**1. INTRODUCTION**

This document is to outline the software requirements for developing a pet store website. This platform will provide pet owners with a convenient and user-friendly online shopping experience, offering a wide range of pet products and services. The website will feature intuitive navigation, secure payment options, and a responsive design to ensure accessibility across various devices. Additionally, it will include a blog for pet care tips and a customer support portal to assist users with their inquiries.

1.1 Purpose

The purpose of this document is to detail the software requirements for the development of a comprehensive pet store website. This platform will facilitate the online purchase of pet products and services, providing a seamless and enjoyable shopping experience for pet owners.

1.2 Project Scope

The scope of the pet store website includes a comprehensive range of functionalities designed to provide a seamless online shopping experience for pet owners. Key features will include detailed product listings with descriptions, images, and prices, as well as user account management for tracking orders and saving favourite items. The website will support a secure shopping cart and checkout process with multiple payment options. Additionally, it will offer robust order management capabilities for both users and administrators. Customer support will be facilitated through a dedicated portal and a FAQ section, while a blog will provide valuable pet care tips and product reviews.

1.3 Intended Audience and Reading Suggestions

Reading Suggestions:

To make the most effective use of this document, readers are advised to follow these suggestions:

1. Start with the Introduction: Gain an overview of the project’s purpose, scope, and objectives.
2. Review the Overall Description: Understand the high-level requirements and constraints of the project.
3. Examine the Specific Requirements: Delve into the detailed functional and non-functional requirements to understand what the website must achieve.
4. Refer to the Appendices: Check any additional information, such as glossary terms, diagrams, and references, for further clarification.
5. Use the Document Conventions: Familiarize yourself with the conventions used in this document to navigate and understand the content more effectively.

**2. OVERALL DESCRIPTION**

2.1 Product Perspective

Product perspective for a pet store website involves understanding the needs and preferences of pet owners and ensuring the website offers a seamless and engaging shopping experience. There are some key elements which need to consider and those are:

* Detailed product description
* User friendly navigation
* Personalization
* Account information
* Convenient checkout process
* Guide for the pet
* Good customer support.

2.2 Product Features

To enhance the user experience on your pet store website, consider incorporating several key features. Start with detailed product descriptions that highlight ingredients, size options, and specific benefits tailored to various pet breeds. User reviews and ratings can build trust and provide valuable insights for potential buyers. Additionally, offering pet care guides—through articles or videos—will help customers make informed decisions about their purchases. A wish list feature can encourage future shopping, while personalized recommendations based on browsing and purchasing history will streamline the shopping experience.

2.3 User classes and characteristics

The user classes for a pet store encompass a diverse range of individuals, each with distinct characteristics and goals. Pet owners are the primary customers, owning one or more pets and regularly seeking high-quality products to enhance their pets' health and well-being. New pet owners often require guidance and recommendations, as they navigate their first experiences with pet care. Pet enthusiasts are deeply passionate about pets, staying updated on trends and often seeking premium or specialty items.

* Customer Function
  + Customer should be able to login
  + New user should be able to create a account
  + User should be able to navigate through different pets they want
  + Customer should be able o add the pet to cart
  + Customer shouldn’t face any issue in check out and payment
* Admin Function
  + Add/Delete of pet
  + Add a new verities of pet
  + Update price of the particular pet.
  + Adding details of the pet like bread, behaviour, etc.
  + Update the age of the pet that they have.

2.4 Operating Environment

The operating environment for the airline management system is as listed below. Creating an effective operating environment for a pet store website involves several critical components. First, choose a reliable hosting solution, such as shared or VPS hosting, complemented by a CDN for faster content delivery. The technology stack should include frontend technologies like HTML, CSS, and JavaScript, possibly utilizing frameworks like React or Vue.js for a dynamic user experience. Creating an operating environment for a pet store website involves several key components, including hosting, technology stack, security, and user experience. Here’s a breakdown:

* Hosting environment: Web hosting, Domain registration, etc
* Technologies: HTML, CSS, JS, PHP, SQL, etc
* Payment processing
* Operating system: Windows, Linux, etc

2.5 Design and Implementation constraints

Designing and implementing a pet store website involves navigating various constraints that can influence its success. Technical limitations such as compatibility and performance must be considered to ensure a seamless user experience across devices. Budgetary restrictions may affect choices regarding technology and features, while tight timelines could limit thorough testing. Regulatory compliance is crucial for data protection and accessibility, ensuring the site meets legal standards. User experience must be prioritized, considering the target audience's needs and technical capabilities. Key constraints are:

* Technical constraints
* Budget constraints
* Time constraints
* Regulatory constraints
* U/X Constraints
* Design and integration constraints

2.6 Assumption Dependencies

Let us assume that this is a pet store and it is used in the following application:

* Customer will visit the site and will find the pet they want.
* If the user is new they need to create a account and if the user is registered already they need to login by username and password.
* The user should be able to get the detail of the pet and should be able to add it in the cart.
* The user should be able to checkout the details and should be able to do payment.

**3 SYSTEM FEATURES**

3.1 Functional Requirements

* **User Account Management:** Enable user registration, login/logout, and password recovery.
* **Product Browsing:** Implement a searchable and filterable product catalog with detailed descriptions and images.
* **Shopping Cart and Checkout:** Allow users to add/remove items, edit quantities, and complete a secure checkout process with various payment options.
* **Order Management:** Provide users with access to their order history and tracking information.
* **Admin Product Management:** Enable administrators to add, edit, and delete product listings and manage inventory.
* **Security Features:** Implement secure user authentication and SSL encryption for safe transactions.
* **Customer Support:** Offer a contact form, FAQs, and optional live chat for customer inquiries.
* **Promotions and Discounts:** Create and manage coupon codes and promotional events.
* **Email Marketing:** Allow users to subscribe to newsletters and automate emails for confirmations and abandoned carts.
* **Mobile Responsiveness:** Ensure the website is fully functional and user-friendly across all devices.

**4 EXTERNAL INTERFACE REQUIREMENT**

4.1 User Interfaces

* Front-end software: Vb.net version
* Back-end software: SQL+

4.2 Hardware Interfaces

* Windows.
* A browser that supports CGI, HTML & Javascript.

4.3 Software Interfaces

Following are the software used for pet store online application.

|  |  |
| --- | --- |
| **Software used** | **Description** |
| Operating system | We have chosen Windows operating system for its best support and user-friendliness. |
| Database | To save the flight records, passengers records we have chosen SQL+ database. |

4.4 COMMUNICATION INTERFACES

This project supports all types of web browsers. We are using simple electronic forms for reservation forms, ticket booking etc.

**5 NONFUNCTIONAL REQUIREMENTS**

* Performance: The website must load within 3 seconds and support up to 10,000 concurrent users.
* Security: User data must be encrypted and access to sensitive information restricted to authorized personnel.
* Usability: The site should have an intuitive design, ensuring easy navigation and a user-friendly experience.
* Reliability: The website should maintain an uptime of 99.9% and provide informative error messages.
* Compatibility: The site must function correctly across major web browsers and be responsive on all devices.
* Maintainability: The codebase should follow best practices for maintainability and include comprehensive documentation.
* Localization: Support for multiple languages should be implemented to cater to a diverse audience.
* Backup and Recovery: Regular data backups must be performed, and a disaster recovery plan should be in place.
* Monitoring: Real-time monitoring tools should be implemented to track website performance and user activity.
* Compliance: The website must comply with relevant regulations, such as GDPR and PCI DSS.