



Petopia

Fur-ever care, Forever friends!



Project title: Petopia

Slogan: fur-ever care, forever friends!

project Statement

Our mission is to empower pet owners with the tools and resources they need to provide optimal care for their beloved pets, ensuring their health, happiness, and longevity.

To be the go-to solution for pet owners, offering a seamless and intuitive platform for managing all aspects of their pets' well-being, from healthcare to daily routines.

Main project problem

Problem Statement: pet owners are facing increasing challenges in Finding reliable pet care services and pets social needs, It becomes time-consuming tasks and needs a lot of effort, Many pet owners may struggle to take care of their pets due to lack of knowledge and awareness, Difficulties in accessing affordable and reliable veterinary care, And Finding trustworthy and suitable pet services.



Sub-problems



**Difficulty in Managing
Medication Schedules
and pet appointments.**



**Time-Consuming Search
for Reliable Pet-Sitting
Services and Matchmaking.**



**Financial
Constraints in
Accessing Premium
Pet Care Services.**



**Limited Availability
of Pet Care Resources
in Remote Areas.**



**lack of finding
guidance on pet
behavior and
training.**

Main project objective

Our objective is to improve pet care services by connecting pet owners with trusted providers. Focusing on addressing pets' social needs. We aim to make pet care more accessible and affordable, ensuring trustworthy services. Overall, our goal is to empower pet owners to provide optimal care for their pets.



Sub-objectives



The fastest way to provide social Needs of Pets (matchmaking and pet-sitting).



Enhance Access to Affordable and Reliable Pet Care centers.



Reminder for Medication Schedules.



Pet appointments and daily tasks.



Resources to learn about your pet behavior and how to train them.



Ensure the nearest Trustworthy and Suitable Pet centers and shops.

Target Users

Pet Owners: These are the primary users who sign their pets on the app for various services such as pet-matching, petcare or veterinary care.

Veterinarians: Professionals who will interact with the app to manage appointments, prescriptions, and health records of pets.



Target Users

Pet service providers: Pet Sitters, Pet Walkers

Pet care centers & shops: Pet Stores, Veterinary Clinics & Hospitals, Pet Daycare Center, Adoption & Rescue Centers



Technologies and Frameworks:

Frontend: (mobile app)
Flutter

Backend: Spring Boot (Java)

Database: MySQL



Expected Design Patterns

Model-View-Controller (MVC)

Observer Pattern

Singleton Pattern



Initial High-Level System Overview

User Module: Authentication, profile management, pet profiles, and booking history.

Pet Service Module: Listings of veterinarians, pet sitters, trainers, and groomers with categories and details.

Service Provider Module: Profiles for vets, sitters, and trainers, including availability and pricing.

Booking Module: Real-time appointment scheduling, service availability, and secure payments.

Notification System: Push notifications, SMS/email reminders for appointments and medication schedules.

Admin Dashboard: Manage users, service providers, bookings, and reviews.

Functional Requirements

- 1) User Registration & Profile Management** – The system shall allow pet owners and service providers to create, update, and manage their profiles with relevant details
- 2) Service Search & Booking** – The platform shall enable pet owners to search for pet care services based on filters like location, availability, and category, and allow them to book appointments seamlessly.
- 3) Rating & Review System** – Users shall be able to rate and review service providers after appointments, helping others make informed decisions.
- 4) Appointment Scheduling** – The system shall provide a calendar-based scheduling feature for users to set, modify, and track appointments with service providers.
- 5) Messaging & Notifications** – The application shall support real-time messaging between pet owners and service providers and send notifications/reminders for appointments and updates.

Non-Functional Requirements

- 1) Performance** – The application must remain responsive and efficient, even during peak usage periods.
- 2) Strong Security** – User data, payment transactions, and communications must be secure and protected against unauthorized access.
- 3) Scalability** – The system should be capable of handling an increasing number of users and service requests without performance degradation.
- 4) Usability** – The interface should be intuitive, easy to navigate, and provide clear instructions for a seamless user experience.
- 5) Reliability** – The application must maintain consistent uptime and functionality, minimizing technical issues and downtime.
- 6) Accessibility** – The system should meet accessibility standards, ensuring usability for individuals with disabilities.

Constrains

1) Platform Compatibility – The app must support both Android and iOS.

2) Secure Payments – Must integrate with Banks, Vodafone cash, fawry, or Google Pay/Apple Pay for app transactions.

3) User Data Privacy – Must follow data protection rules (GDPR), ensuring secure login and encrypted user data.

4) Internet Requirement – The app needs an active internet connection for bookings, messaging, and payments.



Assumptions

1) Users have access to the internet – The app requires an active connection for bookings, messaging, and payments.

2) Users own smartphones that support modern apps– The app assumes users have (Android 8+ or iOS 12+) for compatibility.

3) Pet service providers will register and update their availability – The system depends on vets, trainers, and pet sitters (actively using the app).

4)Users will provide accurate pet and appointment details– To avoid service disruptions, users must (input correct information).

Dependencies

1) Google Play Store & Apple App Store – The app depends on these stores for distribution and updates.

2) Payment Gateways (Fawry, Vodafone cash, Google Pay, Apple Pay)
– For secure transactions when booking pet services.

3) Google Maps API – Required for location-based search (finding nearby vets or pet shops).



Our pets



Maylo



Falco



Honey

THANK YOU!

by

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