Software Requirements Specification (SRS) – JPet Store

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# 1. Introduction

## 1.1 Purpose of the Document

This Software Requirements Specification (SRS) outlines the functional and non-functional requirements for the JPet Store web application. It serves as a reference for developers, testers, and stakeholders to understand the expected behavior and system constraints of the application.

## 1.2 Scope of the Product

JPet Store is a web-based shopping platform tailored for pet-related products and animals. It allows customers to browse various categories of pets, view item details, manage a shopping cart, register/login to an account, and place online orders in a streamlined and user-friendly manner.

## 1.3 Target Audience and Document Structure

Target Users:  
- Individuals interested in adopting or purchasing pets  
- Online shoppers looking for pet supplies  
  
This document is organized into clear sections outlining the product overview, functional specifications, external interfaces, and non-functional standards.

## 1.4 Terminologies and Abbreviations

- SRS: Software Requirements Specification  
- FR: Functional Requirement  
- NFR: Non-Functional Requirement  
- UI: User Interface

## 1.5 Cited References

Pet Store Application URL: https://petstore.octoperf.com/actions/Catalog.action

# 2. Overall Description

## 2.1 General Overview

JPet Store is a responsive e-commerce platform centered around the sale of pets and their accessories. It is designed with ease-of-use in mind, providing core e-commerce features like search, cart management, and secure login.

## 2.2 Key Features and Capabilities

- Navigate pet categories such as Fish, Dogs, Cats, Birds, and Reptiles  
- View product and pet-specific descriptions  
- Add items to and remove them from a shopping cart  
- Perform secure user authentication (register/login/logout)  
- Place orders post-login  
- Utilize a product search function to locate desired items

## 2.3 Limitations and Design Constraints

- Must support modern web browsers including Chrome, Firefox, and Edge  
- All stored passwords must be securely encrypted to protect user data

## 2.4 Assumptions and External Dependencies

- Users have reliable internet access  
- The web application runs on up-to-date desktop or mobile browsers

# 3. Detailed Requirements

## 3.1 Interface Requirements

### 3.1.1 User Interface

- Fully responsive layout for use across desktops, tablets, and mobile phones  
- Persistent search bar for quick product lookup

### 3.1.2 Hardware Requirements

- Access via any standard browser on a device with internet connectivity

## 3.2 Functional Requirements

|  |  |
| --- | --- |
| ID | Requirement Description |
| FR1 | Users must be able to browse available pet categories |
| FR2 | System should allow viewing details of selected pets or items |
| FR3 | Users can add products to their cart |
| FR4 | Registration should require a valid email address |
| FR5 | Users must be able to log in and log out of their accounts |
| FR6 | Users can view, update, and delete items from their cart |
| FR7 | Only logged-in users should be allowed to place an order |
| FR8 | System should allow keyword-based product search |

# 4. Non-Functional Requirements

## 4.1 Performance Metrics

The website must support up to 500 concurrent users without performance degradation.

## 4.2 Security and Safety Considerations

User passwords must be encrypted both during transmission and when stored in the database. The application should prevent unauthorized access to user data.