# **Software Requirements Specification (SRS)**

## **Pet Store Application**

### **1. Introduction**

#### **1.1 Purpose**

The Pet Store Application allows customers to browse pets, make purchases, and manage orders, while admins can manage inventory, customers, and transactions.

#### **1.2 Scope**

It includes pet catalog management, customer accounts, shopping cart, checkout, and payment processing, accessible via a web interface.

#### **1.3 Definitions, Acronyms, and Abbreviations**

* **Admin**: Store staff.
* **Customer**: End-user purchasing pets.
* **SKU**: Unique product identifier.

### **2. Overall Description**

#### **2.1 Product Perspective**

The system is a web-based app for pet sales with secure payment processing and admin functionalities for managing the store.

#### **2.2 Product Features**

Features include pet catalog management, order tracking, account creation, shopping cart, and payment integration.

#### **2.3 User Classes and Characteristics**

Admins manage the store, while customers browse, purchase, and track pets. Both interact through the web interface.

#### **2.4 Operating Environment**

The application will run on modern web browsers and be hosted on a cloud server with high availability.

### **3. System Features**

#### **3.1 Pet Catalog Management**

Admins can add, edit, or remove pets from the store's inventory. Pets are listed with details such as breed, price, and description.

#### **3.2 Customer Account Management**

Customers can create, edit, and delete their accounts, track orders, and manage personal info securely.

#### **3.3 Shopping Cart and Checkout**

Customers can add pets to their cart, review items, and proceed to a secure checkout process, including payment.

#### **3.4 Payment Processing**

Secure integration with third-party payment providers (e.g., PayPal, Stripe) to process transactions and generate receipts.

#### **3.5 Order Management**

Admins can view, update, and track orders; customers can view their order status and shipment tracking.

### **4. External Interface Requirements**

#### **4.1 User Interfaces**

The app will have a responsive UI for customers to browse pets, and a dashboard for admins to manage inventory and orders.

#### **4.2 Hardware Interfaces**

The system does not require specialized hardware, running on web servers with internet access and standard user devices.

#### **4.3 Software Interfaces**

Integration with third-party payment providers (PayPal, Stripe) for transactions, and shipping APIs for tracking orders.

### **5. Non-Functional Requirements**

#### **5.1 Performance Requirements**

The system should handle 500 concurrent users with pages loading within 2 seconds, ensuring smooth user experience.

#### **5.2 Security Requirements**

Data encryption for sensitive information (e.g., passwords, payment details) and secure user authentication methods.

#### **5.3 Reliability**

The system should maintain 99.9% uptime, with automatic backups and disaster recovery protocols in place.

#### **5.4 Maintainability**

The codebase should follow best practices, be modular, and well-documented for easy updates and bug fixes.

### **6. Appendices**

#### **A. User Stories**

Includes use cases like “As a customer, I want to add pets to my cart so that I can purchase them easily.”

#### **B. Mockups of UI Screens**

Provide designs for key pages like the homepage, catalog, and checkout process.

#### **C. Data Flow Diagrams**

Illustrates how data moves through the system for key processes like shopping cart and payment processing.