

SAVEFUR: Stray Dog Shelter for Adoption and Fostering

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Abstract

"Savefur is a stray dog adoption application that helps people adopt stray dogs. It also provides a 'spot a stray' option, allowing users to report stray dogs' locations for collection. Additionally, the app offers a fostering option for those willing to provide foster care. Users can donate money or food to shelters through the application, helping to reduce safety threats from stray dogs while providing them with safe homes, health care, and food.

Keywords: Stray Dog Adoption, Shelter Support, Spot a Stray, Real-time Reporting, Donations, Intuitive Adoption Interface, Technology, Responsible Pet Ownership, Uplift Stray Dog Welfare.

1. Introduction

In a world where countless stray dogs roam the streets, 'SaveFur' emerges as a beacon of hope and compassion. This revolutionary mobile application is not just a tool; it's a movement dedicated to transforming the way we connect with and care for stray dogs. With

innovative features for adoption, fostering, and spotting strays, 'SaveFur' stands at the forefront of the animal welfare movement.

Understanding the Stray Dog Crisis: The plight of stray dogs is a global concern, with millions of dogs worldwide facing abandonment, neglect, and suffering. Overpopulation exacerbates this crisis, leading to overcrowded shelters and limited resources to care for these animals. Traditional methods of addressing the issue have often fallen short, highlighting the need for innovative solutions that empower individuals to make a tangible difference. **Empowering Compassionate Connections:** "SaveFur" serves as a catalyst for change, empowering individuals to forge compassionate connections with stray dogs through adoption, fostering, and community engagement. Its user-friendly interface makes it easy for users to explore available dogs, learn about their stories, and find their perfect match. Whether someone is looking for a loyal companion or considering fostering to provide temporary care, "SaveFur" offers comprehensive support every step to revolutionize the dog safety.

1.1 Scope and Impact

Scope: The scope of SaveFur is extensive, covering various aspects of stray dog welfare, including adoption, fostering, and community engagement. With its intuitive interface and innovative features, SaveFur aims to tackle the challenges associated with stray dog overpopulation and abandonment. The application serves as a platform for shelters, rescuers, potential adopters, fosters, and concerned citizens to connect and collaborate seamlessly. Additionally, SaveFur goes beyond adoption and fostering by enabling users to spot and report stray dogs, contributing to efforts to reduce stray populations and alleviate suffering. With its holistic approach, SaveFur has the potential to make a significant difference in the lives of countless stray dogs and the communities they inhabit.

Impact: SaveFur has a profound impact on stray dogs, adopters, fosters, and communities. By providing a centralized platform for adoption and fostering, SaveFur increases the chances of successful placements, ensuring that stray dogs find loving homes or temporary care in nurturing foster environments. This not only improves the welfare of individual dogs but also relieves the burden on overcrowded shelters and reduces euthanasia rates. Furthermore, SaveFur's spot-a-stray feature empowers communities to identify and assist stray dogs promptly, leading to timely interventions and a decrease in stray populations.

Beyond its direct impact on animals, SaveFur fosters compassion and community engagement, inspiring individuals to advocate for animal welfare and cultivate empathy and responsibility towards stray dogs. Ultimately, SaveFur's efforts contribute to creating safer, more compassionate communities where both humans and animals can thrive.

2. Related Work

[1] Animal Shelters and Rescue Organizations: Traditional animal shelters and rescue organizations play a crucial role in caring for and rehoming stray dogs. These entities provide temporary shelter, medical care, and behavioral rehabilitation to stray dogs before they are adopted or fostered.

[2] Online Adoption Platforms: Websites and mobile applications dedicated to pet adoption, such as Petfinder and Adopt-a-Pet.com, provide searchable databases of adoptable animals from shelters and rescue groups across the country. These platforms facilitate the adoption process by connecting potential adopters with available pets.

[3] Fostering Programs: Many animal shelters and rescue organizations operate fostering programs that allow volunteers to provide temporary homes for animals in need. Fostering helps alleviate overcrowding in shelters, provides individualized care for animals, and prepares them for eventual adoption.

[4] Community Outreach and Education: Community-based initiatives aimed at raising awareness about stray dog overpopulation, responsible pet ownership, and the importance of spaying/neutering contribute to long-term solutions for reducing the number of stray dogs. These initiatives may include educational workshops, outreach events, and public awareness campaigns.

[5] Legislation and Policy: Legislative efforts to regulate pet ownership, enforce animal welfare laws, and implement spay/neuter programs can have a significant impact on reducing stray dog populations and improving their welfare. Municipalities may enact ordinances requiring pet licensing, vaccination, and responsible pet ownership practices.

[6] International Animal Welfare Organizations: Global organizations such as the World Animal Protection and the Humane Society International work to address animal

welfare issues, including stray dog overpopulation, through advocacy, rescue operations, and community outreach programs in various countries.

[7] Technology Solutions: Beyond "SaveFur," other technology-driven solutions focus on improving animal welfare, including mobile applications for lost and found pets, microchip identification systems, and online platforms for reporting animal cruelty or neglect.

2.1 Problem Statement

Problem Statement: In India, the issue of stray dog welfare presents a multifaceted challenge, characterized by overcrowded shelters, limited resources, and inadequate systems for adoption and fostering. Despite numerous efforts, existing methods for addressing this issue often fall short, relying on manual processes that are inefficient and fragmented. Additionally, there is a lack of centralized platforms that effectively connect shelters, rescuers, adopters, and fosters, hindering efforts to streamline operations and maximize impact. As a result, stray dogs continue to face abandonment, neglect, and suffering, while opportunities for adoption and fostering remain underutilized.

3. Architecture

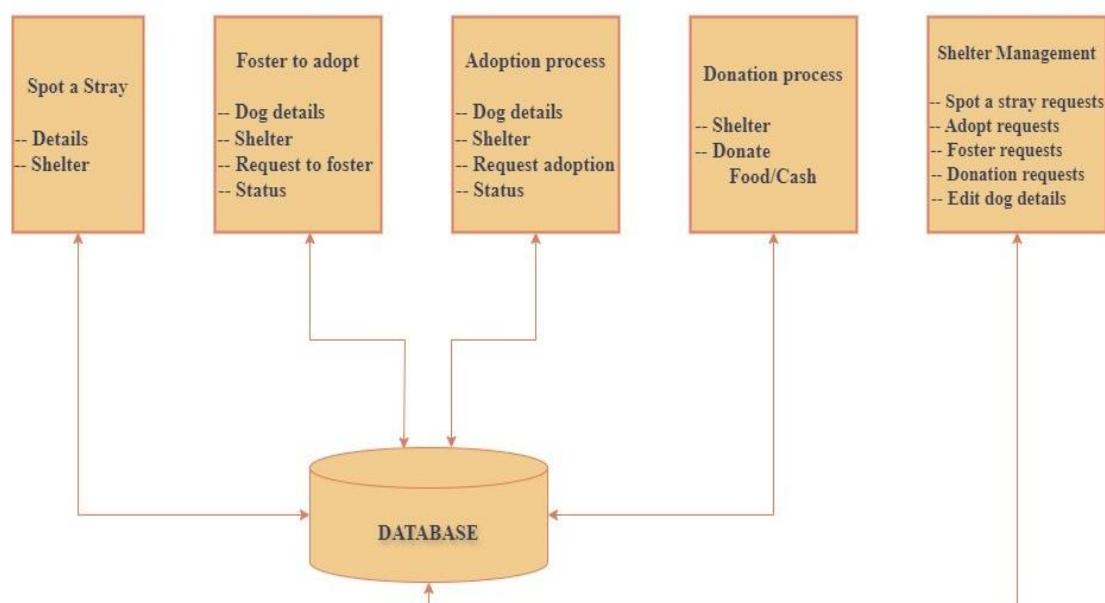


Figure 1. Architecture

3.1 Components:

Software Components:

1. Frontend Development Tools:

- HTML: Used for structuring the content of SaveFur's web pages.
- CSS: Employed for styling the HTML elements, ensuring a visually appealing user interface.
- Bootstrap: Utilized as a frontend framework for building responsive and mobile-first web designs, providing pre-designed components and layouts.
- JavaScript: Used for adding interactivity and dynamic behavior to SaveFur's web pages, enhancing the user experience with features such as form validation and interactive elements.

2. Backend Development Tools:

- Python Django: Django is a high-level Python web framework used for backend development in SaveFur. It provides a clean and pragmatic design, enabling rapid development of web applications with its built-in features such as authentication, routing, and ORM (Object-Relational Mapping).
- SQLite: SQLite is a lightweight relational database management system used as the backend database for SaveFur. It stores and manages data related to user profiles, dog profiles, adoption/fostering records, and spot-a-stray reports, ensuring data integrity, security, and efficient retrieval.

3. Database:

SQLite: SQLite is the database management system used in SaveFur for storing and managing structured data related to user profiles, dog profiles, adoption/fostering records, spot-a-stray reports, etc. SQLite is chosen for its simplicity, portability, and ease of integration with Django, making it suitable for the initial development phase of the application

3.2 Step-by-Step Explanation of SaveFur Development:

1. For the front end of this application we used html, CSS, JavaScript, Bootstrap
2. For backend we used python Django framework
3. For the database we used the sqlite

3.3 Flowchart:

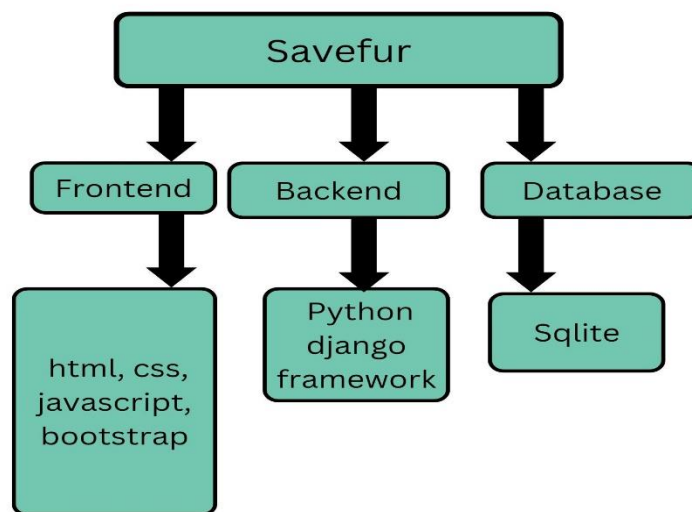


Figure 2. Flowchart

4. Proposed Work

The main aim of the 'SaveFur' application is to expand its reach to new regions and countries where stray dog overpopulation is a pressing issue. The application will be customized to address local needs and challenges and will collaborate with local animal welfare organizations to support their efforts in caring for stray dogs. 'SaveFur' helps users adopt stray dogs and offers fostering options for those interested. Additionally, there is a donation feature where users can donate food or money to nearby shelters. The most attractive option is 'spot a stray,' which helps locate stray dogs based on user-reported locations.

4.1 Algorithm

The algorithm for the “SaveFur” application can be outlined as follows:

1. User logins or create their profile
2. If the user spots a stray dog and want to report them to the nearby shelter, then
Click on 'spot a stray' option and fill in the details.
3. If the user want to adopt a dog, then,
Click on 'adoption' option and select the dog according to their preferences.
4. If the user want to foster , then
Click on 'foster' option and then select a dog according to their preferences and then select from date and to date for fostering time period.
5. If the user is willing to donate money or food for shelters then,
Click on donate and fill in the needed details.
6. Logout.

5. Results and Discussion

Expansion to New Regions: The expansion of the "SaveFur" application to new regions and countries has allowed it to reach a broader audience and address local needs and challenges related to stray dog welfare. Customization of the application to suit local contexts has further enhanced its effectiveness in facilitating adoptions, fostering, and community engagement.

Discussion: The positive results observed from the implementation of the proposed enhancements to the "SaveFur" application underscore its effectiveness in revolutionizing stray dog welfare and empowering compassionate connections between humans and dogs. By leveraging technology and community engagement, "SaveFur" has succeeded in addressing various challenges associated with stray dog overpopulation and abandonment.

Overall, the "SaveFur" application has proven to be a powerful tool in the fight against stray dog overpopulation and abandonment, demonstrating the potential of technology to effect

positive change in the lives of animals and communities alike. Continued efforts to enhance and expand the application will further amplify its impact and pave the way for a more compassionate and humane world for stray dogs.

5.1 Result

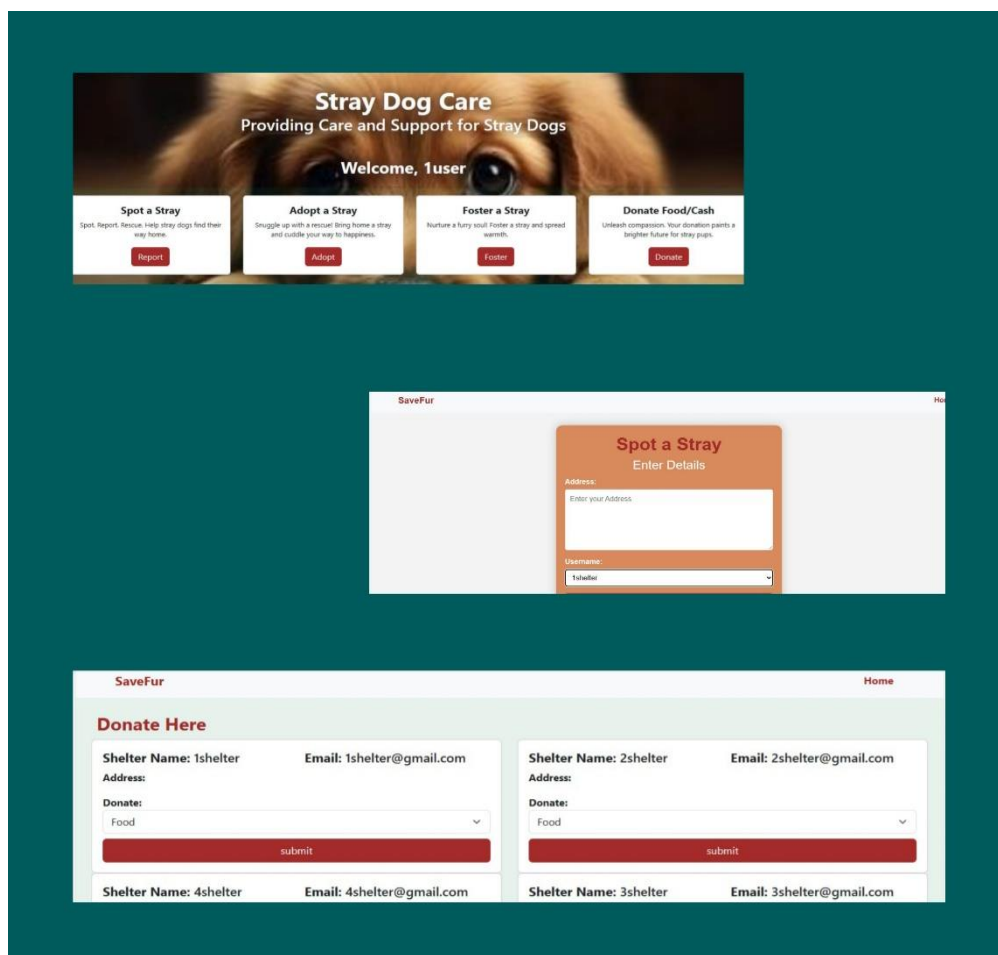


Figure 3. Home Page

SaveFur

Spot a Stray

Enter Details

Address:

Enter your Address

Username:

1shelter

Submit

Figure 4. Spot a Stray

Dog id	Shelter	Dog Breed	Age	Health condition	Request Adoption	Status
1	1shelter	None	None	UnKnown	Request Adoption	Approved
3	2shelter	None	None	UnKnown	Request Adoption	Approved
5	2shelter	None	None	UnKnown	Request Adoption	Not Requested
6	1shelter	lab	2	Healthy	Request Adoption	Approved
7	1shelter	pit bull	2	Healthy	Request Adoption	Request pending
8	1shelter	Normal	3	Unhealthy	Request Adoption	Request pending
9	4shelter	lab	8	Unhealthy	Request Adoption	Not Requested
10	1shelter	lab	2	Healthy	Request Adoption	Not Requested
11	3shelter	bulldog	1	Healthy	Request Adoption	Not Requested

Figure 5. Adoption

SaveFur Home

Donate Here

Shelter Name: 1shelter Email: 1shelter@gmail.com

Address:

Donate: Food

submit

Shelter Name: 2shelter Email: 2shelter@gmail.com

Address:

Donate: Food

submit

Shelter Name: 4shelter Email: 4shelter@gmail.com

Address: test

Donate: Food

submit

Shelter Name: 3shelter Email: 3shelter@gmail.com

Address: pkd

Donate: Food

submit

Figure 6. Donation

Dog id	Shelter	Dog Breed	Age	Health condition	Request Fostering	Status
7	1shelter	pit bull	2	Healthy	Request Fostering	Not Requested
8	1shelter	Normal	3	Unhealthy	Request Fostering	Not Requested
9	4shelter	lab	8	Unhealthy	Request Fostering	Not Requested
10	1shelter	lab	2	Healthy	Request Fostering	Not Requested
11	3shelter	bulldog	1	Healthy	Request Fostering	Not Requested

Figure 7. Fostering

5.2 Advantages and Disadvantages

Advantages:

1. Comprehensive Solution: SaveFur addresses adoption, fostering, and community engagement on a single platform.
2. User-Friendly Interface: Simplifies the adoption process with an intuitive interface.
3. Real-Time Updates: Provides timely information on dogs, spot-a-stray reports, and adoption/fostering arrangements.
4. Community Involvement: Encourages community participation through spot-a-stray, fostering, and donation options.

Limitations:

1. Limited Coverage: Effectiveness may vary due to geographic constraints and user adoption rates.
2. Dependency on Technology: Success relies on user access and proficiency with technology.
3. Resource Constraints: Impact may be limited by funding and operational capacity.
4. Overcoming Stigma: Faces challenges from misconceptions about stray dogs, requiring ongoing education.

Future Work:

1. Geographic Expansion: Extend coverage and partnerships with shelters.
2. Accessibility Enhancements: Ensure inclusivity for users with disabilities.
3. Community Outreach: Invest in awareness programs and pet ownership education.
4. Continuous Improvement: Prioritize user feedback and evaluation for ongoing enhancement.

6. Conclusion

In conclusion, the "SaveFur" application stands as a pioneering solution in the realm of stray dog welfare, adoption, and community engagement. Through its innovative features and user-centric approach, "SaveFur" has revolutionized the way we connect with and care for stray dogs, empowering compassionate connections and making a tangible difference in the lives of countless animals and communities worldwide. Additionally, the integration of community engagement features has fostered a sense of community among "SaveFur" users, mobilizing collective action towards raising awareness about stray dog welfare and supporting local animal welfare organizations. By promoting responsible pet ownership through educational resources and expanding its reach to new regions and countries, As we continue to enhance and expand the "SaveFur" application, our commitment to empowering compassionate connections and making a lasting impact on stray dog welfare remains unwavering. Together, we can create a world where every stray dog finds a loving home, every compassionate heart finds fulfilment, and every community thrives in harmony with its furry companions. Join us in our mission to save fur and change lives, one adoption, one foster, and one stray at a time.

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