

Software Requirements Specification (SRS) for Pet Care System

1. Introduction

1.1 Purpose

The purpose of this document is to define the requirements for the development of a Pet Care System that enables users to schedule veterinary appointments, track their dogs' vaccination details, receive notifications for missed or pending vaccinations, and allows veterinarians and administrators to manage and update data.

1.2 Scope

This system will serve pet owners who want to manage multiple dogs, schedule veterinary appointments, and keep track of their dogs' vaccination history. Veterinarians and administrators will have the capability to update and manage records.

2. Overall Description

2.1 Product Perspective

The Pet Care System will be a standalone system that interfaces with users (pet owners), veterinarians, and administrators. It does not integrate with external systems.

2.2 Product Features

- * User registration and login.
- * Dog profile management for users with the ability to manage multiple dogs.
- * Appointment scheduling for veterinary visits.
- * Vaccination tracking with notifications for missed or pending vaccinations.
- * Veterinarians can update vaccination details.
- * Administrators can edit all data.

2.3 User Classes and Characteristics

- * Pet Owners: Users who own one or more dogs and want to schedule veterinary appointments and track vaccination details.
- * Veterinarians: Users responsible for providing veterinary services and updating vaccination records.
- * Administrators: Users with elevated privileges to edit all data within the system.

3. Specific Requirements

3.1 External Interfaces

3.1.1 User Interfaces

- * User-friendly web and mobile interfaces for pet owners.
- * A dedicated interface for veterinarians to access and update vaccination details.
- * An admin interface with elevated privileges for data management.

3.1.2 Hardware Interfaces

Compatible with standard web browsers and mobile devices.

3.1.3 Software Interfaces

Integration with a notification system to send reminders to pet owners.

3.2 Functional Requirements

3.2.1 User Registration and Login

Pet owners, veterinarians, and administrators must register for an account.

Secure login functionality.

3.2.2 Dog Profile Management

Pet owners can add, edit, or remove dog profiles.

Each dog profile includes basic information and vaccination history.

3.2.3 Appointment Scheduling

Pet owners can schedule veterinary appointments.

Veterinarians can view and manage their appointment schedules.

3.2.4 Vaccination Tracking

Pet owners receive notifications for upcoming, missed, or pending vaccinations.

Veterinarians can update vaccination details for each dog.

3.2.5 Data Management by Administrators

Administrators have the ability to edit all data within the system.

This includes user profiles, dog profiles, appointments, and vaccination records.

3.3 Non-functional Requirements

3.3.1 Usability

The system should be intuitive and easy to navigate for pet owners, veterinarians, and administrators.

3.3.2 Reliability

The system should be available 24/7 with minimal downtime.

3.3.3 Performance

The system should handle concurrent user interactions efficiently.

4. System Features

4.1 User Registration and Login

Pet owners, veterinarians, and administrators must register using a valid email address and password.

Passwords should be securely hashed and stored.

4.2 Dog Profile Management

Pet owners can add multiple dogs, providing details such as name, breed, age, and photo.

Veterinarians can access dog profiles for appointment and vaccination management.

4.3 Appointment Scheduling

Pet owners can schedule appointments, providing details such as date, time, and reason for the visit.

Veterinarians can view and manage their appointment schedules, marking appointments as completed.

4.4 Vaccination Tracking

Pet owners receive notifications for upcoming vaccinations.

Veterinarians can update vaccination records, marking vaccinations as administered.

4.5 Data Management by Administrators

Administrators have access to an interface for editing all data within the system.

They can modify user profiles, dog profiles, appointment details, and vaccination records.

5. External Interface Requirements

5.1 User Interfaces

- * Web-based interfaces for pet owners, veterinarians, and administrators.
- * Mobile-friendly design for accessibility on various devices.

5.2 Hardware Interfaces

Compatible with standard web browsers (Chrome, Firefox, Safari) and mobile devices (iOS, Android).

5.3 Software Interfaces

Integration with a notification service to send reminders.

6. Other Non-functional Requirements

6.1 Usability

The system should provide a user-friendly experience with clear instructions and intuitive navigation.

6.2 Reliability

The system should be reliable, ensuring that users can access and update information consistently.

6.3 Performance

The system should handle a concurrent user load without significant degradation in performance.