**BUSINESS REQUIREMENTS DOCUMENT**

*FOR*

**Shoe Inventory Management System**

**Version 1.0**

**Prepared for**

**CSIT- Information Management 2**

**August 24,2024**

**Prepared by:**

**Rommel John L. Pobadora**

FUNCTIONAL REQUIREMENTS DOCUMENT

1 General

**1.1 Project Description**

The Shoe Inventory Management System is a web-based program that enables shoe shops to manage their inventory more efficiently. The system will track stock levels, monitor sales, update inventory in real time, and generate reports on sales patterns and inventory status. The system's goal is to streamline inventory procedures, decrease errors, and improve decision-making about stock replenishment and product availability.

**1.1.1 Background**

Overstocking, stockouts, and human tracking errors are all common inventory management difficulties for shoe sellers. These difficulties might result in missed revenue, increased inventory expenditure, and worse customer satisfaction. A strong inventory management system is critical for optimizing stock levels, assuring product availability, and reducing the expenses associated with excess or insufficient inventory. This project tackles these difficulties by creating a comprehensive Shoe Inventory Management System that is suited to the unique requirements of shoe stores.

**1.1.2 Purpose**

The Shoe Inventory Management System is designed to give shoe shops a dependable solution for efficiently managing their inventory. The system seeks to improve operational efficiency, lower inventory-related costs, and boost overall business performance by automating inventory tracking and offering actionable insights via reporting and analytics. This solution will help shops maintain ideal stock levels, reduce errors, and make more educated inventory management decisions.

**1.1.3 Assumptions and Constraints**

**Assumptions:**

* The system will be used by small to medium-sized shoe retailers.
* Users will have basic computer literacy and access to the internet.
* The inventory data provided by the users is accurate and up to date.

**Constraints:**

* The system must comply with relevant data protection and privacy laws.
* The system must be scalable to accommodate the growth of the retailer's business without significant rework.

**Point of Contact**

Project Manager: Rommel John L. Pobadora

Email: rommeljohn.pobadora@cit.edu

Phone: 09084146838

**Business Objectives**

1. Optimize Inventory Levels: Ensure that the right amount of stock is always available to meet customer demand without overstocking or stockouts.
2. Reduce Operational Costs: Minimize costs associated with manual inventory management, excess stock, and lost sales due to stockouts.
3. Improve Decision-Making: Provide real-time data and reports to help retailers make informed decisions about purchasing, stocking, and sales strategies.
4. Enhance Customer Satisfaction: Ensure that popular products are always in stock, reducing the likelihood of lost sales due to stockouts.
5. Increase Sales Efficiency: Streamline inventory management processes to free up time and resources, allowing staff to focus on sales and customer service.

**2 FUNCTIONAL REQUIREMENTS**

**1. User Management**

1. The system shall allow administrators to create, edit, and delete user accounts with different access levels (e.g., admin, staff).
2. The system shall require users to log in with a valid username and password.

**2. Inventory Management**

1. The system shall allow users to add new shoe products to the inventory with details such as product name, category, size, color, quantity, cost price, and retail price.
2. The system shall enable users to update existing product information, including stock levels and pricing.
3. The system shall support the deletion of products from the inventory.
4. The system shall automatically update inventory levels when sales are made, or stock is received.
5. **Sales Management**
6. The system shall allow users to record sales transactions, including product selection, quantity sold, price, and customer information.
7. The system shall automatically deduct sold items from the inventory and update stock levels in real-time.

**4. Product Categorization**

1. The system shall allow users to categorize products by type (e.g., Basketball, Casual, Running), brand, and other attributes.
2. The system shall support filtering and sorting of products within the inventory based on category, brand, size, and other attributes.

**5. Product Search and Filtering**

1. The system shall allow users to search for products by name.
2. The system shall support filtering products by category, brand, size, color, and stock status (e.g., in stock, out of stock).

**6. Dashboard Overview**

1. The system shall provide a simple dashboard that displays key metrics such as total inventory value, top-selling products, and low-stock alerts.
2. The dashboard shall include quick links to common actions, such as adding new products or viewing sales reports.
   1. **Data Requirements**

**Appendix A: Logical Data Model**

**A screenshot of a computer

Description automatically generated**

* 1. **Functional Process Requirements**

1. **User Managemen**t: The system should authenticate users using their credentials (username and password) and provide access based on their assigned roles (e.g., admin, staff). Admin users should have the ability to manage user accounts, including adding, editing, and deleting users. Regular staff should have limited access, primarily focused on viewing and updating specific data, such as inventory levels or sales entries.
2. **Inventory Management:** The system should allow users to manage inventory by adding new products, updating existing product information, and adjusting stock levels. When a product is added, the system should capture details such as Size, color, quantity and price. The inventory should automatically update to reflect changes from sales, returns, or manual adjustments.
3. **Sales Management:** Sales transactions should be recorded by the system, capturing details like the date of sale, products sold, quantities, and total amounts. Sales should automatically adjust inventory levels to ensure accurate stock tracking. The system should generate receipts or sales summaries and store transaction data for future reporting and analysis.
4. Product Categorization: The system should support categorizing products into defined groups (e.g., Basketball, Casual, Running) to streamline inventory management and improve the searchability of products. Users should be able to assign or update categories for each product, ensuring that the categorization remains accurate and relevant to the inventory.
5. Product Search and Filtering: To facilitate easy navigation and management, the system should offer search functionality, allowing users to locate products by entering keywords such as product name or other attributes. Additionally, filtering options should be available to refine search results based on criteria like category, size, color, or stock status, enabling users to quickly find specific products or groups of products.
6. Dashboard Overview: A central dashboard should provide an overview of key metrics, such as total inventory value, top-selling products, and current stock levels. The dashboard should feature quick access links to frequently used actions like adding new products, viewing sales reports, or adjusting inventory, providing users with an at-a-glance view of system performance and critical tasks that need attention.

**3 Operational Requirements**

**3.1 System Availability**

The system should be available 24/7 to ensure that inventory and sales management can be conducted at any time, especially in a retail environment where operations might extend beyond typical business hours. Downtime should be minimized, with maintenance scheduled during off-peak hours to avoid disruptions.

**3.2 Performance**

The system must be capable of handling multiple simultaneous user sessions without performance degradation. Page load times and response times for database queries should be optimized to provide a smooth and efficient user experience, even during peak operational periods.

**3.3 Scalability**

The system must be designed to scale as the business grows, supporting an increasing number of products, users, and sales transactions. This scalability should be achievable without significant changes to the core system architecture, ensuring that the system can adapt to the growing demands of the business.

**3.4 Usability**

The user interface should be intuitive and easy to navigate, with clear labeling and accessible features to minimize the learning curve for new users. Training materials and user guides should be provided to assist staff in using the system effectively, reducing the likelihood of errors in inventory or sales management.

**4 Requirement Traceability Matrix**

**Appendix B: Requirement Traceability Matrix**

**A screenshot of a computer

Description automatically generated**

**5 APPENDICIES**

Appendix A: Logical Data Model

Appendix B: Requirement Traceability Matrix