

# PET ADOPTION SYSTEM DESIGN

*This paper delves into designing and implementing pet adoption system for animal shelters to improve information management and adoption rate. At the same time, it arises people's awareness of homeless animals. A system design concept is presented, highlighting the system of advanced algorithm and creative functions.*

## INTRODUCTION

Each year, approximately 3.4 million companion animals enter U.S. animal shelters nationwide. Shockingly, only a small percentage, ranging from 15% to 18%, are reunited with their original owners [1]. This results in many animals being euthanized due to overcrowding in shelters. The current methods of finding and adopting pets are ineffective and disorganized, with people using hand-to-hand posters and relying on word-of-mouth to spread the message of a pet fostering. Such methods are costly and often result in no success. Social media platforms like Facebook and Instagram are also used and there are cases of small individual websites trying offer more options to people to foster a pet. Combing all these, our system aims to create a comprehensive platform that caters to all animal lovers, providing all necessary information to help them find their ideal pet and provide a community in which pet owners can share personal experience about how to cater a specific type of pet, which is often lacking in other shelters or platforms.

### I. EXISTING SYSTEM

Pet adoption is the process in which an individual fosters an animal, mostly cat or dog, according their preference. These animals that are lost, abandoned or rescued from streets are collected by the animal control and kept in animal shelters. In most existing system or process, adopting a pet requires a series of basic steps from searching shelter information, contacting shelter to physically visiting a shelter to select an ideal pet. If the user decides to adopt the pet, they must then fill out an application form and wait for a period of 24 to 48 hours for approval from the shelter administration. Once clearance is sorted, the user can sign a contract and take the pet home[2]. The process flow is depicted in the following Sequence figure (see Figure.1)



Рис. 1 – Sequence

In the proposed system, there are various enhancements that can be implemented to improve its functionality:

- Pet tutorial: A comprehensive tutorial can be incorporated to assist adopters with limited knowledge regarding pet care and catering.
- Pet identification: An efficient system for establishing a unique identification record for each pet can be implemented to facilitate ownership management.
- Owner communication: A dedicated platform can be established to encourage open communication among owners, enabling the sharing of information and experiences related to addressing specific pet-related issues.
- Trial period: To support first-time adopters in their endeavors, a trial period can be introduced. This will allow adopters to assess compatibility and if necessary, return the pet if the arrangement proves unsuccessful.

## II. SYSTEM DESIGN

The implementation of our adoption system design is built on the existing system or process, while offering user a seamless and efficient experience with a higher satisfaction. In our system, adopting a pet requires several basic steps as shown in Improved Sequence figure (see Figure.2). Initially, users can begin by searching our system's web page, where they will find a pet tutorial designed to provide them with a better understanding of their ideal pets. Subsequently, they can utilize our online pet information database to find their desired pets. The user-friendly interface allows for easy browsing and selection of pet posts. Once a pet is selected, users can access detailed information about the chosen pets. User can visit the corresponding shelter to observe and interact with pets. After that, user can apply for adoption request. The admin will evaluate the application. Upon approval, user can take the pet home. Additionally, on the web site, there is a communication section which is open to user, enabling the sharing of information and experiences related to addressing specific pet-related issues, and a volunteer engagement section providing an opportunity for user to make a contribution saving the animals.

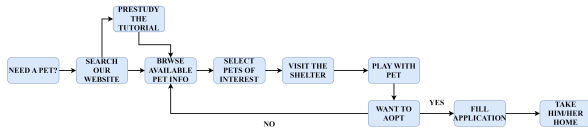


Рис. 2 – Improved Sequence

### III. CONCLUSION

Our adoption system design offers a seamless and efficient experience for users, resulting in higher satisfaction. By providing a user-friendly interface, a pet tutorial, an online pet information database, and a streamlined adoption process, we have improved the overall adoption experience.

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Additionally, our website features a communication section and a volunteer engagement section to promote community involvement and support in animal welfare. Overall, our adoption system design enhances the user experience and facilitates the process of pet adoption.

1. The national database.(2023).Shelter Animals Count. Retrieved from <https://www.shelteranimalscount.org/intake-and-outcome-database-iod/>
2. Harshwardhan Bhale, Swajeet Chavan2, Chetan Kamble.(2023).Pet Adoption System. International Journal of Research Publication and Reviews, Vol 4, no 6, pp 3778-3782 June 2023