Software Requirements Specification

for

PetShop Management

Nimisha Siby

Amal Jyothi College

3-10-19

Table of Contents

Revision History

Name	Date	Reason For Changes	Version

1. Introduction

1.1 Purpose

The main objective of pet Shop Management System is to enhance and upgrade the existing system by increasing its efficiency and effectiveness. The software improves the working methods by replacing the existing manual system with the computer-based system Document Conventions

Document Conventions

This document uses the following conventions.

DB	Database
DDB	Distributed Database
ER	Entity Relationship

1.2 Intended Audience and Reading Suggestions

This Software Requirements document is intended for:

− Developers who can review project’s capabilities and more easily understand where their efforts should be targeted to improve or add more features to it (design and code the application it sets the guidelines for future development).

− Project testers can use this document as a base for their testing strategy as some bugs are easier to find using a requirements document. This way testing becomes more methodically organized.
End users of this application who wish to read about what this project can do Product Scope

Product Scope

The current scope of the pet shop project in PHP is to,help customers to register to the system,then view the pet shop details and can buy pets.Admin can manage the pet details.

1.3 References

The official website of the project contains a brief description of the project, screenshots, links, tutorials and of course it gives users the ability to download and contribute to the project in different way

2. Overall Description

2.1 Product Perspective

Product Perspective

- Pet details: It includes category and detail of pets
- Customer description:It includes customer name, address and phone number

2.2 Product Functions

The major features of airline pet shop management system as shown in below **entity–relationship model** **(ER model)**

2.3 User Classes and Characteristics

This project is mainly having three users namely admin,customer.The overall system is controlled by the admin.Main component of the system is the user.

Customer: The customer is the end user of the system.They can view product and other services provided by the admin.Customer can buy pets.

Admin: The admin is the owner of the site.Admin manages all the users.He can view user details.He maintains the pet details.

2.4 Operating Environment

Operating environment for the pet shop management system is as listed below.

- distributed database
- client/server system
- Operating system: Windows.
- database: sql+ database
- platform: vb.net/Java/PHP

2.5 Design and Implementation Constraints

1. The global schema, fragmentation schema, and allocation schema.
2. SQL commands for above queries/applications
3. How the response for application 1 and 2 will be generated. Assuming these are global queries. Explain how various fragments will be combined to do so.
4. Implement the database at least using a centralized database management system.

2.6 User Documentation

User documentation components are available on project's official website

2.7 Assumptions and Dependencies

Assumption :The code should be free from compilation errors/syntax errors.The product must have an interface which is simple enough to understand

Dependencies: All necessary hardware and software are available for implementing and use of the tool. The proposed system would be designed, developed and implemented based on the software requirements specification document.

3. External Interface Requirements

3.1 User Interfaces

- Front-end software: PHPversion
- Back-end software: SQL+

3.2 Hardware Interfaces

- Windows.
- A browser which supports CGI, HTML & Javascript.

3.3 Software Interfaces

Following are the software used for the pet shop management online applicationCommunications Interfaces

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.
PHP	To implement the project we have chosen PHPlanguage for its more interactive support.

3.4 Communications Interfaces

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

4. System Features

4.1 System Feature 1

DESCRIPTION and PRIORITY: The pet shop reservation system maintains information on pets, categories of pets, prices, and bookings

STIMULUS/RESPONSE SEQUENCES**:**

- Displays a detailed list of available pets and make a “Reservation” or Book a ticket on a particular pets .
- Cancel an existing Reservation.

DISTRIBUTED DATABASE:

Distributed database implies that a single application should be able to operate transparently on data that is spread across a variety of different databases and connected by a communication network

CLIENT/SERVER SYSTEM

The term client/server refers primarily to an architecture or logical division of responsibilities, the client is the application (also known as the front-end), and the server is the DBMS (also known as the back-end).

A client/server system is a distributed system in which,

- Some sites are client sites and others are server sites.
- All the data resides at the server sites.
- All applications execute at the client site

5. Other Nonfunctional Requirements

5.1 Performance Requirements

The steps involved to perform the implementation of airline database are as listed below

A) E-R DIAGRAM
The E-R Diagram constitutes a technique for representing the logical structure of a database in a pictorial manner. This analysis is then used to organize data as a relation, normalizing relation and finally obtaining a relation database.

- **ENTITIES:** Which specify distinct real-world items in an application.
- **PROPERTIES/ATTRIBUTES:** Which specify properties of an entity and relationships.
- **RELATIONSHIPS:** Which connect entities and represent meaningful dependencies between them.

B) NORMALIZATION:
The basic objective of normalization is to reduce redundancy which means that information is to be stored only once. Storing information several times leads to wastage of storage space and increase in the total size of the data stored.

Normalization is the process of breaking down a table into smaller tables. So that each table deals with a single theme. There are three different kinds of modifications of anomalies and formulated the first, second and third normal forms (3NF) is considered sufficient for most practical purposes. It should be considered only after a thorough analysis and complete understanding of its implications.

5.2 Safety Requirements

If there is extensive damage to a wide portion of the database due to catastrophic failure, such as a disk crash, the recovery method restores a past copy of the database that was backed up to archival storage (typically tape) and reconstructs a more current state by reapplying or redoing the operations of committed transactions from the backed up log, up to the time of failure. Security Requirements

5.3 Security Requirements

Security systems need database storage just like many other applications. However, the special requirements of the security market mean that vendors must choose their database partner carefully.

5.4 Software Quality Attributes

- AVAILABILITY: The pets should be available on the specified date and specified time as many customers are doing advance reservations.
- **MAINTAINABILITY:** The administrators and pet in chargers should maintain correct schedules of pet.
- **USABILITY:** The pet schedules should satisfy a maximum number of customers needs

6. Other Requirements

1. Usability:
   - The system must be easy to use by both users and the owner,
   - The system should highlight the relevant information
   - The menu and buttons are easily navigable and understandable by user
2. Relability:
   - The System must give accurate ststus of users
   - The system must add services
   - The system should provide password enabled login to avoid foreign entity changing the data in the system

3. Performance:
   - The system must not lag, because the user using it doesn't have down time to wait for it to complete an action
   - All the functions of system should be available all time
4. Implementation:
   - The system user interface is built upon PHP
   - The programming is done in PHP core
   - The database implemented on MySQL

Appendix A: Glossary

OS-Operating System

PS-Pet Shop

PHP-Hypertext Preprocessor