**SRS FOR PETSHOP APPLICATION**

**1. Introduction**

1.1 Purpose

The purpose of this document is to specify the requirements for the development of a Pet Shop Application. This application will allow users to browse, purchase pets and pet-related products, and manage orders online.

1.2 Scope

This application is designed for customers to view and buy pets, pet food, accessories, and other products. It also includes functionality for administrators to manage inventory, orders, and user accounts.

1.3 Definitions, Acronyms, and Abbreviations

SRS: Software Requirements Specification

Administrator: User responsible for managing the application.

Customer: User purchasing pets and products.

Inventory: Collection of pets and products available in the store.

1.4 Overview

This document provides a detailed description of the Pet Shop Application, including functional and non-functional requirements, system features, and user classes.

2. Overall Description

2.1 Product Perspective

The Pet Shop Application is an online e-commerce platform where customers can browse and purchase pets and pet supplies. It is a standalone system designed to handle inventory, orders, and customer management efficiently.

2.2 Product Functions

* Browse pets and products.
* Add pets/products to a shopping cart.
* Place orders and make secure payments.
* Manage inventory (Admin).

2.3 User Classes and Characteristics

Administrator: Manages inventory, user accounts, orders, and payments.

Customer: Browses products, places orders, and makes payments.

Guest User: Can browse products but must register to purchase.

Delivery Personnel: Updates delivery status of orders.

2.4 Operating Environment

* Web-based applications accessible via standard web browsers.
* Compatible with desktop and mobile devices.

2.5 Constraints

* Must ensure secure payments using payment gateway integration.
* Application should comply with privacy and data security regulations.

3. System Features

3.1 User Registration and Login

Description: Users can register and log in to access personalized features.

Inputs: User details (name, email, password, etc.).

Outputs: User profile and account access.

Functional Requirements:

* Users must be able to create an account.
* Secure login using email and password.
* Password recovery feature.

3.2 Browse and Search Products

Description: Users can browse or search for pets and pet-related products.

Inputs: Search terms or category selection.

Outputs: List of products matching the search criteria.

Functional Requirements:

* Display product details (price, description, availability).
* Search and filter by category, price, breed, etc.

3.3 Shopping Cart and Checkout

* Description: Users can add products to the shopping cart and proceed to checkout.
* Inputs: Selected products, delivery address, payment details.
* Outputs: Order confirmation.

Functional Requirements:

* Add/remove items from the cart.
* Display total price and taxes.
* Secure checkout and payment processing.

3.4 Order Management (Admin)

Description: Administrators manage incoming orders.

Inputs: Order details, shipping updates.

Outputs: Updated order status.

Functional Requirements:

* View all orders and update their status.
* Notify users about order processing and shipment.

3.5 Inventory Management (Admin)

Description: Manage product availability.

Inputs: Product details (name, price, stock).

Outputs: Updated product listings.

Functional Requirements:

* Add new products/pets to inventory.
* Update or remove existing products.

4. Non-Functional Requirements

4.1 Security

* The system must ensure secure user authentication and protect user data.
* Payment transactions must be encrypted.

4.2 Performance

* - The application should load pages within 3 seconds under normal traffic conditions.
* - The system should handle up to 1,000 concurrent users without performance degradation.

4.3 Usability

* The interface must be user-friendly and responsive across devices (desktop, tablet, mobile).
* Clear navigation and labeling for ease of use.

4.4 Availability

* The system should be available 24/7, with a 99% uptime guarantee.

5. External Interface Requirements

5.1 User Interfaces

* Simple, intuitive web interface for browsing, purchasing, and managing products.
* Administrator dashboard for inventory and order management.

5.2 Hardware Interfaces

* Compatible with standard desktop and mobile device hardware.

5.3 Software Interfaces

* Integration with third-party payment gateway for secure transactions.
* Support for web browsers like Chrome, Firefox, Safari, and Edge.

5.4 Communication Interfaces

* Internet connectivity is required to access the application.

6. Other Requirements

6.1 Legal and Regulatory Requirements

* Compliance with data privacy laws (e.g., GDPR).
* Adherence to consumer protection laws regarding online sales.