**Software Requirements Specification**

**for**

**DSA Hardware Store**

**Version 0.9**

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**Revision History**

| **Name** | **Date** | **Reason For Changes** | **Version** |
| --- | --- | --- | --- |
| **Jeffrey Manobanda** | **10/05/2023** | **IEEE REQUIREMENTS** | **Version 0.9** |
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**Definition**

Software Requirements Specification for DSA Hardware Store

**Abstract**

The project is a comprehensive software solution that has been designed to meet the specific needs of the hardware store. In addition to automating and optimizing inventory and sales management processes, the software also includes features such as a user-friendly and intuitive interface for easy navigation, the ability for customers to browse and purchase products through the application, and the ability to view special promotions and offers. Additionally, the software is designed to handle a high volume of simultaneous users without affecting its performance, ensuring that the application remains fast and responsive even during peak usage periods. The application is also designed to be secure, protecting users' personal information and complying with all applicable laws and regulations. The software team is committed to providing ongoing technical support and updates to ensure that the application continues to meet the needs of the hardware company and its customers.

o buy products at the hardware store. It will allow them to view the inventory and product catalog, as well as make purchases.

**2.2 Product functions**

* Inventory: Customers will be able to see which products are available at the hardware store.
* Product catalog: Customers will be able to browse the product catalog and see details about each product. Promotions and offers: Customers will be able to view special promotions and offers in the application.
* Shopping cart: Customers will be able to add products to the shopping cart and make a purchase.
* Customer service: Customers will be able to contact customer service through the application.

1. **Introduction**

**1.1 Purpose**

The purpose of this document is to define the requirements for a hardware store application that allows customers to view the inventory and product catalog, as well as register with their ID and make purchases.

**1.2 Scope of the system**

The application will include the following features:

* Inventory: Customers will be able to see which products are available at the hardware store.
* Product catalog: Customers will be able to browse the product catalog and see details about each product.
* Promotions and offers: Customers will be able to view special promotions and offers in the application.
* Shopping cart: Customers will be able to add products to the shopping cart and make a purchase.
* Customer service: Customers will be able to contact customer service through the application.

**1.3 Definitions**

Customer: Person who uses the application to view the inventory and product catalog, and make purchases.

ID: Identification document used by customers to register in the application.

**1.4 References**

IEEE Std. 830-1998: IEEE Recommended Practice for Software Requirements Specifications.

**2 Overview**

**2.1 Product perspective**

The application will be a useful tool for customers who wish t

**2.3 User characteristics**

The users of the application will mainly be customers who wish to buy products at the hardware store.

**2.4 Constraints**

The application must comply with all applicable laws and regulations.

**2.5 Assumptions and dependencies**

It is assumed that customers will have access to a mobile device or computer with an internet connection to use the application.

**3 Specific requirements**

**3.1 External interfaces**

The application must have a friendly and intuitive user interface. To achieve this, it's important to design a simple and clean layout that's easy to navigate and organize information in a clear and coherent manner. The use of iconography, consistent and attractive color palettes, clear and easy to read font sizes, and feedback to the user can all help make the interface more user-friendly.

**3.2 Functions**

3.2.1 Inventory Customers will have access to inventory information for products available at the hardware store. This function will enable customers to view the availability of products in real-time and make informed decisions when placing orders. This improves the overall customer experience and increases sales for the hardware store.

**3.2.2 Product catalog**

The application will provide customers with access to a product catalog, allowing them to browse and view details about each product. This function will enable customers to make informed decisions about their purchases by providing them with comprehensive information on each product, such as product descriptions, prices, and availability. Additionally, the catalog will be easy to navigate and search, making it easy for customers to find the products they need.

**3.2.3 Promotions and offers**

The application will provide customers with access to special promotions and offers, giving them an incentive to make purchases from the hardware store. Customers will be able to view these promotions within the application, making it easy to keep up to date with the latest deals. By featuring promotions and offers, the application can encourage customers to make purchases and increase sales for the hardware store. This function will help the hardware store stay competitive and enhance the overall customer experience.

**3.2.4 Shopping cart**

The application will allow customers to add products to their shopping cart and make purchases. This function will enable customers to easily select the products they need and complete their transactions within the application. The shopping cart will provide customers with a clear and easy-to-use interface that displays the products they have selected, along with the quantity and price.

**3.2.5 Customer service**

The application will provide customers with an easy way to contact customer service. Customers will be able to access a customer service feature within the application, which will allow them to communicate with a representative via chat, email, or phone. This feature will help customers quickly resolve any issues or concerns they may have, improving their overall experience with the hardware store.

**3.3 Performance requirements**

The application must be designed to handle a high volume of simultaneous users without affecting its performance. To achieve this, the application must be optimized for scalability, ensuring that it can accommodate an increasing number of users over time. This can be achieved through the use of load balancing, caching, and database optimization techniques.

**3.4 Design constraints**

The application must comply with all relevant laws and regulations to ensure that it operates legally and ethically. This includes complying with regulations related to data privacy, security, and accessibility. To achieve this, the application must be designed with privacy and security in mind, with appropriate measures in place to protect customer data and ensure that it is not shared or used without consent.

**3.5 System attributes**

The application must be designed with security in mind to protect users' personal information and ensure that it is not compromised or accessed by unauthorized parties. This can be achieved through the use of encryption and other security measures to protect data in transit and at rest.

Information rescued from:

[Especificación de Requisitos Software según el estándar IEEE 830 - FdIwiki ELP (ucm.es)](https://wikis.fdi.ucm.es/ELP/Especificaci%C3%B3n_de_Requisitos_Software_seg%C3%BAn_el_est%C3%A1ndar_IEEE_830)

[Especificación de requisitos de software - Wikipedia, la enciclopedia lib](https://es.wikipedia.org/wiki/Especificaci%C3%B3n_de_requisitos_de_software)

