**Software Requirements Specification**

**for**

**MarketHub**

**Version 1.0**

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1. **Introduction**
   1. **Purpose**

This document outlines the Software Requirements Specification for MarketHub, an integrated platform designed to streamline the management and operations of wholesale businesses. The system offers tools for suppliers and customers to ensure seamless purchasing, transport, shipment, and returns management, focusing on user satisfaction and efficiency.

* 1. **Document Conventions**

Bold: Used for module names or important terms.

Italics: Used for additional clarifications or explanations.

* 1. **Intended Audience and Reading Suggestions**

This document is intended for:

* + 1. Developers: For the technical implementation of the system.
    2. Testers: For understanding the functionalities and performance requirements.
    3. Stakeholders: To review the system's functionality, scope, and features.
  1. **Product Scope**

MarketHub is designed to support wholesale business operations, focusing on the following modules:

* + - User management, product catalogue, order management, shipment tracking, returns, and warehouse management.
    - Integration with suppliers and customers for improved efficiency.
  1. **References**
     1. MarketHub Concept Overview (Internal Document)
     2. MySQL and Oracle Database Documentation
     3. Python Flask Documentation

1. **Overall Description**
   1. **Product Perspective**

MarketHub is a web-based platform that integrates business operations for suppliers and customers. The system uses **Python (Flask)** for backend development and is powered by MySQL and Oracle databases.

* 1. **Product Functions**

The main features of the system include:

* + 1. **User Management:** registration, login, and role-based access control
    2. **Product Management:** viewing and categorizing products, reviewing products
    3. **Order Management:** Order placement, tracking and Order history
    4. **Shipment Management:** Transport assignment, status tracking, delivery estimation
    5. Discounts and Offers**:** Managing discounts and offers for products.
    6. Returns and Refunds: Handling product returns and refunds, complaint resolution
    7. Warehouse Management: Stock monitoring and restock alerts
  1. **User Classes and Characteristics**
     + Admin: Manages all aspects of the platform (users, products, shipments).
     + Supplier: Uploads products, manages inventory.
     + Customer: Places orders, tracks shipments, handles returns.
  2. **Operating Environment**
     + Frontend: HTML, CSS, JavaScript
     + Backend: Python (Flask)
     + Database: MySQL and Oracle\
     + Development Tools: Visual Studio Code, Spyder
  3. **Design and Implementation Constraints**
* The platform should be designed for scalability and user-friendly navigation.
* The backend should handle a large volume of requests efficiently.
  1. **User Documentation**

Online help section detailing how to use the platform.

FAQs for common issues.

* 1. **Assumptions and Dependencies**

The platform assumes internet connectivity for online operations.

Requires MySQL/Oracle for database management.

1. **External Interface Requirements**
   1. **User Interfaces**

The user interface will be designed using **HTML**, **CSS**, and **JavaScript**.

It will provide a responsive layout for customers, suppliers, and admins.

* 1. **Hardware Interfaces**

The system will be designed to work with standard web server configurations.

* 1. **Software Interfaces**

**Backend**: Python Flask

**Database**: MySQL and Oracle (for storing and querying business data)

* 1. **Communication Interfaces**

The platform will use **HTTP/HTTPS** for communication between the frontend and backend.

Email integration for order confirmations, shipment status, and returns.

1. **System Features**
   1. **System Feature 1: User Management Module**
      1. Description and Priority

This module allows users to register, log in, and manage roles for access control.

Priority: High.

* + 1. Stimulus/Response Sequences

Stimulus: User submits registration/login request.

Response: Platform processes the request and grants access.

* + 1. Functional Requirements
       1. User registration with mandatory fields (Name, Email, Password).
       2. Role-based login for Admin, Supplier, and Customer.
  1. **System Feature 2**
     1. Description and Priority
     2. Stimulus/Response Sequences
     3. Functional Requirements
        1. .
        2. .
  2. **System Feature 3**
     1. Description and Priority
     2. Stimulus/Response Sequences
     3. Functional Requirements
        1. .
        2. .

1. **Other Nonfunctional Requirements**
   1. **Performance Requirements**
   2. **Safety Requirements**
   3. **Security Requirements**
   4. **Software Quality Attributes**
   5. **Business Rules**
2. **Other Requirements**

**Appendix A: Glossary**

**Appendix B: Analysis Models**

**Appendix C: To Be Determined List**