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Care4purrt (Pet Health Care System)

Submitted to

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Project Proposal

Care4purrt - Pet Health Care System with Emotional, Personalized, and Travel Compliance Features

Project Title: Care4purrt (Pet Healthcare System)

Team Members:

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Project Overview

This project is about developing a smart, pet healthcare system that makes managing pet health easy, personalized, and travel-ready. The system allows pet owners, doctors, and an admin to handle every aspect of pet care from basic health records and appointments to emotional tracking and travel compliance all within one platform. With tools like personalized care planning, mood tracking, and digital pet passports, Care4Purrt ensures that every pet receives complete and convenient care. It's designed to simplify pet management, promote emotional well-being, and support modern, travel-compliant lifestyles.

1. Help pet owners manage their pets' profiles, health records, and appointments easily.
2. Allow doctors to view, diagnose, and update pets' medical histories efficiently.
3. Enable admins to monitor the system, manage users, and generate pet travel passports.
4. Provide unique system like MoodTrack for behavior logging and CareTailor for personalized health plans.
5. Ensure data accuracy, user verification, and smooth role-based access through a secure system.

Introduction

Care4purrt is a pet healthcare system developed in PHP using Object-Oriented Programming (OOP) principles. The system allows pet owners, doctors, and an admin to manage all aspects of pet health from basic CRUD operations to advanced features like personalized health planning, emotional behavior tracking, and travel passport generation. All data will be stored in database. The system demonstrates concepts like Encapsulation, Inheritance, Abstraction, and Polymorphism, along with proper modular design.

Features

a. User-Friendly Registration

- Separate account options for Pet Owners, Doctors, and Admins.
- Secure login using hardcoded or simulated credentials with role-based dashboard access.

b. Pet Profile Management (CRUD)

- Pet owners can add, edit, delete, or view detailed pet profiles.

- Include information such as name, age, breed, vaccination status, and medical history.

c. Appointments and Medical Records

- Pet owners can book, update, or cancel appointments with doctors.
- Doctors can add diagnoses, prescriptions, and treatment notes for each pet.

d. MoodTrack – Emotional and Behavior Logging

- Pet owners can log daily moods and behavioral changes (happy, anxious, aggressive, etc.).
- Doctors can review logs and suggest emotional support or therapy plans.

e. CareTailor – Personalized Health Planner

- System analyzes breed, age, and activity level to suggest nutrition and exercise routines.
- Recommends vaccination schedules and preventive check-ups.

f. PurrPort – Pet Passport and Travel Compliance

- Admins verify vaccination, health certificates, and microchip details.
- Generate printable travel passports for pets meeting all health and vaccination criteria.

g. Role-Based User Dashboards

Different dashboards for each user role:

- Pet Owners: Manage pets, appointments, and mood logs.
- Doctors: View pets, add medical records, and review health trends.
- Admins: Oversee users, verify travel compliance, and generate system-wide reports.

h. Database Data Handling

- Uses **MySQL Database** integrated through **XAMPP** for efficient data storage and management.
- Stores all user, pet, appointment, and medical data securely in structured tables.
- Ensures **data persistence**, accuracy, and easy retrieval through SQL queries.

i. Admin Monitoring and Reporting

- Admin monitors user activities, reviews pet data, and manages system compliance.
- Generates summary health reports and ensures data consistency across roles.

Target Users

Pet Owners: Individuals who want to manage their pets' health records, track moods, and access personalized care or travel compliance information.

Doctors: Veterinary professionals who diagnose pets, record medical details, review behavior logs, and suggest personalized treatment or care plans.

Admin: Responsible for managing system users, verifying vaccination and travel compliance, generating pet passports, and overseeing system activities.

Technology Stack

Frontend: HTML, CSS
Backend:
PHP

Database: phpMyAdmin, Mysql

Hosting: Localhost (XAMPP) during development, later a live server

User Roles and Dashboards

Pet Owner Dashboard:

- Register and log in
- Add/Edit/Delete/View pet profiles
- Book, update, or cancel appointments
- View pet health records (read-only)
- Use MoodTrack: Log pet moods, triggers
- Use CareTailor: Get personalized nutrition/exercise plan
- Use PurrPort: View travel/passport readiness

Doctor Dashboard:

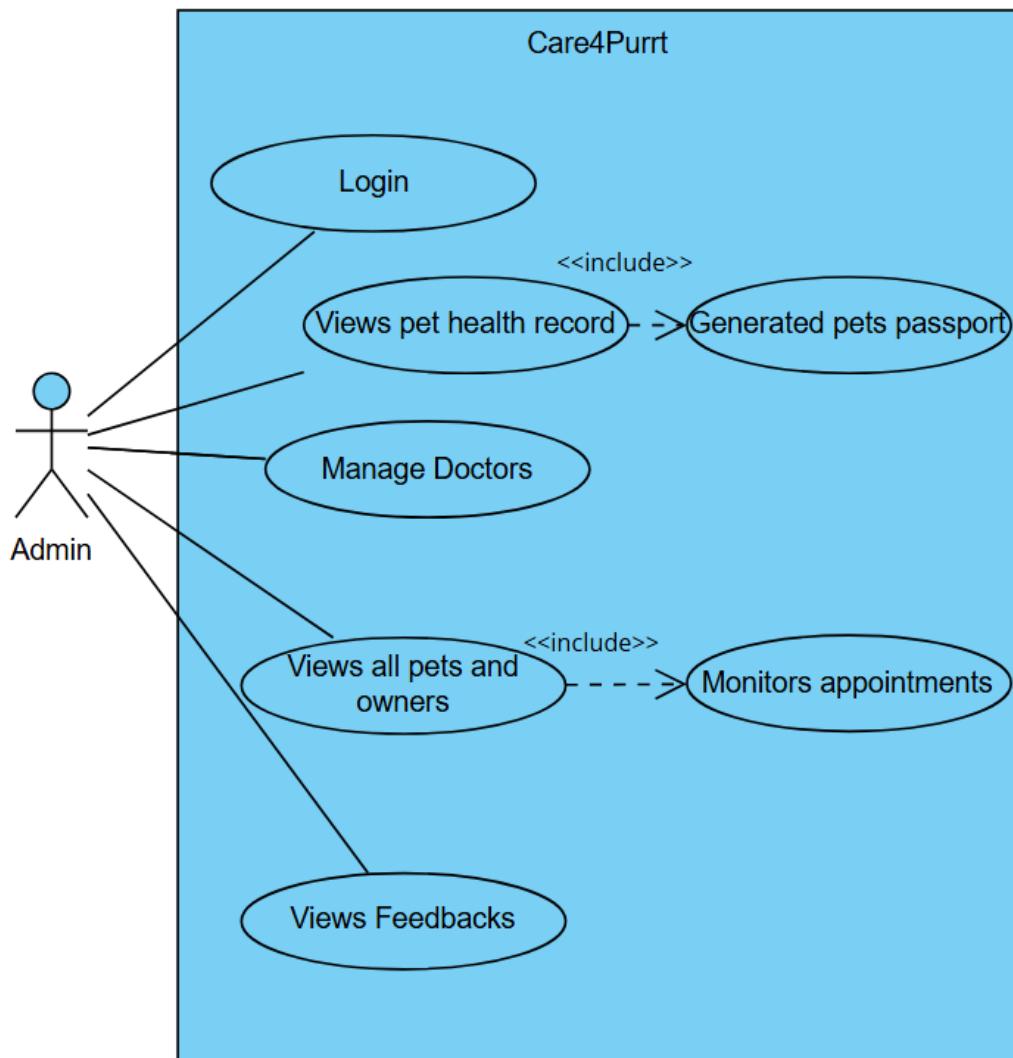
- Login via simulated credentials
- View list of pets and appointments
- Add/View medical records (diagnosis, prescriptions)
- Review mood/behavior logs for emotional support
- Suggest health plans or follow-ups

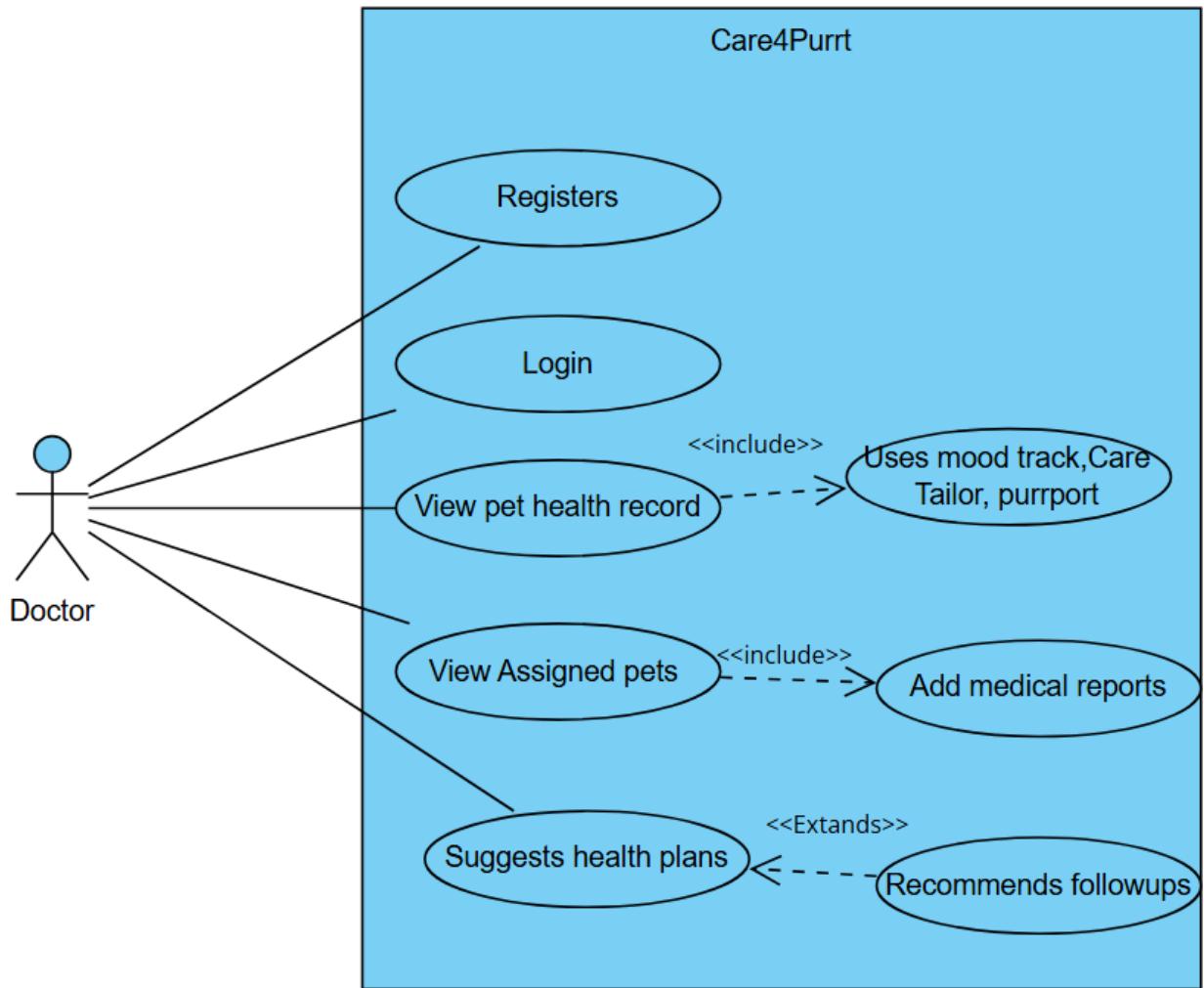
Admin Dashboard :

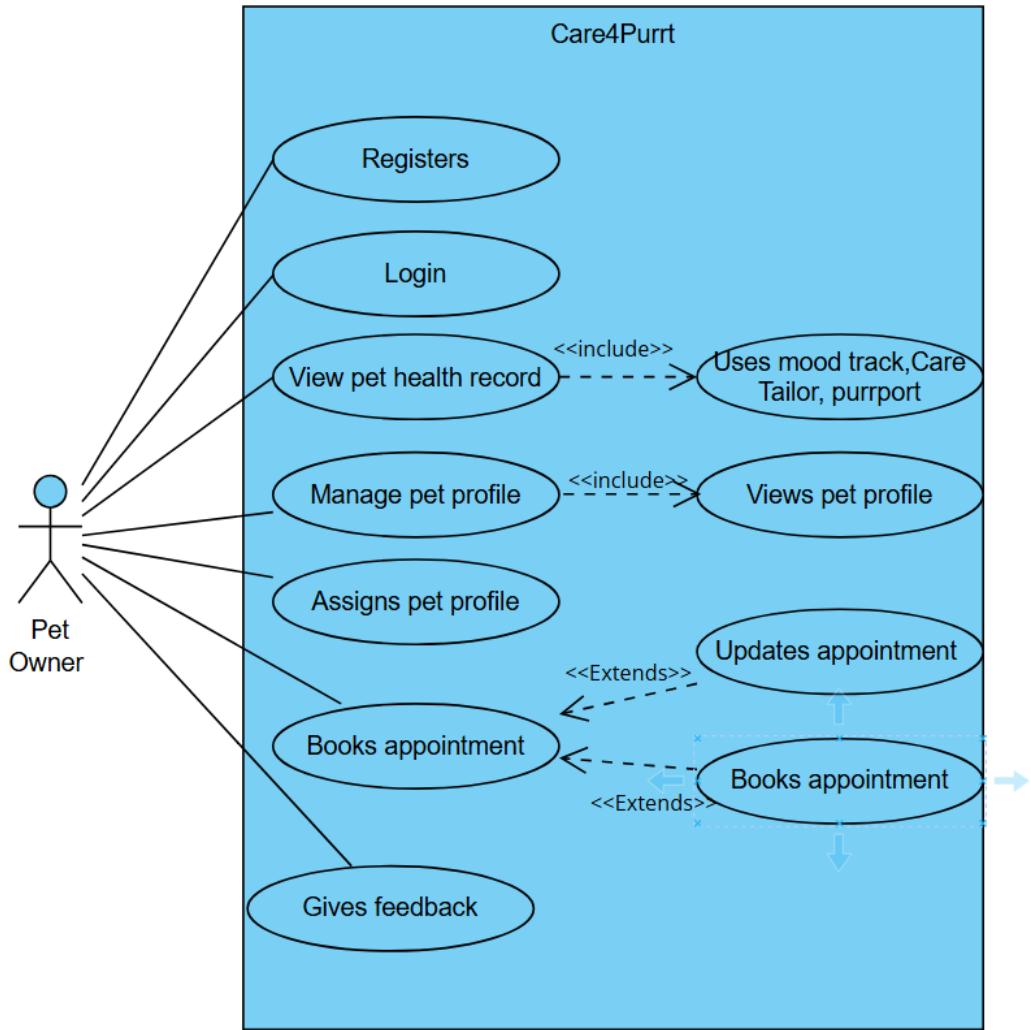
Admin Role Responsibilities:

- Log in with hardcoded admin credentials
- Generate Pet Passport (PurrPort)
- Check rabies vaccine, microchip, health certificate
- Generate printable text-based passport
- Add/Edit/Delete doctors (user management)
- View all pets and owners in the system
- View system-wide mood logs, vaccine status
- Generate summary health reports of all pets
- Monitor pending appointments and compliance issues

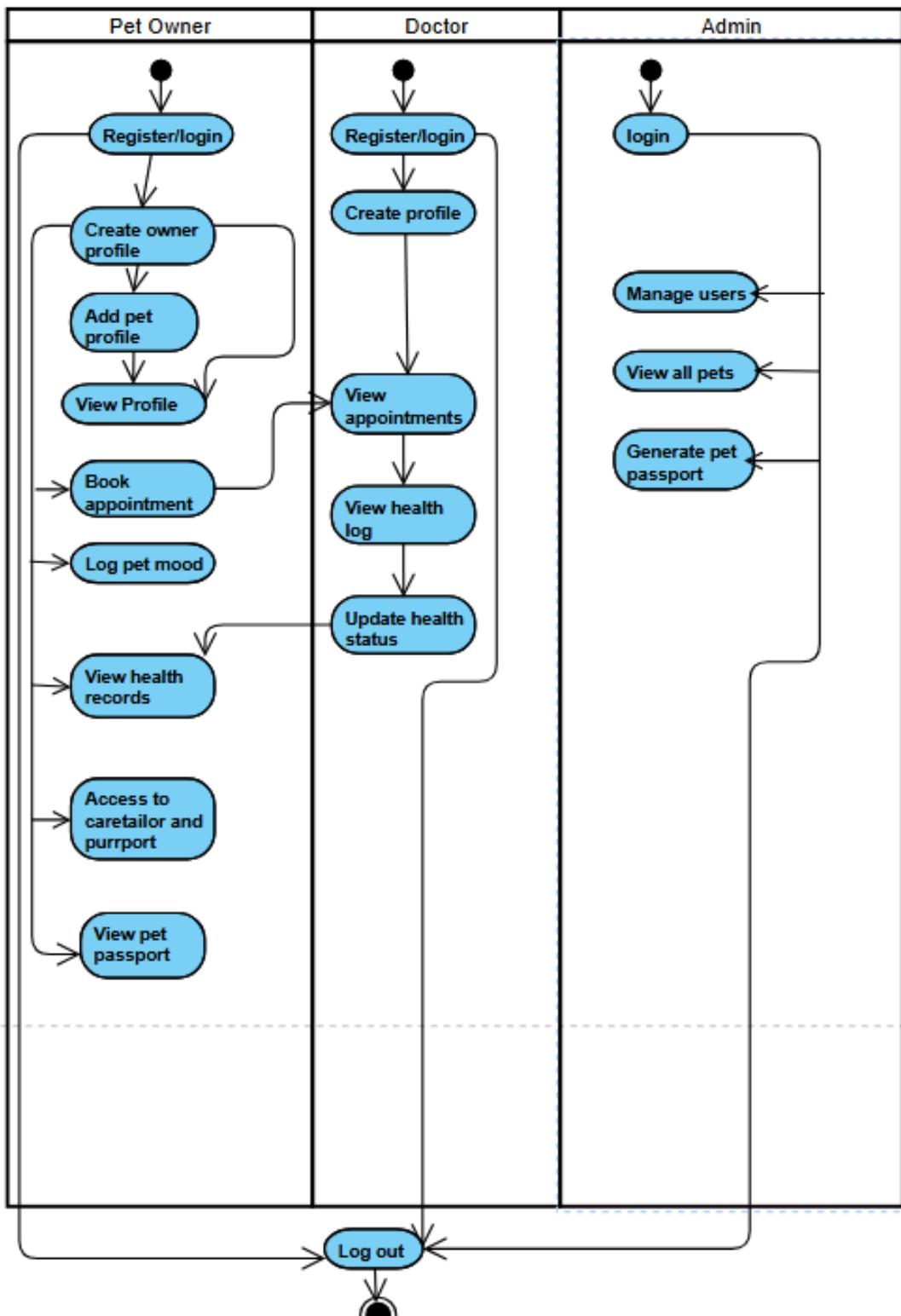
USE CASE DIAGRAM



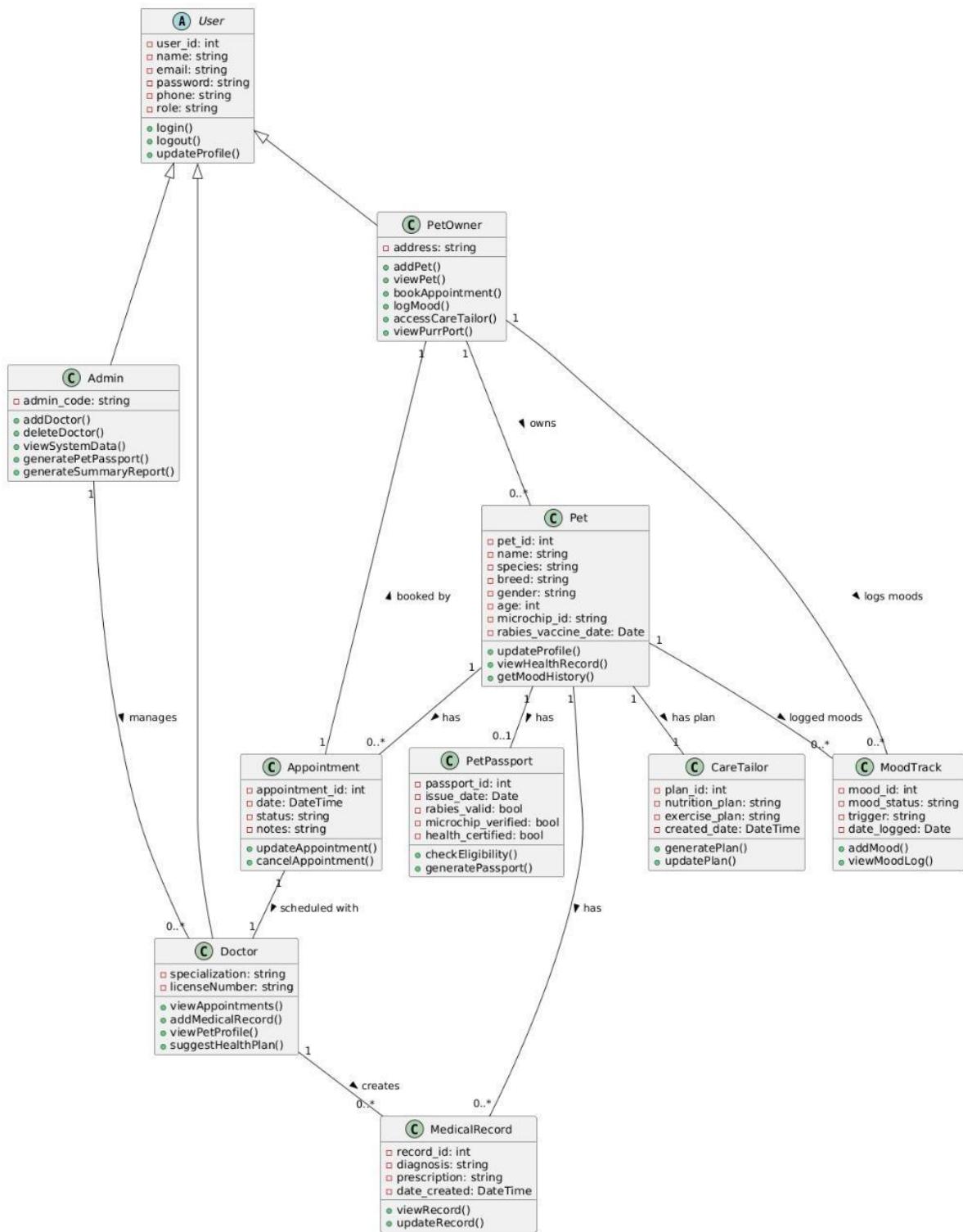




ACTIVITY DIAGRAM



CLASS DIAGRAM



Literature Review

1. PetMD: PetMD (<https://www.petmd.com/about>) , founded in 2008, is a trusted online platform dedicated to providing accurate and veterinarian-approved information on pet health and care. With the motto “For Pets. By Vets.TM”, the site emphasizes credibility and professional expertise, ensuring that pet owners receive reliable, evidence-based guidance on various aspects of pet wellbeing, including nutrition, diseases, and behavior. What distinguishes PetMD from other sources is its close collaboration with qualified veterinarians who review and update content regularly, maintaining the accuracy and relevance of its information. By working with a network of veterinary experts, PetMD bridges the gap between professional veterinary knowledge and accessible education for pet owners. PetMD allows content licensing only through Wright’s Media to ensure proper use and protect its brand’s authenticity. Overall, PetMD is a reliable online resource that combines modern technology and veterinary knowledge to help pet owners care for their pets in a responsible and informed way.
2. United Pet Care (UPC): United Pet Care (UPC) (<https://www.unitedpetcare.com/>) provides a membership-based program designed to make pet healthcare simple, affordable, and accessible. Through this system, members select a participating veterinarian, register under a plan, and instantly receive discounts typically around 20% on a wide range of services, including wellness exams, vaccinations, dental treatments, lab tests, and emergency care. Unlike traditional pet insurance, UPC accepts all pets regardless of age, breed, or pre-existing conditions, and members benefit without any waiting periods, deductibles, or claim forms. This straightforward structure allows pet owners to save money while ensuring consistent and quality veterinary care. By blending convenience with affordability, UPC stands out as a practical and reliable alternative to conventional insurance models, promoting responsible and proactive pet healthcare.
3. Zoetis: Zoetis (<https://www.zoetispetcare.com/>) is a comprehensive pet health care platform that combines veterinarian-approved products, expert advice, and digital tools to support pet wellness. The company offers a wide range of products for parasite prevention, skin health, vaccines, and overall quality of life, all backed by veterinary science. One of its key features is the Zoetis Rewards program, which allows customers to earn points from product purchases and use them for future veterinary care or pet-related expenses. Zoetis Petcare also provides valuable online resources such as the Pack App, health quizzes, expert articles, and newsletters to help pet owners stay informed and proactive about their pets’ needs. Emphasizing trust and professional accuracy, all of its information is verified by veterinarians. Overall, Zoetis Petcare stands out as a reliable and holistic resource that blends quality healthcare products, professional guidance, and customer engagement to promote better pet health and responsible ownership.
4. Petivity: Petivity (<https://www.petivity.com/>) is a health-focused pet care website that offers smart devices and at-home health tests to help pet owners monitor and improve their pets' well-being. Its flagship product, the Smart Litter Box Monitor, uses AI to track a cat's weight, urination, and defecation each time they use the litter box. The data is sent to the Petivity app, which provides easy-to-read charts and monthly health reports, and alerts owners to changes that may indicate health issues requiring veterinary attention. In addition, Petivity offers at-home health tests such as the Microbiome Analysis Kit, which monitors gut health, and the Kidney Health Test, which allows monitoring kidney function using a simple gum swab. Overall, Petivity provides tools that enable pet owners to proactively manage their pets' health, detect potential problems early, and seek timely veterinary care.
5. Veterinary Partner – VIN: Veterinary Partner – VIN (<https://veterinarianpartner.vin.com/>) is a trusted online resource providing pet health information reviewed by veterinarians. It offers detailed, species-specific content on topics such as diseases, medications, diagnostics, and preventive care. The platform is designed to help pet owners understand their pets' health and make informed decisions.

Content is organized by species including dogs, cats, horses, birds, and more and covers a wide range of topics, from common illnesses to emergency care. Each article is written or reviewed by veterinary professionals, ensuring accuracy and reliability. The platform also provides resources on first aid, quality of life assessments, and end-of-life decisions, supporting pet owners through all stages of their pets' lives. VIN stands out by offering evidence-based information that empowers pet owners to actively participate in their pets' healthcare. Its user-friendly interface and comprehensive content make it a valuable tool for anyone seeking to enhance their understanding of pet health.

6. Pet Health Club : Pet Health Club (<https://www.pethealthclub.com/uk>) is a preventative healthcare program designed to help pet owners manage the routine health needs of their pets. With over 800,000 members, the club offers structured plans for dogs, cats, and rabbits that focus on proactive care to maintain long-term health. There are two main plan tiers: the Essential Plan, which includes annual vaccinations, six-month health checks, year-round parasite treatments, and a 10% discount on neutering, and the Plus Plan, which adds unlimited face-to-face consultations with a local vet, 24/7 online access to veterinary advice, and a 20% discount on neutering. These plans allow pet owners to budget for essential healthcare while ensuring their pets receive consistent, preventative care. Pricing starts from £22.99 per month for dogs, £20.99 for cats, and £17.99 for rabbits on the Essential Plan, with higher rates for the Plus Plan. Additional features include a welcome Little Paws Bundle worth over £100 and a multi-pet discount for owners with more than one pet. Pet Health Club complements traditional pet insurance by focusing on routine care and preventative treatments, helping pet owners maintain their pets' health proactively. Enrollment is simple: owners select a participating veterinary practice from over 1,200 across the UK, choose a plan, register their pet, and begin using the plan benefits immediately. By combining structured healthcare plans, professional veterinary support, and added incentives, Pet Health Club benefits not only pet owners but also veterinarians by promoting regular check-ups and long-term monitoring, while pets gain from consistent preventive care that enhances their overall well-being and quality of life.

Discussion

Care4Purrt is designed to provide a comprehensive and innovative approach to pet health management that goes beyond traditional systems focused solely on physical health or appointment scheduling. By integrating mental health tracking system through MoodTrack, the system addresses often overlooked emotional and behavioral well-being, which can significantly impact a pet's quality of life. The CareTailor module personalizes care plans based on specific pet data making the system accessible and practical for learning and demonstration purposes. Incorporating PurrPort equips the system to meet modern demands of pet owners who travel internationally, ensuring pets comply with necessary health certifications and travel documentation. This feature enhances the system's real-world relevance and utility. The addition of an Admin Dashboard introduces necessary oversight, such as user management, compliance checks, and system-wide reporting, thereby improving system robustness and enabling smooth multi-role operation. Overall, Care4Purrt blends technical learning with practical application, making it a valuable project for both educational purposes and potential real-world extension.

Conclusion

Care4Purrt is more than a simple CRUD-based veterinary application, it is a smart, interactive, and featured system that effectively demonstrates real-world implementation of Pet healthcare system. By combining the oversight of administrators, the expertise of veterinarians, and active participation from pet owners, Care4Purrt provides a comprehensive and responsible solution for holistic pet care, addressing physical health, emotional well-being, and travel compliance all in one system.