

# Project Requirements Document

## StockMaster Inventory Manager

**Project Name:** StockMaster

**Internal Stakeholder:** Ogana Oluchukwu, Jaydon Forrester, Ebelechukwu Azu-Okonkwo

**Client:** Yogesh Sharma, Floor Coverings International, Regina

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## 1. Project Overview

### Background:

Floor Coverings International is a medium-sized flooring franchise in Regina that is facing challenges with its current warehouse operations. Inventory is not being tracked effectively, resulting in mismatched orders, delayed customer service, and lost sales opportunities. Sales staff are spending significant time managing inventory instead of focusing on their primary sales tasks.

### Objective:

The StockMaster Inventory Manager will provide an automated, user-friendly solution for tracking and managing warehouse inventory in real-time, ensuring accurate stock records, and improving operational efficiency.

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## 2. Stakeholders

- **Internal Stakeholders:**
  - Oluchukwu Ogana
  - Jaydon Forrester
  - Ebelechukwu Azu-Okonkwo
- **External Stakeholders:**
  - Yogesh Sharma
  - Flooring Covering Regina Int'l

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### 3. Functional Requirements

#### 1. Inventory Management:

- Ability to track stock levels in real-time.
- Automated stock updates when items are added, removed, or reordered.
- Barcode scanning for efficient data entry.

#### 2. Reporting and Analytics:

- Generate inventory reports (daily, weekly, and monthly).
- Identify trends in stock usage to inform future ordering decisions.

#### 3. User Roles and Permissions:

- Separate access levels for sales employees, warehouse staff, and managers.
- Role-based permissions for adding, editing, or viewing inventory.

#### 4. Notification System:

- Low-stock alerts to prevent stockouts.
- Notifications for reordered inventory arrival dates.

#### 5. Search and Filter:

- Advanced search functionality for locating products quickly.
  - Filters based on stock status, product type, and supplier.
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### 4. Non-Functional Requirements

#### 1. Scalability:

- The system should handle an increase in inventory volume as the business grows.

#### 2. Usability:

- Intuitive user interface for employees with varying technical skills.
- Minimal training required for users to operate the system.

#### 3. Reliability:

- Data integrity must be ensured with regular backups.
- The system should be operational 99.9% of the time during business hours.

#### 4. Security:

- Secure login with password protection.
- Data encryption to safeguard sensitive information.

#### 5. **Performance:**

- Real-time updates to inventory with minimal latency (<2 seconds).
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### 5. Assumptions and Constraints

- **Environmental:** Reduction in waste products through better inventory control.
  - **Societal:** Improved employee productivity and satisfaction by building a user-friendly application
  - **Economic:** Cost savings by reducing unnecessary orders.
  - **Reliability and Scalability:** Building most functionalities to be reliable with the timeframe we had.
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### 6. Deliverables

1. Functional StockMaster Inventory Manager application.
  2. User training materials and documentation.
  3. System installation and configuration at the client site.
  4. Final project report detailing implementation, testing, and lessons learned.
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### 7. Milestones and Timeline

1. **Requirement Gathering and Approval:** 2 weeks.
  2. **Product Design:** 2 weeks.
  3. **Backend Development:** 4 weeks.
  4. **Frontend Development:** 2 weeks.
  5. **Final Deployment:** 1 week.
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### 8. Features

The features of StockMaster include:

- Real-time inventory updates.
  - Automatic alerts for low stock levels.
  - User authentication for role-based access.
  - Report generation for inventory analysis.
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## 9. Risks

1. **Change in Requirements:**

Mitigation: Conduct frequent stakeholder reviews.

2. **Technical Challenges:**

Mitigation: Allocate additional time for unforeseen development hurdles.

3. **User Resistance:**

Mitigation: Provide hands-on training and support.

4. **Budget Overrun:**

Mitigation: Regularly monitor expenses and adjust scope if needed.