Software Requirements Specification

for

<PET CARE>

Version 1.0 approved

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<24/10/23>

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Revision History

Name	Date	Reason For Changes	Version

1.Introduction-

- 1.1 Purpose: The pet care app aims to streamline pet management for owners, connecting them with essential services. It offers a one-stop solution for tracking and enhancing pet well-being.
- 1.2 Document Conventions: This document follows standard industry conventions for documenting software requirements, ensuring consistency and clarity.
- 1.3 Intended Audience and Reading Suggestions: This document is intended for the development team and stakeholders involved in the app's creation. It's recommended to have basic knowledge of software development and the pet care domain for better understanding.
- 1.4 Product Scope: The app's scope encompasses user profiles, pet services, vaccination tracking, and information on nearby vets, providing a comprehensive solution for pet owners' needs.

2. Overall Description

2.1 Product Perspective:

The product perspective section defines how the pet care app fits within the larger context of pet management. It describes its relationships with external systems, databases, or services, highlighting its role as a standalone software solution to address pet care needs.

2.2 Product Functions:

Product functions outline the core features and capabilities of the pet care app, including user profiles, pet services, vaccination tracking, and vet information. These functions are the key components that provide value to users.

2.3 User Classes and Characteristics

This section identifies the different user groups or classes who will interact with the app, such as pet owners, potential adopters, veterinarians, and administrators. It also describes the specific characteristics and roles of each class, enabling a tailored user experience.

2.4 Operating Environment:

The operating environment section specifies the technical and environmental conditions under which the pet care app will run. This includes information about supported platforms (web, mobile), hardware requirements, and internet connectivity.

2.5 Design and Implementation Constraints:

Design and implementation constraints highlight any limitations or restrictions that developers need to consider during the software's design and construction. This can include factors like budget constraints, compliance with specific standards, or platform compatibility requirements.

2.6 User Documentation

2.7Assumptions and Dependencies

3. External Interface Requirements:

3 1 User Interfaces:

User interfaces describe how users will interact with the app. This includes web and mobile interfaces that should be user-friendly, accessible, and intuitive, ensuring a seamless user experience.

3.2 Hardware Interfaces:

Hardware interfaces define the hardware components or devices that the app relies on, such as internet-connected devices (smartphones, tablets, computers), their specifications, and any compatibility requirements.

4. Software Interfaces:

This section provides an overview of the interfaces the pet care app will utilize to interact with external entities, including users, hardware devices, software systems, and communication channels.

User Interfaces:

User interfaces describe how users will interact with the app. This includes web and mobile interfaces that should be user-friendly, accessible, and intuitive, ensuring a seamless user experience.

Hardware Interfaces

Hardware interfaces define the hardware components or devices that the app relies on, such as internet-connected devices (smartphones, tablets, computers), their specifications, and any compatibility requirements.

Software Interfaces:

Software interfaces describe the interactions between the pet care app and external software systems, databases, or services. It should detail the specific APIs, protocols, or integration points used for functionalities like pet adoption listings, vaccination data retrieval, and mapping services.

Communications Interface

Communication interfaces outline the protocols and methods used for data exchange between the app and external services or databases. For example, it may specify how the app communicates with mapping services via HTTP web services or RESTful APIs.

4. 1 System Features

System Features:

1. User Profile

- a. Users should be able to create a profile with their personal information, including name, email, phone number, and address.
 - b. Users should be able to upload a profile picture.
- c. Users should be able to view and edit their profile information.

2. Listing Pet

- a. Users should be able to create a listing for their pet, including name, breed, age, and a description.
 - b. Users should be able to upload pictures of their pet.
 - c. Users should be able to view and edit their pet listings.

3. Adoption

- a. Users should be able to browse pet listings created by other users.
- b. Users should be able to filter pet listings by breed, age, and location.
- c. Users should be able to contact the owner of a pet listing to inquire about adoption.

4. Daycare

- a. Users should be able to search for pet daycare facilities in their area
- b. Users should be able to view information about each daycare facility, including location, hours, and services offered.
- c. Users should be able to contact a daycare facility to schedule a visit or make a reservation.

5. Vaccination

- a. Users should be able to view a list of recommended vaccinations for their pet based on their age and breed.
- b. Users should be able to schedule vaccination appointments with a veterinarian.
 - c. Users should be able to view their pet's vaccination history.

6. Push Notification

- a. Users should be able to receive push notifications for new pet listings, adoption inquiries, daycare reservations, and vaccination reminders.
- b. Users should be able to turn push notifications on or off for each feature.

7. Doctor Place

- a. Users should be able to search for veterinarians in their area.
- b. Users should be able to view information about each veterinarian, including location, hours, and services offered.
- c. Users should be able to contact a veterinarian to schedule an appointment.

User Profile-

Description and Priority

- The User Profile feature allows users to create and manage their profiles within the system. This feature is of high priority as it forms the foundation for personalized interactions within the application.

Stimulus/Response Sequences

- When a user logs in or registers, the system should prompt them to fill out their profile information.
- Users can update their profile information at any time.
- The system should respond with appropriate feedback on the success of these actions.

Functional Requirements-

- REQ-1: Users must provide at least the following profile information: name, email, and password.
- REQ-2: Users can add optional profile information like a profile picture, contact number, and address.
- REQ-3: Users should be able to reset their password if they forget it.
- REQ-4: User profiles should be stored securely, and user data should be protected.

Listing Pet

- 4.2.1 Description and Priority
- The Listing Pet feature enables users to create listings for pets they want to put up for adoption, day care, or vaccination services. This feature is of high priority as it is a core function of the system.

Stimulus/Response Sequences

- Users can create pet listings, specifying details such as pet type, age, breed, and photos.
- Users can view and manage their pet listings.
- Users can search for available pets based on various criteria.

4.2.

- REQ-5: Users should provide essential information about the pet when creating a listing.
- REQ-6: Users should be able to add photos of the pet.
- REQ-7: Users should be able to edit or remove their pet listings.
- REQ-8: Users should be able to search for available pets based on filters like type, age, and location.

(Continue this pattern for the other features: Adoption, Day Care, Vaccination, Push Notification, and Doctor Place.)

This structure provides a clear and organized way to outline the system features, their descriptions, priorities, stimulus/response sequences, and detailed functional requirements for each feature. Be sure to expand upon the functional requirements and adapt them to the specific needs and functionalities of your software system.

5. Other Nonfunctional Requirements:

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5.1 Performance Requirements:

Performance requirements define how the pet care app should perform under various conditions. This includes response times, scalability, and the ability to handle a specific number of concurrent users. For example, the app should load within 2 seconds and accommodate up to 1000 concurrent users.

5.2 Safety Requirements:

Safety requirements describe measures to ensure the safety of users and pets while using the app. This may encompass data backup and recovery to prevent data loss, as well as any emergency features or procedures for critical situations.

5.3 Security Requirements:

Security requirements specify how the app should protect sensitive data and user information. This may include data encryption, user authentication, and authorization mechanisms to safeguard personal and pet-related data from unauthorized access.

5.4 Software Quality Attributes:

Software quality attributes encompass overall qualities that the app should possess. These attributes include reliability, usability, maintainability, and performance. The app should be user-friendly, reliable, easy to maintain, and efficient to ensure a high-quality user experience.

Business Rules:

Business rules define the specific rules, policies, or regulations that govern the operation of the pet care app. These rules may include guidelines for pet adoption, pet daycare services, or vaccination tracking. They are crucial for ensuring compliance with industry or regulatory standards.

Here are brief descriptions for the "Other Requirements" section and the appendix sections:

5. Other Requirements:

This section addresses any additional requirements that are not covered in the previous sections. It may include unique constraints, external dependencies, or specific needs relevant to the development of the pet care app.

6.

Appendix B: Analysis Models:

Appendix B may include various analysis models, such as flowcharts, use case diagrams, or data flow diagrams that help visualize the app's functionality and interactions. These models offer a graphical representation of the system's architecture and operation, aiding developers and stakeholders in understanding the app's design.