**Revision History**

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| --- | --- | --- | --- |
| Date | Author(s) | Changes | Version |
| 12/04/2021 | Özgün Şen  Berfu Anıl  Esra Ateş | Initial Draft | v1.0 |
| 05/05/2021 | Özgün Şen  Berfu Anıl  Esra Ateş | 2nd Iteration Review | v1.1 |

Stock Management System

System-Wide Requirements Specification

# Introduction

This Software-Wide Requirements Specification document is prepared for the Stock Management System. This document defines the system's constraints and non-functional requirements which apply to the whole system. This is the initial draft and it will be used for the extensions.

# System-Wide Functional Requirements

## Notifications

All required notification by the system contains;

-When a user checks the stocks levels, if there is an understock problem coming, the user can see those areas covered in red.

-A notification is seen when a password or username is incorrect on the login screen.

# System Qualities

## Usability

The interface must be 100% resizable for all devices such as mobile, tablets etc.

The interface must show the user experience design principles, For the rest of the pages, 60% of the screen is used to ease the read and catch the attention of the user where for the login screen it is 30%.

## Reliability

The system should be up and running 24/7 operation period.

Wrong entries made by the user will be handled and will not interrupt the system.

## Performance

The system will react to user commands approximately below or equal to 5 seconds.

## Supportability

In terms of understandability, %5 of the code will be commented on for further uses.

# System Interfaces

## User Interfaces

The system will interact with the users through a web interface. This interface will work with the Chrome browser without experiencing any design problems.

### **Look & Feel**

The system will have a look and feel graphical user interface i.e., the colours, icons, layouts and behaviour of the buttons, boxes and menus will be familiar to users which increases ease of use.

### **Layout and Navigation Requirements**

The system will provide a menu (sidebar) for users to navigate different system action screens.

### **Consistency**

User interface elements in the system will be designed uniformly. UI elements used in all screens will look and behave the same way in order to provide a sense of control, familiarity and reliability.

### **User Personalization & Customization Requirements**

The system will not offer any customization options.

## Interfaces to External Systems or Devices

### **Software Interfaces**

The system will perform the payment actions via the payment interface. Also, an SMTP interface for e-mail notifications will be used.

### **Hardware Interfaces**

The system will connect to the Internet and all hardware for Internet connection is required i.e., modem, WLAN-LAN, 3G.

### **Communications Interfaces**

This system requires communication via Hypertext Transfer Protocol (HTTPS).

# Business Rules

## User Account Rules

The user should have a checked-out licence plan in order to be able to sign up to the system.

The user should be signed up to the system before logging in.

The user should log in to the system to access the main screen.

Users should be able to access the stock levels all the time.

Users cannot have more than one active session simultaneously.

## Inventory Update Rules

Only the registered user can update the system.

One item can be updated at a time.

There should exist raw materials and products in the system in order to manage inventory bindings.

## Payment Rules

Users should be able to perform payment actions on the Stock Management System via valid credit card information.

# System Constraints

Developers must use the same NuGet packages along with libraries in order to maintain consistency. In terms of privacy, the user data will be kept in a cloud-based system with high security. For development, C# will be used in Microsoft Visual Studio 2019 which supports Web-based systems with several NuGet packages along with libraries. The computer for the system development is a Windows OS computer that is suitable for Visual Studio 2019. The web interface can be reachable for Google Chrome.

# System Compliance

## Licensing Requirements

There is a licensing requirement along with a trial period.

## Legal, Copyright, and Other Notices

Copyright will be included.

## Applicable Standards

OpenUP standards will be applied.

# System Documentation

A user manual will be provided for the Stock Management System.