**Software Requirement Specification:**

Project Tittle: JPetStore Demo

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**1.Introduction:**

To display the

a) Purpose.

b) Indented audience

c) Scope.

d) Definitions, acronyms, and abbreviations.

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f) Overview.

* 1. Purpose: The purpose of this SRS is to provide a detailed description of the JpetStore Application, an online pet store where user can browse pets and make purchases. This will help the stakeholders and other development team throughout the Software development lifecycle
  2. Intended audience-Registered Individual
  3. Scope: Jpetstore is an online pet store application where User can register and log in to the platform, browse product by categories, search for specific product and add to cart. The scope includes User registration, product CatLog and order processing
  4. Definitions, acronyms, and abbreviations:

SRS-Software requirement Specification

1.5) References:

PetStore Application Framework Documentation

1.6) Overview: The overall description provides a high-Level view of the system. Jpetstore will be web-based platform where customer can explore and search for the desired product

**2.Overall description:**

To display the

a) Product perspective

b) Product functions

c) User characteristics

d) Constraints

e) Assumptions and dependencies

2.1) Product perspective:

System interface: Jpetstore will be independent ecommerce website potentially able to interact with external Systems

User Interface-The system will provide a user-friendly responsive web page, Responsible for both desktop and mobile users

2.2) Product Function:

User/login-Allows user to login and register securely

Product Browsing-User can browse the product by categories

Product details-can view information about a product include image

Shopping cart-Enable users to add, update and remove items from their carts

Order processing-Facilitates the checkout Process

2.3) User characteristics: The target user of Jpetstore includes,

Customers-Individuals looking to purchase pets or pet products

Administrators-Who manage products, orders and feedback

2.4) Constraints:

The system should be highly performed

The System should be Compatible with major web browsers (Chrome, Firefox and edge)

2.5) Assumptions and Dependencies:

Users will have internet access to utilize the web Applications

The application will rely on external Payment processing like (PayPal)

**3.Specific Requirements**

3.1External Interface Requirements

3.1.1 User Interface

* Home Page: Displays the products
* Login/Registration Page: Allows users to log in or create an account.
* Product Page: Shows product details with images and prices.
* Shopping Cart Page: Displays items added with total price.
* Admin Dashboard: Provides product and order management tools

3.1.2 Hardware Interface

The application will run on standard web servers with minimum requirements

Processors-intel core i5

Ram-8Gb

Storage 50Gb

3.1.3 Software Interface

This application will interact with

frontend: JavaScript-based (React or Angular).

Backend: Spring Boot.

Database-MySQL for data storage.

3.1.4 Communication Interface:

HTTP/HTTPS-The system will communicate over secure HTTP/HTTPS protocols

REST API-Communication between Front end and Back end.

**3.2Functional Requirement**

3.2.1User Registration

This System will allow new User to create Account by providing username, Password and other personal details.

3.2.2Login/Sign up

Registered Users can log in by providing their Username and Password allow user to reset their Password via email.

3.2.3 Product Listing and search

User can browse their product by category, filter by price and availability.

3.2.4 Add product to shopping cart

Users can add products to their Shopping cart and remove items

3.2.5 Order Processing

The User can make their Orders which can be delivered to their Mentioned address, and user can review their Order Summary.

3.2.6 Payment Processing

The system will Integrate with external Payment gateways like PayPal and Gpays.Upon successful Payment the order will be marked as “Completed” and forwarded for fulfilment

3.2.7 Admin-inventory Management:

Admin can add, update or remove product from the inventory. The system will track product stock levels and alert administration when inventory is low.

3.3 Performance Requirements:

The system should support more Users.

Page load should not exceed more than 2 sec

The system must be able to process payment and completes order within 5 sec.

3.4 Design Constraints:

Database-MySQL will be used as the primary database system

Browser compatibility-Should support moder web browser (Chrome, Firefox and Edge)

3.5 Software System Attributes:

The system should have user-friendly and intuitive design

Payment should be processed securely.

3.6 Other Requirements:

The system should be adaptable for multiple languages.

The system must provide a user manual for customers and admins.

There should be customer feedback collection after orders.