Simple Design Document - SportyShoes.com

1. Overview

SportyShoes.com is an e-commerce website dedicated to the sale of sports shoes. The primary objective is to develop a prototype that showcases the essential features of the application. This document outlines the key functionalities and design considerations for the SportyShoes.com project.

2. Functional Requirements

2.1 Admin Panel

2.1.1 Admin Login

- Objective: Allow administrators to securely log in to the admin panel.
- Details: Implement a login page with authentication mechanisms.

2.1.2 Change Password

- Objective: Enable administrators to change their passwords.
- Details: Include a functionality within the admin panel to change the password securely.

2.2 Product Management

2.2.1 Add/Edit/Remove Products

- Objective: Provide the admin with the ability to manage products.
- Details: Create forms for adding, editing, and removing products from the inventory.

2.2.2 Product Categorization

- Objective: Improve organization by categorizing products.
- Details: Implement a system to assign categories to products for easy navigation.

2.3 User Management

2.3.1 View User List

- Objective: Allow the admin to view a list of users who have signed up.
- Details: Create a user management page displaying user details.

2.3.2 Search Users

- Objective: Enable the admin to search for users.
- Details: Implement a search functionality based on user attributes.

2.4 Purchase Reports

2.4.1 Generate Reports

- Objective: Allow the admin to generate purchase reports.
- Details: Design a reporting system that compiles purchase data.

2.4.2 Filter Reports by Date and Category

- Objective: Provide filtering options for purchase reports.
- Details: Include filters for date and product category to refine report results.

3. Non-functional Requirements

3.1 Performance

- Objective: Ensure the website performs efficiently.
- Details: Optimize code and utilize best practices to enhance speed.

3.2 Security

- Objective: Implement security measures to protect user data.
- Details: Employ secure authentication methods and data encryption.

3.3 Usability

- Objective: Create an intuitive and user-friendly interface.
- Details: Conduct usability testing and gather feedback for improvements.

3.4 Reliability

- Objective: Ensure the system is reliable and available.
- Details: Implement backup and recovery mechanisms.

3.5 Scalability

- Objective: Design the system to handle increased user loads.
- Details: Consider scalability options for future growth.

4. Development Workflow

4.1 Planning

- Objective: Define user stories and development milestones.
- Details: Create a development plan and timeline.

4.2 Coding and Testing

- Objective: Implement features using Java technologies.
- Details: Conduct rigorous testing for functionality and security.

4.3 Documentation

- Objective: Create comprehensive documentation for code, APIs, and system architecture.
- Details: Document code and provide deployment instructions.

4.4 Presentation

- Objective: Showcase the prototype to stakeholders.
- Details: Emphasize capabilities and user interactions during the presentation.

5. Conclusion

The SportyShoes.com project aims to deliver a user-friendly e-commerce platform with essential features for administrators. This simple design document outlines the functionalities and considerations to guide the development process effectively.