

### PAF-Karachi Institute of Economics & Technology

#### Department of Computer Science Course Project Proposal Form

# SOFTWARE REQUIREMENT SPECIFICATION FOR ONLINE INVENTORY MANAGEMENT SYSTEM.

# Prepared by

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Proposed to

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## 1. Introduction

# 1.1 Purpose

• Online Inventory Management Software is a software system for tracking inventory levels, orders, sales and deliveries. It can also be used in the manufacturing industry to create a work order, bill of materials and other production-related documents. Companies use inventory management software to avoid product overstock and outages. It is a tool for organizing inventory data that before was generally stored in hard-copy form or in spreadsheets.

## 1.2 Scope

Online inventory management system is a complex process, particularly for larger organizations, but the basics are essentially the same regardless of the organization's size or type. In inventory management, goods are delivered into the receiving area of a warehouse in the form of raw materials or components and are put into stock areas or shelves.

Compared to larger organizations with more physical space, in smaller companies, the goods may go directly to the stock area instead of a receiving location, and if the business is a wholesale distributor the goods may be finished products rather than raw materials or components. The goods are then pulled from the stock areas and moved to production facilities where they are made into finished goods. The finished goods may be returned to stock areas where they are held prior to shipment, or they may be shipped directly to customers.

# 1.3 Audience Definitions, Acronyms and Abbreviations

## 1.3.1 Audience Definitions

The intended readers of this document are the developers of the site, testers, website owners, managers and coordinators.

## 1.3.2 Acronyms and Abbreviations

Acronym	Meaning	
OSP	Online Inventory Management System	
C#	C#.Net MVC 5	
SQL	SQL Server	
HTTP	Hypertext Transfer Protocol	

#### 1.4 References

- IEEE 830-1998 standard for writing SRS document.
- Fundamentals of Software Engineering

# 1.5 Technologies to be used

- Programming languages:
- <u>C#:</u>C#.Net is a programming platform— part of the MVC 5 frameworkfor developing and running distributed multi-tier architecture web application
- <u>HTML, XML:</u> Hyper Text Markup Language and Extensible markup Language are the predominant markup languages for web pages. It provides a means to describe the structure of text-based information in a document and to supplement that

text with interactive forms, embedded images, and other objects.

SQL Server:Sql server is used to create Database Tools & Development Environment

Microsoft Visual Studio: Microsoft Visual Studiois a toolkit which is designed for the creation of complex projects, providing fully dynamic web application.

## 1.6 Overview

The rest of this SRS is organized as follows: Section 2 gives an overall description of the software. It gives what level of proficiency is expected of the user, some general constraints while making the software and some assumptions and dependencies that are assumed.

Section 3 gives specific requirements which the software is expected to deliver. Functional requirements are given by the use case.

Section 4 describes the various interfaces and possible scenarios.

# 2. Overall Description

## 2.1 Product Perspective

 Online inventory management system uses a variety of data to keep track of the goods as they move through the process, including lot numbers, serial numbers, cost of goods, quantity of goods and the dates when they move through the process.

#### 2.2 Product Functions

- <u>User</u>: Administrator
- <u>Functions</u>: The Administrator is the super user and has complete control over all the activities that can be performed. The application notifies the administrator of all shop creation requests, and the administrator can then approve or reject them. The administrator also manages the list of available product categories.
- <u>User</u>: Employees
- <u>Functions</u>: Purchase department under a Purchase manager to overlook purchasing activities if warehousing needs arise.
- <u>Functions</u>: Sales department under a Sales manager who will look after the sale of products and services, the most important activity.
- <u>Functions</u>: Accounts department under an Accounts manager to look after the accounting activities of the enterprise

#### 2.3Constraints

- There is no maintainability of back up so availability will get affected.
- Limited to HTTP/HTTPS.
- No multilingual support

## 2.5 Operating Environment

The OIMS is a website that shall operate in all famous browsers, for a model we are taking Microsoft Internet Explorer versions 7.0, 8.0 and 9.0 .And Google Chrome

# 3. Specific Requirements

## 3.1 Functional Requirements

## 1. Administrator:

- **Database Management:** Control the database and keep track of all records of employee details.
- **View all details:** View the details of all employees and control the whole site.
- Advertising the Site: Responsible for making advertisements for the site.

## 2. Shop Owner:

- Taking Permission from Administrator: Vendors must take permission from the Administrator for selling their products under the site. Administrator will test product's quality according to its market price to permit vendor for selling purpose.
- Consulting with Administrator: Can consult with the Administrator regarding product's quality and advertisements.

• Advertising Vendor's Own Products: Responsible for making advertisements of his products, but the site will not be responsible for any kind of advertisements about products.

## 3.2Non-functional Requirements

## **3.2.1 Performance Requirements**

- •The system shall accommodate high number of items and users detail without any fault.
- Responses to view information shall take no longer than 5 seconds to appear on the screen.

## 3.2.2 Safety Requirements

•System use shall not cause any harm to human users.

## 3.2.3 Security Requirements

- System will use secured database
- Normal users can just read information but they cannot edit or modify anything except their personal and some other information.
- System will have different types of users and every user has access constraints.

## 3.2.4 Error handling

OIMS shall handle expected and non expected errors in ways that prevent loss in information and long downtime period.

## 4. Interfaces Possible Scenarios

## 4.1 Shop Owner Interface:

## 4.1.1 Login:

This interface will consist of two compulsory fields namely, "User Name" and "Password". There will also be options for "New User's Registration" which will redirect to "Registration" If the password entered is correct the Main User Interface opens up else an error message is displayed.

## 4.1.2 Registration Interface

The user will enter his personal details like Name, User Name, Password, Date Of Birth, Address, Registration Type, etc.

Users will be warned about any mistakes on data format or any other constrains by validation notes and error messages. When the button "save" button is clicked, the server will check if the username or email is already taken and alert the user.

If everything is entered correctly and saved a new user will be created.

## 4.1.3 Personal Data Editing

If any member wants to change his personal information he can enter his profile by clicking on his name at the top right of the main page and he will be directed to the personal details editing page.

#### 4.1.4. Search

The customer can enter the type of item he is looking for and the specifications he is interested in them he can click on "Search". User can also use advanced search for more options. For eg: the user can filter the results basing on various aspects such as size, color, material, brand etc and also they can sort the product display according to their wish (relevance, price in ascending or descending, popularity)

# 4.2 Interface for Shop owner

The shop owner will have a different login id using which he can access his account that contains a control panel that allows him to contact the administrator, set up/ maintain shop etc.

This control panel will allow the shop owner to do the following things:

- Request the admin for a permission to set up a shop.
- Set up the catalog for his shop and upload it so that the admin can make it visible in the website.
- Add/Remove items. The corresponding changes will be done in the database by the Admin.
- Create advertisements for his products.
- Generate a sales report.
- Discontinue the shop.

## 4.3 Interface for Administrator

The administrator will have a different login id using which he can access his account that contains a control panel that allows him to contact each and every aspect of the system.

This control panel will allow the administrator to do the following things:

- Access and view the customer database.
- Access and view the database of vendors, go through their requests for shop creation and reply them back with acceptance /dismissal of their request.
- Access and view the employee database and manage them.
- Make the catalog (that is visible to the customers), taking the design of corresponding shop owners in consideration.
- Grant/ Reject purchase permit to purchase manager.
- Manage employee salary.
- Contact employees.