Software Requirements Specification Template

WAREHOUSE INVENTORY

Software Requirements Specification

V 1.0.0

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Team Members:

SURESH GOPI TULAM

SRAVANI NALLA

SAMYUKTHA POTLA

CHAITANYAKRISHNA CHUNDIWAR

POOJA KUNTA

Submitted in partial fulfilment

Of the requirements of

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# Revision History

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# Document Approval

The following Software Requirements Specification has been accepted and approved by the following:

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| **Signature** | **Printed Name** | **Title** | **Date** |
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1. **Introduction**
   1. **Purpose**

The main objective of a warehouse inventory is to ensure that there is a constant supply of goods or raw materials to meet orders that you have without creating excess inventory. Warehouse inventory is a subset of inventory management and is focused on knowing which products are incoming and outgoing, as well as where each item is located.

* 1. **Scope**

The WIS is responsible for maintaining registered items, their quantities and alarming the manager and admin at lower stock. Moreover, it will be able to have a good check and balance in all branches associated with this system. This system will be a great deal for the owner and his/her customers and worker to perform their jobs in a very efficient way. This will be applicable to all stores having daily life’s needed items; thus it is a generic system.

1. **General Description**
   1. **Product Perspective**

Warehouse inventory software offers several key features to help you monitor the goods within your storage facilities and oversee inventory control. In some cases, warehouse inventory software is built into broader enterprise resource planning (ERP) software solutions; in other cases, warehouse inventory software serves as a stand-alone system. It is best to purchase a seamlessly integrated process if you want to manage your inventory across the entire ecosystem of your company. Inventory management software covers the acquisition, tracking, and shipping of products, ensuring you know what products are where at what time. They can also serve as forecasting tools, helping you to order items based on expected customer demand according to historical sales data. Some also offer alerts and notifications to improve the operational process of your warehouse, indicating when it is time to perform cycle counts.

* 1. **Product Functions**

Every warehouse moves things, stores them, keeps track of them, and sends them out regardless of the product. Our four primary types of equipment are storage, material handling, packing, and shipping, and barcode equipment as a result of these four activities.

* 1. **User Characteristics**

1. Inventory Management. The module or feature is all meant to keep your essential warehouse functions centralized.
2. Barcoding & Tagging.
3. Inventory Tracking.
4. Reporting Tools.
5. **Specific Requirements**
   1. **External Interface Requirements**

We might need real-time order status data from external private logistics

* + 1. **User Interfaces**

1. Login module
2. Search results view from the inventory
3. Order tracking
   * 1. **Hardware Interfaces**

Mobile Operating System

* Android 7.0 and newer
* Inventory QR Code Scanner
  1. **Functional Requirements** 
     1. **Software Interfaces**
* Android studio.
  + 1. **Communications Interface**

In discussions, yet to decide.

* 1. **Functional Requirements**

Client

* Functionality of login/logout
* Privilege to Search for the products in inventory after successfully logging in.
* View the Results from the result list by scrolling.
* Ability to Choose the product from inventory and place an order.
* Choose to cancel the order or replacement

Admin

* Ability to Login into the application.
* Maintain the inventory and the products shown to the users.
* Pull up the orders details and their incidentals
* Has the privilege of approving returns and replacements
* Has the ability of tracking the orders and its status
  1. **Class/Objects**

We will create the classes accordingly once we start implementation of the project.

* 1. **Non-Functional Requirements**
     1. **Performance**

Warehouse performance measurement refers to the measurement of optimal use of storage space, customer relations activity, quality level, assets usage and costs.

* + 1. **Reliability**

The reliability of an inventory system can be defined as its ability to complete all required processes before they are due.

# Different ways to Ways to improve warehouse reliability:

# Review your warehouse maintenance and operational plans.

* Plan for increased staffing needs.
* Use quality components and parts
* Set order deadlines earlier.
  + 1. **Availability**

Warehouse availability refers to the amount of available space for storage, inventory preparation, and order fulfillment. To fully understand warehouse availability, it's important to make a clear distinction between theoretical storage capacity and working capacity. Inventory availability refers to whether a specific item is available for customer orders. Additional information provided by retailers may include the quantity available.

* + 1. **Security**

A lack of warehouse security gives thieves an easy way to steal products and make a quick buck and no e-commerce business is immune to theft.

* 1. **Design Constraints**

There are three main types of constraints to consider when developing a feasible supply chain plan: Production Constraints, Flow Constraints and Storage Constraints. These three types of constraints should be determined at every point along the extended supply chain to ensure an optimal and feasible supply plan.

**3.11 Use Case Diagrams**

Below is the generalized use case diagram of warehouse inventory

**Diagram

Description automatically generated**

1. **Design**
   1. **ER Diagram**

ER model Design for Warehouse Inventory.

**Diagram

Description automatically generated**