Software Requirements Specification
for
Fashion Inventory Management System

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Contents

1 Introduction

1.1 Purpose

The purpose of this document is to define the software requirements for a Fashion Inventory Management System. This system is designed to help local clothing shops efficiently manage their inventory, brands, and sales. It aims to provide a comprehensive solution that addresses the unique challenges faced by small to medium-sized fashion retailers.

1.2 Intended Customers/Users

The intended users of this system are small to medium-sized local clothing shops that require an affordable solution for inventory management. This includes:

- Boutique owners
- Vintage clothing stores
- Local fashion designers with retail outlets
- Consignment shops specializing in fashion items

1.3 Product Scope

The Fashion Inventory Management System will provide functionalities for:

- Brand management: Registration and organization of different fashion brands
- Product management: Detailed tracking of items including size, color, and quantity
- Sales and billing: Processing transactions and generating invoices
- Inventory tracking: Real-time updates of stock levels
- Categorization: Organizing products within brands and by type (e.g., tops, jeans, dresses)
- Reporting: Generating insights on sales trends and inventory levels
- User management: Controlling access levels for different staff roles

1.4 Outline of the document

This document is structured as follows:

- Section 1 (Introduction): Provides an overview of the system's purpose and scope
- Section 2 (Overall Description): Details the product perspective, functions, and user classes
- Section 3 (Other Non-Functional Requirements): Outlines performance, security, and quality attributes
- Section 4 (Conclusion): Summarizes the key points of the SRS

2 Overall Description

2.1 Product Perspective

The Fashion Inventory Management System is a standalone software solution designed to replace traditional pen-and-paper or memory-based inventory management methods. It aims to provide a user-friendly, efficient, and affordable solution for local clothing shops. The system will operate independently but may interface with existing point-of-sale systems if required.

Key features of the product perspective include:

- Cloud-based solution for easy access from multiple devices
- Responsive design for use on desktop computers and tablets
- Potential for future expansion to include e-commerce integration

2.2 Product Functions

The main functions of the system include:

- Brand registration and management
  - Add, edit, and remove brands
  - Associate products with specific brands
  - Track performance metrics by brand
- Product registration and categorization
  - Add new products with detailed attributes (size, color, material, etc.)
  - Assign unique product IDs in the format COMPANY-NAME-ID
  - Categorize products by type (e.g., tops, bottoms, accessories)
  - Handle potential ID conflicts with error messaging
- Inventory tracking with size and quantity management
  - Real-time update of stock levels
  - Low stock alerts and reorder suggestions
  - Size-specific inventory tracking
- Sales and billing with automatic inventory updates

  - Process sales transactions
  - Generate invoices and receipts
  - Automatically adjust inventory levels post-sale
- Reporting and analytics
  - Generate sales reports (daily, weekly, monthly)
  - Analyze top-selling items and brands
  - Track inventory turnover rates

2.3 User Classes

The primary user classes for this system are:

- Shop owners/managers
  - Full access to all system features
  - Ability to generate reports and analyze business performance
  - Manage user accounts and permissions
- Sales staff
  - Access to sales and billing functions
  - Ability to check inventory levels
  - Limited access to product and brand management
- Inventory managers
  - Full access to inventory management features
  - Ability to add and update product information
  - Generate inventory reports

2.4 Design and Implementation Constraints

- The system should be designed for ease of use by non-technical users
- It should be able to run on basic computer hardware commonly found in small shops
- The system should be cost-effective to implement and maintain
- The interface should be intuitive and require minimal training
- The system should be scalable to accommodate business growth
- Data storage and handling must comply with local data protection regulations

2.5 Assumptions and Dependencies

- Users have basic computer literacy
- The system will be used in a single-location shop (not designed for multi-store chains)
- Internet connectivity is available for potential cloud backups or updates
- The business has a consistent and stable electrical power supply
- Users have access to devices (computers or tablets) capable of running a web browser
- The shop has a relatively stable product catalog without frequent major changes

3 Other Non-Functional Requirements

3.1 Performance Requirements

- The system should be able to handle inventory of up to 10,000 items without significant performance degradation
- Page load times should not exceed 3 seconds under normal operating conditions
- The system should support up to 10 concurrent users without performance issues
- Database queries should return results within 5 seconds for complex reports
- The system should be able to process a minimum of 100 sales transactions per hour
- Backups should be performed daily and should not impact system performance

3.2 Security Requirements

- User authentication to prevent unauthorized access
- Ability to export files in Excel and other formats
- All data transmissions should be encrypted using industry-standard protocols
- User passwords must meet minimum complexity requirements
- The system should log all significant actions for audit purposes
- Access to sensitive data (e.g., sales figures) should be restricted based on user roles
- The system should automatically log out inactive users after 30 minutes

3.3 Software Quality Attributes

- Reliability: The system should be available during all business hours
- Usability: The interface should be intuitive for non-technical users
- Maintainability: The system should be easy to update and expand
- Scalability: The system should be able to accommodate increasing data volumes and user numbers
- Portability: The system should be accessible from various devices and operating systems
- Interoperability: The system should be capable of integrating with common POS systems
- Efficiency: The system should minimize the number of steps required to complete common tasks

4 Conclusion

This Fashion Inventory Management System aims to provide an affordable and efficient solution for local clothing shops to manage their inventory, streamline their operations, and improve their business management capabilities. By addressing the specific needs of small to medium-sized fashion retailers, this system will help bridge the gap between manual methods and expensive enterprise solutions.

Key benefits of the system include:

- Improved inventory accuracy and tracking
- Enhanced sales processing and reporting
- Better insights into business performance
- Increased efficiency in day-to-day operations
- Scalability to support business growth

The implementation of this system will enable local clothing shops to compete more effectively in the modern retail landscape, providing them with tools traditionally available only to larger retailers. By focusing on user-friendly design and essential features, the Fashion Inventory Management System will empower shop owners and staff to make informed decisions and provide better service to their customers.

As the fashion retail industry continues to evolve, this system will serve as a foundation for future enhancements, potentially including e-commerce integration, advanced analytics, and multi-store management capabilities.