. Veterinary service plays an important role in pet healthcare. Pets are brought to veterinary clinics for medical checking or treatment, get pets vaccinated and microchipped, surgery, etc. Every responsible pet owner should offer their pets the right of having veterinary treatment when they are sick or needed for medical help. For pet grooming service, apart from hair brushing and coat grooming, there is a list of grooming treatment services are provided, such as pet nails care, spa treatment, styling service, bathing, cleaning ears, etc. Pet owners may want to take pet grooming services for related professions if they do not know how to groom or to take care of their pets in grooming.

### 1.1 Objective

The main objective of this application is to provide non-exhausting way to take care of your pet based on android mobile application. We describe the architecture, design approaches and functional components and data flow of the application. This application is developed based on domestic pets. The results includes buy/sell the breed, shopping pet food and pet accessories, canine blood donation, pet services like grooming, veterinary, cemetery and pet exercise. All the services are acquired by one phone call by providing door step services.

### 1.2 Scope

This project is based on an Android OS version 6.0+ developed in the android studio, a platform which helps developers build the highest-quality apps for every Android device. It offers custom tailored tools for Android developers, including rich code editing, debugging, testing, and profiling tools. Firebase database is used when apps are

built with iOS, Android, and JavaScript SDKs, all the clients share one Realtime Database instance and automatically receive updates with the newest data.

### 1.3 Existing and Proposed System

The existing system consists of numerous websites and applications to buy/sell pets and also provides various pet care services, shopping apps for buying pet food and pet accessories, grooming service, veterinary service and so on. One such website provides cemetery service also. And there is no such website or app for pet blood donation in India. And there is no app/website for pet exercise, as many people have no idea about how to exercise their pets and keep them fit and healthy. But one has to browse through different websites to avail different services, as there is no service provider/website/app that provides all the services at one place and which is time consuming for users.

Happy Paws application allows user to access all the different services within a single application. It is time consuming, data saving and easy to purchase and receive at your door step.

## 2. METHODOLOGY

Happy Paws application stores the description about different dog and cat breeds using database which makes users easier to buy a pet of their choice by contacting us. Pet Owners can easily buy pet food and accessories just by one click. For pet care, user gets services like veterinary and grooming services. To get these services users can book a vet on call/ book a grooming services by contacting to the details provided. Other service like cemetery service is also available to the pet-lovers who doesn't want to bury their pets in the backyard. We also provide blood donation where you can donate your pet's blood or you can receive it from other pet if needed and all the information will be provided about the donor and the receiver. This app also provides pet exercise which displays GIF and description about how to exercise at home easily in order to make your pet fit and healthy. Users get all the above services within a single application. All the above services are provided just by registering to the application, all the user details and requests are stored safely and securely in firebase database using firebase authentication and firebase realtime database.

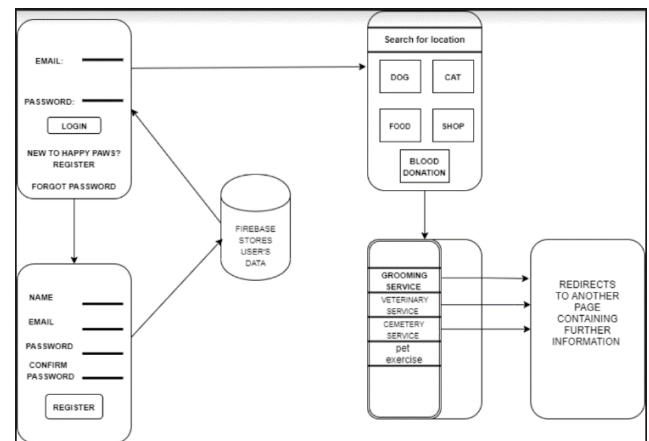


Figure 2. Methodology diagram

### 2.1 Architecture

Happy paws application starts with splash screen and sign-up page just like every other app. The basic user details like name, email-id, password and confirm password is entered and it will be stored in firebase authentication. Homepage consists of 5 modules with a location button. Different dog and cat breeds information is stored securely using database which makes users easier to buy a pet of their choice by contacting us. Pet owners can buy pet food and pet accessories easily by contacting us. In blood donation, users can donate their pet's blood by providing details like name, pet's age, address, blood group or you can receive it from other pet if needed and all the information will be provided about the donor and the receiver. The blood donation module also includes the FAQs, feedback and contact us options are available. FAQs provides the detailed information about the pet donation, eligible criteria for donating blood etc., feedback allows user to leave a constructive message and comments, it helps us to motivate and improve the quality of service. Location service is available in the homepage which will provide directions to the user. In pet care, user gets services like veterinary and grooming services. To obtain these services users can book a vet on call/ book a grooming services by contacting to the details provided. Other service like cemetery service and pet exercise is also available to the pet-lovers who doesn't want to bury their pets in the backyard. Users get all the above services within a single application. Pet exercise includes the routine physical exercises which helps the user to keep their pet healthy and fit.

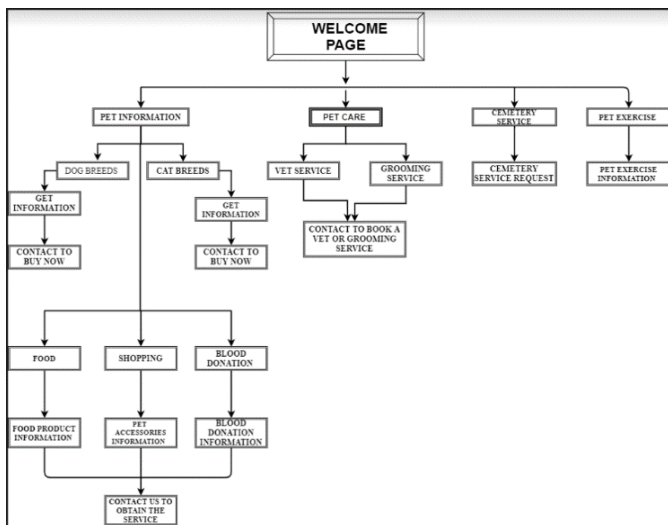


Figure 2.1 Architecture Data flow Diagram

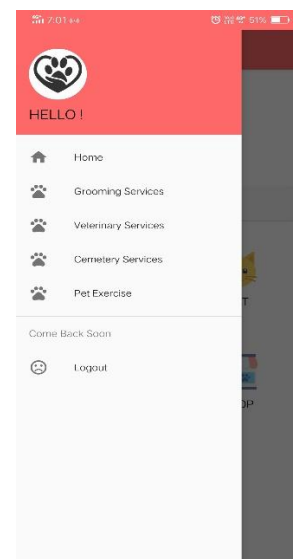


Figure 3(iii). Navigation Page

### 3. RESULTS

### 4. CONCLUSIONS

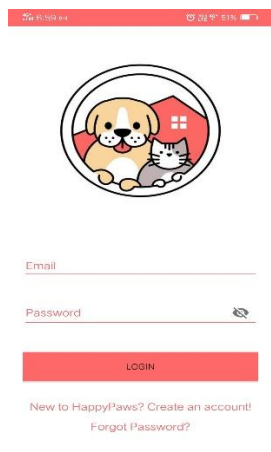


Figure 3(i). Login Page

In conclusion, the five core components of Happy paws application are pet food, pet products, pet services, pet blood donation and canine physical rehabilitation. Pet food is the major business segment as it accounts the largest sales in the global pet care market; while pet product has smaller sales in total because of the fewer demand of pet care products over the world. Pet blood donation is the initiative taken by happy paws application to save a life, as most of the dog and cat owners are not aware of canine blood donation schemes and animal blood banks. Canine physical rehabilitation is the practice of restoring normal function to the body through variety of modalities while managing pain and discomfort. This application provides vast knowledge regarding pets to the pet owners.

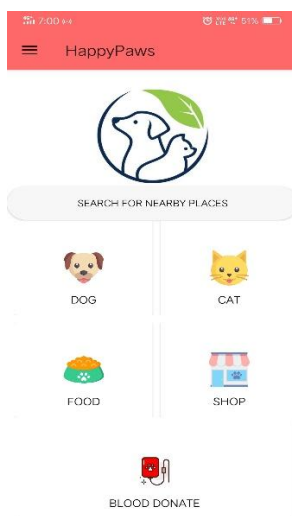


Figure 3(ii). Home Page

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