

PETBOOK: A PLATFORM FOR PET OWNERS FOR VARIOUS FEATURES ABOUT PETS

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ABSTRACT

PetBook a platform for pet owners for various features about pets; Importance of managing pet information Pets, like humans, require regular medical care and attention to maintain their well-being. However, pet owners may find it difficult to keep track of all the necessary appointments, vaccinations, medications, and nutritional needs. Moreover, specific information about the pet's breed, behaviour, and preferences is often scattered or forgotten. A PIMS helps consolidate all relevant data, ensuring that pet owners and caregivers have easy access to vital information. This improves the pet's quality of life and reduces the risk of missed vaccinations, overlooked medical issues, or inappropriate feeding practices Need of pet care and information cause Every pet is unique, with its own set of health requirements, dietary restrictions, and activity levels. A one-size-fits-all approach to pet care is insufficient for maintaining optimal health.

Keywords: Pet Care, Information Management, Health Tracking, Veterinary Support, Pet Wellness, Digital Solutions, Pet Technology.

I. INTRODUCTION

This research paper presents an advanced Pet Information Management System (PIMS) designed to improve pet care and management across various settings. The study explores the technical and practical aspects of the system, focusing on its potential to reduce the challenges of pet care while maximizing data accessibility for pet owners, veterinarians, and pet service providers. Through a series of tests and analyses, we evaluate the PIMS's performance under different usage scenarios and types of pets. The results indicate that the system significantly enhances pet owners' ability to manage pet health and wellness, reducing the likelihood of missed care routines compared to traditional methods. Additionally, we analyze the broader applications of this technology for both domestic and exotic pets, highlighting its flexibility and potential to integrate with existing veterinary and pet care frameworks. This paper aims to contribute to the development of more organized and user-friendly pet management solutions, providing insights for future research and practical applications in the field of pet care technology.

II. METHODOLOGY

Procedure that we adopted during the completion of the project is as follows :-

1. Literature Review:

A comprehensive review of existing literature on Pet Information Management Systems (PIMS) and similar animal care management solutions was conducted. This included academic papers, technical reports, and case studies to identify current technologies, design principles, and user experiences. The review aimed to establish a theoretical foundation for the research and highlight gaps in existing knowledge regarding pet health tracking, personalized care, and data management in the pet care sector. Design Analysis:

A systematic evaluation of various Pet Information Management Systems (PIMS) designs was performed. This involved:

2. Design Analysis:

- Feature Analysis: Breaking down different systems into their core features (e.g., health tracking, vaccination records, dietary and activity monitoring).
- User Experience Assessment: Evaluating the designs for ease of use, accessibility, and relevance to pet owners and veterinarians, using criteria from user experience studies.
- Data Security and Storage: Assessing the security and storage solutions used in the systems for reliability, privacy, and efficiency.

Based on these evaluations, prototype systems were developed. These prototypes incorporated user-centered design principles, focusing on improving usability, data accessibility, and overall performance.

3. User Testing:

The data collected from user testing were analyzed using statistical methods to quantify performance metrics (e.g., accuracy, responsiveness) and qualitative methods to identify common themes in user feedback, such as ease of use, reliability, and helpfulness in managing pet care.

4. Case Studies:

Real-world applications of Pet Information Management Systems (PIMS) in various pet care settings were examined through case studies. These included existing implementations in veterinary clinics, pet boarding facilities, and households, assessing their impact on pet health management, convenience, and user satisfaction.

5. Policy Analysis:

An examination of pet care regulations and industry standards was conducted to understand how PIMS can be integrated into established pet care practices. This included a review of data privacy laws, veterinary record-keeping requirements, and standards for animal wellness tracking.

6. Synthesis and Recommendations:

Finally, findings from all phases were synthesized to develop recommendations for future design improvements, potential applications, and policy considerations aimed at promoting the adoption and effective use of Pet Information Management Systems.

III. COMPARATIVE

Comparison into key aspects like Research Objectives, methodology, System Desing, Technology Integration, Sustainability Focus, Key findings, Limitations, this comparative is created by research papers : IJCRT Paper, JETIR paper, IRJET paper.

Feature/Aspect	IJCRT Paper - Pet Care System Based on Android [7]	JETIR Paper - Pet Adoption Using Flutter [8]	IRJET Paper - Mobile Application of Pet Adoption System [9]
Objective	Offers a pet care app to help users manage their pets and find temporary care for pets.	Aims to reduce stray animal population by creating a pet adoption platform.	Encourages adopting stray animals by simplifying the adoption process.
Technology Used	Android-based mobile application	Flutter for frontend and Firebase for backend	Flutter and Firebase for app development and database management
Key Features	Registration, request/reply system for pet care, location-based vet and caretaker info	Post pictures/locations of stray animals, volunteer sign-up, lost pet listings	Account creation, location-based shelter info, search/filter by pet type
Unique Modules	Pet care advice, temporary adoption requests, notifications for diet/vaccine schedules	Encourages volunteer activities, lost-and-found pet posts, Google Map integration	Chat feature for adopters, appointment scheduling, user profile editing
Target Audience	Pet owners seeking care support or temporary adoption	Pet adopters, volunteers, stray animal rescuers	Animal shelters, pet adopters

IV. CONCLUSION

In conclusion, the development and implementation of a comprehensive Pet Information Management System (PIMS) mark a significant advancement in pet care technology. This paper has shown that integrating personalized

care plans, real-time tracking, and centralized information management can improve the quality of pet care, simplify record-keeping, and enhance communication between pet owners, veterinarians, and service providers. Through systematic evaluation and user feedback, we have demonstrated that the PIMS meets the diverse needs of pet owners, while ensuring safety and well-being for pets. Future research could explore the addition of AI-driven insights for proactive health monitoring and customized care recommendations. Overall, the PIMS holds great potential for improving pet care practices, promoting healthier and happier lives for pets, and offering valuable support for pet owners and caregivers alike.

V. REFERENCES

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