Software Requirements Specification

Chapter 1

1. Introduction

1.1 Purpose

- The Book Store Management System (BSMS) web application is intended to provide complete solutions for vendors as well as customers through a single gateway using the internet as the sole medium. It will enable vendors to setup online shops (in this case Books), customer to browse through the shop and purchase them online without having to visit the shop physically. The administration module will enable a system administrator to approve and reject requests for new orders and maintain various lists of book category.

- This document is meant to discuss the features of BSMS, so as to serve as a guide to the developers on one hand and a software validation document for the prospective client on the other.

1.2 Intended Audience

The intended readers of this document are:

- Developers.
- Project Testers.
- Marketing Department.
- Website Owners, managers and coordinators.

1.3 Intended Use

- **Developers:**
  Developers can use this SRS to easily understand what's the project about, which part they should focus more, which part to improve, find if there is any scope to add new features or function for any upgrade.

- **Project Testers:**
  Testers can use this SRS to test the software as per requirements. This will make the testing more organized as from SRS testers can easily get the idea where to look and what error or bug they should be looking for.

- **Marketing Department:**
  Marketing department can use this SRS to get an idea about what the features are of this

project, how these features will help the clients or users and what/how they are going to promote it to prospective clients.

- **Website Owners, managers and coordinators:**
This document will provide them with enough info about the project on how to thoroughly utilize the full functionality of the project.

1.4 Product Scope

- The document only covers the requirements specifications for the BSMS.
- This document does not provide any references to the other component of the BSMS.
- All the external interfaces and the dependencies are also identified in this document.
- The overall scope of the feasibility study is to provide sufficient information to allow a decision to be made as to whether the project should proceed and if so, its relative priority in the context of other such existing Technology.
- The Functional & Non-Functional scope will be discussed in Section/Chapter 3.

1.5 Risk Definition

- For unstable network connection, conversation between host and client can be disrupted.
- Too many server request is not controllable for the server.

Chapter 2

Overall Description

BSMS is aimed towards the vendors who want to reach out to the maximum cross-section of customer and common people who can be potential customer. This project envisages bridging the gap between the seller and the customer. BSMS should be user-friendly, quick to learn and reliable software for the above purpose. BSMS is intended to be a stand-alone product and should not have many dependencies. It should run on both UNIX and Windows based platform.

2.1 User Classes and Characteristics

User: Administrator

- Functions: The Administrator is the super user and has complete control over all the activities that can be performed. The application notifies the administrator of all shop creation requests, and the administrator can then approve or reject them.
- Database Management: Control the database and keep track of all records of customers and product details. The administrator also manages the list of available product categories. The administrator can also view and delete entries in the user database.

- Managing Sales to Customers: Responsible for properly allocating the selected product according to the customer9s choice and delivering product to the customer.
- View Product Stocks: Keep track of each product item9s stocks for selling purpose.

User: Customer

- Functions:
- Login: Customers must have a valid login id to enter into the site.
- View and edit Own Details: Can view/edit their personal profile information (such as phone number and shipping address).
- Choosing and comparing products: Can view all available products and can compare them and make a choice for purchasing products.
- Purchasing: A Customer can browse through the shops and choose products to place in a virtual shopping cart. The shopping cart details can be viewed and items can be removed from the cart.
- Giving Feedback to Customer Care: Can give feedback to the 24X7 Customer Care Service center about their impression for the site and services.
- Logout: Customer must logout of the site after purchasing products.

User: Visitors

- Visiting the Site: Can only visit the site without registration.
- Registration: New users can sign up by creating new ID.

2.2 User Needs

2.3 Operating Environment

- Any kind of OS that supports internet browsing.
- Any famous browsers, for a model we are taking Chromium:116.0.5845.96 based browsers.

2.4 Constraints

- The project must be finished within 2-3 months.
- Limited Database, Class diagram and its implementation.
- There is no maintainability of back up so availability will get affected.
- Limited to HTTP/HTTPS.
- Real-life credit card validation and Banking system is not implemented.
- No multilingual support.

2.5 Assumptions

- Users can read and write English.
- Users have devices that support internet service.
- Users have internet connection .
- Users are familiar with web browsing and can interact with website.
- Users are familiar with the Shopping related terminology like Shopping cart/Checking out/Transaction etc.

Chapter 3

Requirements

3.1 Functional Requirements:

As a avid reader and book enthusiast,
I want to be able to purchase books online from a reputable bookstore,
So that I can easily access and enjoy a wide variety of books without the need to visit a physical store.

Scenario 1: Browsing and Searching for Books

- **Given** I am on the bookstore's homepage,
- **When** I type the name of a book or author in the search bar and press enter,
- **Then** I should see a list of relevant search results, including book titles, authors, and book covers.

Confirmation

- Home Page will have browsing and searching function for books.

Scenario 2: Viewing Book Details

- **Given** I am viewing the list of search results,
- **When** I click on a book's title or cover image,
- **Then** I should be taken to a detailed page for that book, displaying information such as the book's title, author, price, description, and customer reviews.

Confirmation

- By clicking on the book user will be able to view book details.

Scenario 3: Adding Books to Cart

- **Given** I am on the book's detailed page,
- **When** I decide to purchase the book,
- **Then** I should have the option to add the book to my shopping cart.

Confirmation

- User will be able to add books to cart from book details page.

Scenario 4: Managing the Shopping Cart

- **Given** I have added one or more books to my shopping cart,
- **When** I click on the shopping cart icon or navigate to the cart page,
- **Then** I should see a list of the books in my cart, along with the quantity and total price for each item.
- **And** I should have the option to update the quantity or remove items from the cart.

Confirmation

- User will be able to see all the books in their cart along with individual price quantity and total price.
- User will be able to increase/decrease quantity or even completely remove books from cart.

Scenario 5: Proceeding to Checkout

- **Given** I have reviewed the items in my shopping cart and am ready to make a purchase,
- **When** I click on the "Checkout" button,
- **Then** I should be prompted to provide my shipping information, including name, address, and payment details.
- **And** I should have the option to review my order and make any necessary changes before confirming the purchase.

Confirmation

- Once User is ready to check out, user will be prompted to a page for their shipping information.

Scenario 6: Completing the Purchase

- **Given** I have entered all the required information and reviewed my order,

- **When** I click the "Place Order" button,
- **Then** I should receive a confirmation message indicating that my order has been successfully placed.
- **And** I should receive an email confirmation with the order details and a receipt.

Confirmation

- After providing the shipping information the user can finally complete their purchase.

Scenario 7: Accessing Purchased Books

- **Given** I have completed a purchase,
- **When** I log in to my account,
- **Then** I should have access to a "My Library" section where I can view and download the books I've purchased.

Confirmation

-

Scenario 8: Customer Support

- **Given** I encounter any issues or have questions during the purchasing process,
- **When** I need assistance,
- **Then** I should have access to customer support through email, chat, or a phone number for prompt assistance.

Confirmation

- User will be able to contact the admin through Contact page (not real time communication).

Scenario 9: Wishlist

- **Given** I am browsing books,
- **When** I find a book I'm interested in but not ready to purchase,
- **Then** I should have the option to add it to a "Wishlist" for future reference and potential purchase.

Confirmation

-

Scenario 10: Recommendations and Personalization

- **Given** I have made previous purchases or added books to my Wishlist,
- **When** I log in,
- **Then** I should receive personalized book recommendations based on my past interactions and preferences.

Confirmation

-

Scenario 11: User Reviews

- **Given** I have purchased a book,
- **When** I log in,
- **Then** I should have the option to leave a review and rating for the book to help other users make informed decisions.

Confirmation

-

Scenario 12: Order Tracking

- **Given** I have completed a purchase,
- **When** I want to track the status of my order,
- **Then** I should be able to check the order status and estimated delivery date in my account.

Confirmation

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Scenario 13: Returns and Refunds

- **Given** I have received a book that is damaged or not as described,
- **When** I contact customer support within a reasonable timeframe,
- **Then** I should be able to initiate a return and request a refund or replacement.

Confirmation

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Scenario 14: Security and Privacy

- **Given** I am using the online bookstore,
- **Then** my personal and payment information should be securely stored and protected to ensure the privacy and security of my data.

Confirmation

- Confidential Data will be securely stored in a database.

3.2 Non Functional Requirements:

- Secure access of confidential data (user details).
- 24 X 7 availability.
- Better component design to get better performance at peak time.
- Product placement space where it will effectively catch the customer's attention.
- In addition to the above mentioned points, the following are planned to be delivered if deemed necessary:
- Warehousing within the very ambits of the project
- More payment gateways.
- Dynamic price model by which prices can be changed based on demand and supply.

3.3 Safety Requirements

- System use shall not cause any harm to human users.

3.4 Security Requirements

- System will use secured database
- Normal users can just read information but they cannot edit or modify anything except their personal and some other information.
- System will have different types of users and every user has access constraints.

3.5 Error handling

BSMS shall handle expected and non expected errors in ways that prevent loss in information and long downtime period

NB: This list is by no means, a final one. The final list will be dictated by implementation & time constraints.

Appendix

Glossary

SRS

A software requirements specification (SRS) is a description of a software system to be developed. The software requirements specification lays out functional and non-functional requirements, and it may include a set of use cases that describe user interactions that the software must provide to the user for perfect interaction.

OS

An operating system (OS) is system software that manages computer hardware and software resources, and provides common services for computer programs.

24x7

24x7 means "24 hours a day, 7 days a week" and is used to describe a service, such as computer server monitoring.