**Software Requirements Specification**

**for**

Pet Adoption **Management System**

**Version 1.0 approved**

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# *1. Introduction*

## *1.1 Purpose*

*This Software Requirements Specification (SRS) outlines the requirements for the user interface, user registration, user features, and admin features of a pet adoption platform. The product described in this document is version 1.0 of the pet adoption platform. It aims to provide a comprehensive solution for connecting pet adopters with pet donators, facilitating pet adoption processes, and fostering a supportive community around pet welfare.*

## *1.2 Document Conventions*

*The document follows standard formatting conventions with prioritization indicated for each requirement. High, Medium, or Low priority levels are assigned based on the importance of each feature. Specific priority component ratings such as benefit, penalty, cost, and risk are provided where applicable.*

## *1.3 Intended Audience and Reading Suggestions*

*This document is intended for developers, project managers, designers, testers, and other stakeholders involved in the development of the pet adoption platform. It provides a detailed overview of the software requirements, organized into sections for ease of reference. Readers are encouraged to begin with the overview sections and proceed to the sections most relevant to their roles.*

## *1.4 Project Scope*

*The pet adoption platform aims to simplify the process of pet adoption by providing a user-friendly interface for pet adopters and donators. It allows users to register, browse pet profiles, initiate adoption requests, and manage their accounts. Admin features are included to oversee user verification, content moderation, and user support. The platform aligns with the goal of promoting pet welfare and facilitating pet adoptions in the community.*

# *2. Overall Description*

## *2.1 Product Perspective*

*The 'Pet Adoption Management System,' a compassionate platform dedicated to supporting individuals facing challenges in caring for their beloved pets. Our nonprofit initiative strives to connect these individuals with caring homes, ensuring that every animal receives the love, nourishment, and shelter they deserve. By facilitating the re-homing process, we alleviate the burden on both pets and owners, fostering a community where the well-being of our furry companions is paramount. Together, we transform the lives of these innocent creatures, providing them with the care and attention they need to thrive. Join us in our mission of compassion and kindness.*

## *2.2 Product Features*

*The platform offers features such as user interface customization, user registration, profile management, pet browsing, adoption requests, and admin oversight. These features are designed to streamline the pet adoption process and enhance user experience.*

## *2.3 User Classes and Characteristics*

*User classes include pet adopters, pet donators, and administrators. Each class has distinct roles and requirements tailored to their interactions with the platform. Users may vary in technical expertise, frequency of use, and specific objectives related to pet adoption.*

## *2.4 Operating Environment*

*The platform operates in a web-based environment, compatible with modern web browsers and devices. It relies on standard web technologies and may require internet connectivity for full functionality.*

## *2.5 Design and Implementation Constraints*

*Design and implementation constraints for the pet adoption platform include compliance with privacy regulations, compatibility with standard web technologies, and integration with third-party services. Consistency and scalability are ensured through adherence to design conventions and programming standards.*

## *2.6 User Documentation*

*User documentation components include user manuals, on-site help features, and tutorials. These resources aim to guide users through the platform's features and functionalities effectively.*

## *2.7 Assumptions and Dependencies*

*Assumptions include the availability of internet connectivity for users, adherence to privacy policies, and the reliability of third-party services for specific features. Dependencies may include external APIs for email verification and social media integration.*

# *3. External Interface Requirements*

## *3.1 User Interfaces*

*In this project, we can use HTML to structure our website. CSS will help us implement various styles, while JavaScript will add logical functionality. Bootstrap and Tailwind can assist in applying a styling framework, and LARAVEL and MySQL will enable us to store and fetch all the data for our project.*

## *3.2 Hardware Interfaces*

*To use our platform, you will need a standard web browser such as Google Chrome, Microsoft Edge, Mozilla Firefox, or Safari, as well as a moderate internet connection.*

## *3.3 Software Interfaces*

*The Pet Adoption Management System interfaces with web servers, databases, and may incorporate third-party services for email communication and must needed high speed internet connectivity*

## *3.4 Communications Interfaces*

*The system will use standard web communication protocols (e.g., HTTP) for user interactions. Email notifications will be sent using email communication protocols (e.g., SMTP).*

# *4. System Features*

## *4.1 User Interface*

### *4.1.1 Description And Priority*

*The user interface greets visitors with an enticing homepage adorned with a sleek navigation bar, captivating imagery, and personalized login/signup prompts. It elegantly showcases essential website information alongside heartfelt testimonials and poignant social quotes, all weaving a tapestry of compassion for pet adoption and the solutions to common pet-related challenges.*

### *4.1.2 Stimulus/Response Sequences*

*Users can navigate through the interface, access registration/login forms, and explore the platform.*

### *4.1.3 Functional Requirements*

**REQ-1: For Header Section:-**

***Logo :-*** *Our platform's logo serves as a unique identifier.*

***Navigation Links:-*** *Explore our essential links for swift navigation to vital sections like Home & Services, encompassing Adopt a Pet, Donate a Pet, Report Pet Abuse, and About Us, Contact Us.Connect with us on social media via Facebook & Instagram for the latest updates.*

***User Segmentation:-*** *The user base is categorized into three segments: Pet Adopter, Pet Donator, and Admin. Separate login/signup options are provided for each.*

**REQ-2:For Body Section (Home Page/Landing Page):-**

*The main body of the home page showcases an engaging image. Accompanying this image are motivational quotes designed to inspire visitors and encourage them to explore our platform and join as Pet adopter and Pet Donator .*

***For, Pet Adopter:*** *A direct link is incorporated beneath the quote, leading them to the login/signup page tailored for Pet Adoption.*

***Similarly, for Pet Donator:*** *A distinct link is placed to guide them to their respective login/signup page.*

**REQ-3:ForFooter Section:-**

*The footer section will feature a set of convenient quick links, including Adopt Pet, About Us, Report For Abuse, Contact Us, Terms And Conditions, Privacy Policies.*

*To enhance our platform's visibility and engagement, social media icons will be incorporated, allowing users to connect with us through various social channels.*

*A copyright symbol will be displayed to safeguard our content and address copyright concerns.*

**REQ-4:- For Contact Us :-**

*This section includes a dedicated feedback form where all users can share their experiences with our project.*

**REQ-5:- For Anonymous Users/ Non Verified Users(Pet Adopter and Pet Donator):-**

Visitors can seamlessly browse our website without the need for login credentials, freely exploring detailed pet profiles. However, to proceed with adoption inquiries and access owner contact information, logging in is required for enhanced security.

## 4.2 User Registration

**4.2.1 Description and Priority**

*Users can register as Pet Adopter and Pet Donator providing necessary details.*

**4.2.2 Stimulus/Response Sequences**

*Users fill out registration forms, receive verification emails.*

**4.2.3 Functional Requirements**

**REQ-6:- For Logged In Users/Verified Users (Pet Adopter and Pet Donator):-**

*Verified and logged in Pet Adopters will have the ability to register themselves within our website, and indicates their availability for pet adoption.*

*Verified and logged in Pet Donators will enroll their pet details along with the valid contact number in our website and indicates their availability for pet donation.*

**REQ-7 For Signup for Pet Adopter:-**

*Upon clicking the signup button, a registration window will open for individuals.*

This registration form will include the following fields:-

1. Full Name
2. Email
3. Mobile Number

*After filling out the form, users simply click on the 'Get Email' button. A distinctive verification link will promptly be dispatched to their email, seamlessly guiding them back to the main window. Should any discrepancies arise, users will be prompted to re-enter their details in the same smooth manner as before.*

**REQ-8 For Signup for Pet Donator:-**

*This process is a replica of the previous process.*

**REQ-9 For Log In For Pet Adopter:-*.***

*After completing the signup process, Pet Adopters can effortlessly access their profiles by inputting their registered email ID. Upon entering their email, users can click on the 'Get OTP' button, triggering the instant delivery of a system-generated OTP to their email address. Upon successful verification, they are seamlessly prompted to log into their account. In the event of a mismatch, Pet Adopters will be guided to re-enter their details in the familiar manner as before.*

**REQ-10 For Log In For Pet Donator:-**

*This process is a replica of the previous login process.*

## 4.3 User Features

**4.3.1 Description and Priority**

*After registering users as Pet Adopters Or Pet Donors they can get some specific features which helps them to interact for the further processes.*

**4.3.2 Stimulus/Response Sequences**

*In our Pet Adopters' feature, individuals can maintain personalized profiles with ease. Furthermore, we've implemented a comprehensive search function specifically designed for pets available for donation on our website, empowering users to seamlessly request adoption from our generous Pet Donators.*

**4.3.3 Functional Requirements**

**REQ-11: Features For Pet Adopter:-**

*Upon entering this phase, users will be seamlessly redirected to the home page, with a personalized greeting displaying the Pet Adopter’s name. Hovering over their name on the right side of the navigation bar reveals a set of convenient options:*

1. ***My Profile:*** *Allows Pet Adopters to view their profile in read-only mode.*
2. ***Edit Profile:*** *Empowers Pet Adopters to make changes to their profile with both read and write access.*
3. ***My Requests:*** *This section neatly organizes a list of pets along with their details, showcasing those desired for adoption by the specific Adopter.*
4. ***My Addresses:*** *Provides a designated space for Adopters to input their current residential address.*
5. ***Validate Information:*** *In adherence to website guidelines and to ensure the safety of pets, Adopters are required to periodically upload necessary details within specified timeframes after adopting a pet.*
6. ***Log Out:*** *Enables Adopters to securely exit from our site with ease.*

**REQ-12 Steps For Adoption Of A Pet:-**

1. To begin the heartwarming journey of pet adoption, simply navigate to the "ADOPT A PET" option, where a world of furry companions awaits you. Upon clicking, you'll be whisked away to a delightful page showcasing a selection of precious pets eager for a loving home.
2. On the left-hand side of our website, you'll discover the filter option, a magical tool allowing you to tailor your search by pet type (CAT/DOG), breed, and preferred location. With just a few clicks, you can refine your quest and find the perfect match.
3. Once you've narrowed down your search, take a moment to marvel at the profiles of the pets and their caring owners. It's a window into their world, brimming with love and companionship.
4. When you've found that special furry friend who tugs at your heartstrings, simply click on the "ADOPT" option to begin the next step of your journey. But before you seal the deal, we'll ask you a few questions to ensure a perfect match:
5. Answer these questions thoughtfully, as they help us ensure the best possible fit for both you and your future pet. Upon completion, a percentage of marks will be generated. Score 80 percent or above, and you'll be deemed eligible for pet adoption.
6. What factors influenced your decision to adopt a pet?

* a) Desire for companionship
* b) To save a life
* c) Recommendation from friends or family
* d) Other

1. How long did it take you to find the right pet for adoption?

* a) Less than a week
* b) 1-2 weeks
* c) 1-2 months
* d) More than 2 months

1. Have you adopted a pet before?

* a) Yes
* b) No

1. How satisfied are you with your decision to adopt a pet?

* a) Extremely satisfied
* b) Somewhat satisfied
* c) Neutral
* d) Dissatisfied

1. Would you recommend pet adoption to others?

* a) Yes, definitely
* b) Yes, but with reservations
* c) No, not at all

1. If your adopted pet begins to relieve itself inside the home, what would be your reaction?

* a) Patiently train the pet to go outside and clean up the mess calmly.
* b) Get frustrated and scold the pet for misbehaving.
* c) Seek advice from a veterinarian or animal behaviorist to address the issue.
* d) Consider returning the pet to the shelter/rescue organization.

1. Your adopted pet frequently scratches furniture or other household items. How do you respond?

* a) Provide appropriate scratching posts and redirect the pet's behavior.
* b) Get upset and discipline the pet.
* c) Ignore the behavior and hope it stops on its own.
* d) Consider declawing the pet.

1. Your adopted pet exhibits signs of anxiety (e.g., excessive barking, destructive behavior) when left alone. What would you do?

* a) Gradually acclimate the pet to being alone and seek advice from a professional if needed.
* b) Punish the pet for its behavior.
* c) Get another pet for companionship.
* d) Rehome the pet.

1. Your adopted pet is displaying aggression towards other animals or people. How would you handle this situation?

* a) Consult a professional animal behaviorist for guidance and implement behavior modification techniques.
* b) Punish the pet for its aggressive behavior.
* c) Avoid situations that trigger aggression.
* d) Return the pet to the shelter/rescue organization.

1. Your adopted pet refuses to eat the food provided. How do you address this issue?

* a) Try offering different types of food to find one the pet enjoys.
* b) Force the pet to eat the food provided.
* c) Ignore the issue and hope the pet will eventually eat.
* d) Return the pet to the shelter/rescue organization.

1. With your heart filled with love and your answers shining brightly, send your adoption request to the generous donator. Together, let's embark on this beautiful journey of companionship and unconditional love.

**REQ-13 For Features For Pet Donator:-**

*Upon entering this phase, users will be seamlessly redirected to the home page, with a personalized greeting displaying the Pet Donor’s name. Hovering over their name on the right side of the navigation bar reveals a set of convenient options:*

1. ***My Profile:*** *Allows Pet Adopters to view their profile in read-only mode.*
2. ***Edit Profile:*** *Empowers Pet Adopters to make changes to their profile with both read and write access.*
3. ***My Addresses:*** *Provides a designated space for Adopters to input their current residential address.*
4. ***My Pets:-*** *This section will contains a “Add New Pet” button. After pressing the button it will open a form which contains this options:-*
5. *Upload Image*
6. *Pet’s Name*
7. *Pet’s Type*
8. *Pet’s Breed*
9. *Pet’s Age*
10. *Pet’s Gender*
11. *Pet’s Vaccination*
12. *Pet’s shots up to date?*
13. *Good with other dogs?*
14. *Good with other Cats?*
15. *Good with Kids?*
16. *Why do you want to donate the Pet?*
17. *Add Facebook Account*
18. *Add Linkedin Account*
19. *Want To Donate Your Pet?*
20. *Upload Vaccination Certificate*

*4. Contact History:- This section will contains the details of requests such as :- Adopter’s Name, Image, Your Pet’s Name (If you have multiple pets for the donation), Pet’s Image, Breed and two buttons “Accept” And “Reject” If the donator clicks on the accept button an acceptance email will sent to the respective Pet Adopter’s email and the reject button is same as previous.*

* ***Report Feature For Both User:-***

Users will each be endowed with the capability to gracefully submit reports to one another, enhancing mutual engagement and fostering a harmonious digital environment.

## 4.4 Admin Features

1. Admin can verify all the Pet Adoptor and Donator .
2. Admin can verify all the photos uploaded by the pet adopter.
3. Admin can verify all the vaccination documents.
4. Admin can verify all the reports.
5. Admin have the block/send warning facilities.

# 5. Other Nonfunctional Requirements

Non functional requirements (NFRs), also known as quality attributes or software qualities, are essential in software engineering. They define the overall behavior, performance, and user experience of a software system. In addition to the commonly mentioned NFRs like performance, 27 | P a g e security, and scalability, there are several other nonfunctional requirements that are crucial in software engineering:

## 5.1.1 Usability

Usability encompasses factors such as user interface design, user experience (UX), and user friendliness. It measures how easy it is for users to interact with and navigate the software.

## 5.1.2 Reliability

Reliability refers to the software's ability to consistently perform its intended functions without failures or errors. It includes aspects like fault tolerance, error recovery, and system stability.

## 5.1.3 Availability

Availability defines the percentage of time a system is operational and accessible to users. High availability is critical for mission-critical systems that must be accessible 24/7.

## 5.1.4 Maintainability

Maintainability assesses how easily and cost-effectively the software can be updated, modified, or repaired. It includes factors like code readability, modularity, and documentation.

## 5.1.5 Portability

Portability evaluates how easily the software can be adapted to different environments, platforms, and operating systems. It's essential when software needs to run on various devices or migrate between systems.

## 5.1.6 Scalability

Scalability refers to the software's ability to handle increased workloads and user demands. It involves horizontal scalability (adding more servers) and vertical scalability (upgrading existing hardware or software components).

## 5.1.7 Performance Efficiency

While performance is a common NFR, it can be broken down further into aspects like response time, throughput, and resource utilization. Performance efficiency ensures that the software meets specific performance benchmarks.

## 5.1.8 Data Integrity And Privacy

For applications that handle sensitive data, data integrity and privacy are critical. Ensuring that data is secure, encrypted, and protected from unauthorized access is essential.

## 5.1.9 Safety

In safety-critical systems, such as medical devices or autonomous vehicles, safety requirements are paramount. These requirements focus on preventing accidents and minimizing risks.

## 5.1.10 Business Rules

1. **Eligibility Criteria:**

* Only individuals facing challenges in caring for their pets are eligible to use the platform.
* Potential adopters must meet certain criteria ensuring they can provide a loving and stable home for the pets.

1. **Animal Welfare Standards:**

* All pets available for adoption must receive necessary veterinary care, including vaccinations, spaying/neutering, and health check-ups.
* Only pets deemed healthy and behaviorally sound are eligible for adoption to ensure the well-being of both the pet and the adopter.

1. **Matching Process:**

* The platform should employ a comprehensive matching algorithm to pair pets with suitable adopters based on factors such as lifestyle, preferences, and pet care experience.

# 6. Other Requirements

* Calls to Pet Donors and Pet Recipients cannot be made between 12 A.M. and 5 A.M.
* There is no real-time chat system present in our project.
* There is no payment gateway for receiving funds from users.