Wiztock Stock Keeping & Tracking Platform

Software Requirements Specification

02.04.2021

150115851	Enver ASLAN
150116021	Mikail TORUN
150117062	A. Tunahan CİNSOY

Prepared for CSE3044 Software Engineering Term Project

Table of Contents

1. INTRODUCTION	4
1.1 Purpose	4
1.2 Scope	
1.3 DEFINITIONS, ACRONYMS, AND ABBREVIATIONS	4
1.4 References	4
1.5 OVERVIEW	4
2. GENERAL DESCRIPTION	5
2.1 Product Perspective	5
2.2 Product Functions	
2.3 USER CHARACTERISTICS	5
2.4 GENERAL CONSTRAINTS	5
2.5 ASSUMPTIONS AND DEPENDENCIES	5
3. SPECIFIC REQUIREMENTS	6
3.1 External Interface Requirements	
3.1.1 User Interfaces	
3.1.2 Hardware Interfaces	
3.1.3 Software Interfaces	
3.2 FUNCTIONAL REQUIREMENTS	
3.2.1 <functional #1="" feature="" or="" requirement=""></functional>	
3.2.2 < Functional Requirement or Feature #1>	
3.3 Non-Functional Requirement of Tedute #2>	
3.3.1 Performance	
3.3.2 Reliability	
3.3.3 Availability	
3.3.4 Security	
3.3.5 Maintainability	
3.3.6 Portability	
3.4 Inverse Requirements	
3.5 DESIGN CONSTRAINTS	
3.6 LOGICAL DATABASE REQUIREMENTS	
4. USE CASE DIAGRAMS	8

1. Introduction

1.1 Purpose

Many companies record and monitor their product purchases, sales and storage processes on their computer by using desktop applications. These applications enable companies to define their own products, determine their characteristics, keep records of products that have been purchased and sold, as well as in which warehouse the products are stored and instantly follow-up the transfer processes of the products.

With the development of technology, companies want to access such information instantly from anywhere. Because of that, in this project, we have aimed to respond to these requests of the companies.

1.2 Scope

The scope of the project is a system that a company can define a product cards and that the information of the location and movement of these products can be kept and that commercial information of suppliers and buyers or customers can record by using web interface basically.

This system is not a detailed accounting program. It is mostly aimed to follow the commercial movements of the products and companies.

1.3 Definitions, Acronyms, and Abbreviations

- A **product card** is a category that contains information about the original product. Firms acquire their products based on their product cards.
- End-Users are the entities that have an active registration in Wiztock.
- Customers are the group of people or firms that end-users sell their items to.
- Warehouses are the storage houses for the products of end-users.
- Suppliers are companies which end-users buy product
- Stock simply identifies the quantity of a product, i.e. the status of an item in warehouse.

1.4 References

- (1) https://y.ebsyazilim.com:9090/depostok.dll?durum=demo
- (2) https://uygulama.mobiliys.com/login
- (3) https://panel.isbasi.com/giris-yap

1.5 Overview

The rest of the content will be shaped by the given hierarchy at Table of Contents Page. We will indicate a general description, following with specific requirements and use case diagrams. Sections will be as clear as possible for understandability purposes.

2. General Description

2.1 Product Perspective

It is an application developed for companies that purchase and sell one or more products, store and track the product in this process. Looking at the relationship with other applications, it may say that this application is a requirement of an accounting application. In this application, although the accounting accounts are not calculated in detail, the accounting records (product price etc.) are kept.

2.2 Product Functions

- Defining products description
- Tracking movements of products
- Storing information of customer, warehouse, suppliers etc.

2.3 User Characteristics

This product has been developed for medium-sized users (companies) such as grocery stores, stationery, who want to keep track of stocks, in short, who want to buy and sell products.

2.4 General Constraints

Software Requirements:

- System needs any web browser like Google Chrome, Mozilla, Internet Explorer
- Developers need back-end and front-end development technologies like Editor for PHP language, any server such as wamp-server

Hardware Requirements:

- For end-user, any computer, tablets or smartphone which is connected to internet is needed.
- For developers, any computer that holds their project file and database is needed.

2.5 Assumptions and Dependencies

- It is assumed that the users have enough information of using internet browser
- The application requires the computer to be connected to the internet.
- Any operating system is the other dependencies for end-user and developers.

3. Specific Requirements

3.1 External Interface Requirements

3.1.1 User Interfaces

- HTML5
- Bootstrap 3 / Bootstrap 4
- JavaScript (React, JQuery, Chart.js etc.)

3.1.2 Hardware Interfaces

• Web Server to store project files and database

3.1.3 Software Interfaces

- Php
- Database Management System (MySql / MogoDB / MariaDb)

3.1.4 Communications Interfaces

HTML pages

3.2 Functional Requirements

3.2.1 End-User Functional Requirement #1

3.2.1.1 Introduction / Description

As stated before, the end user is the person or companies registered on the WizTock system.

3.2.1.2 Inputs / Display

- Username, password and email address for registration
- Firm information of the end-user
- Customer information of the end-user
- Supplier information of the end-user
- Product information of the end-user

3.2.1.3 Processing

- Registration
- Describing, deleting and updating
 - o end-user information
 - o customer information
 - o product information
 - o warehouse information
 - o supplier information

3.2.1.4 Outputs

- Reports related to
 - o product transaction
 - warehouse condition
 - o customer

3.3 Non-Functional Requirements

3.3.1 Performance

Back-end api calls is up to server quality. The default response time is maximum 20 second.

3.3.2 Reliability

Database backup will be taken regularly. Thus, user data will be stored. And users can retrieve their data whenever wanted.

3.3.3 Availability

User can be able to access their account always from their web browsers, smartphones.

3.3.4 Security

User account information cannot be shared with the others. Web security protocol will be used.

3.3.5 Maintainability

Using the flexibility offered by the object oriented programming approach, real-life changes will be able to easily integrated into the system.

3.3.6 Portability

Database and system files are transferred from one server to another easily.

3.4 Inverse Requirements

The system must not allow to unauthorized access.

3.5 Design Constraints

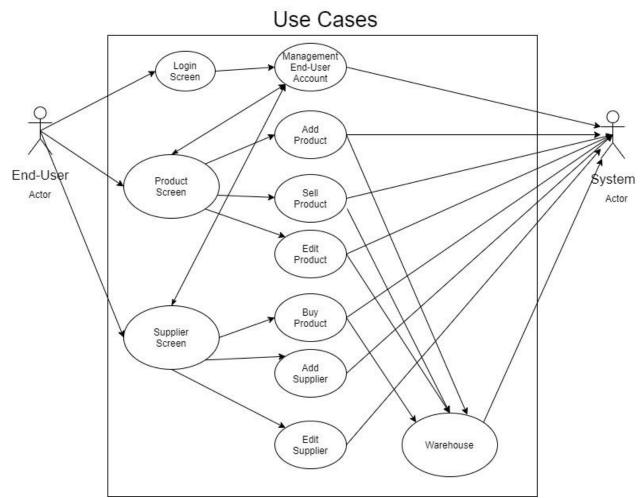
To protect the information security of end-user account, all specific data will be stored as encrypted in database.

3.6 Logical Database Requirements

- Data types: int, string, date time
- Indexes and primary and foreign keys etc.

4. Use Case Diagram

Wiztock - Stock Management



Division of Task

While we are implementing this report, we've arranged multiple Google Meet sessions to discuss content. All of the team members have joined this meeting, division of labor have been executed successfully.