

# UNIVERSIDAD DE LAS FUERZAS ARMADAS ESPE



## **Theme:**

Specification of Requirements according to the IEEE 830 standard  
Clothing store “ Bethsabé Boutique”.

**G4 Software Juniors.**

## **Members:**

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## **1. INTRODUCTION**

### **\*Details:**

The clothing store " Bethsabé Boutique" is a family business that is located in

### **\*Problem:**

After the interview and based on the answers, it can be said that the business has a problem in the financial administration, merchandise and sales control and statistical sales reports.

### **1.1. Purpose**

- To optimize the human and technological resources of the clothing store .
- Develop a customer-friendly tool, knowing that customers and store staff have basic notions of technological tools.
- That the system manages to cover all the information and that the errors are minimal

### **1.2. Scope**

With the implementation of the program, it is expected to provide a better experience in commercial movements of both clients and staff. It is also expected to expedite the processes of registration of purchases, cash inflows and outflows, customer registration and their data for future purchases.

### **1.3. Definitions, Acronyms, and Abbreviations**

In the program, the common terms used to define each class are:

- Associating images with the name of the garments.
- Show product availability to customers.
- Time and date registration of incoming and outgoing goods.
- Control the total cash inflow and outflow per day, providing daily, weekly and monthly reports.
- Apparel Cost Management.
- Application of Taxes to Clothing.

## **1.4 References**

The following documents have been consulted for the preparation of the document:

- IEEE Recommended Practice for Software Requirements Specification.  
ANSI/IEEE std. 830, 1998

## **1.5 Document Overview**

Through the interview, the client made us aware of the administrative and inventory deficiencies in his general management method of his clothing store, for which he asked us to implement an application that allows him to better manage multiple areas of the store. Through the interpreted requirements of the interview we can know the scope that the project must have and the functionality that it must have.

## **2. OVERALL DESCRIPTION**

### **2.1. Product Perspective**

The administration system of the clothing store will be carried out through a database, which will record the entry of multiple data, such as the prices of the products, their availability, their classification by type of garment and will also be considered an accounting classification to manage cash flow.

The interaction with customers and store staff will be done through a graphical interface.

### **2.2. Product Functions**

The main functions of our program are:

Management of a database in which commercial information will be stored such as prices, final purchase prices, product availability, date of purchase and customer information such as the customer's name (if registered and if not, be able to register it), ID, address and telephone number.

Register entry of new merchandise and view old stock.

The system will have for such as input-output, sales, money flow and inventories

***Input-output:***

Related to the registration of new merchandise (Quantity, type of garments, entry price, sale price).

***Sales:***

Related to the quantity of garments sold, their price and their availability.

***Money Flow:***

Related to the entry and exit register of cash for sale purposes.

***Inventories:***

It will reflect the amount of total commercial stock of garments in the store, detailing the classification of clothing, its availability and its sale price.

**2.3. User Characteristics**

It is recommended that store staff and the manager have basic computer skills and are familiar with the clothing sales process.

**2.4. Constraint**

The restrictions that will be given (for now) are:

- Once the merchandise is entered, it cannot be added again because a duplicate would be generated
- The sales prices to the customer cannot be less than the purchase price +35% of the purchase price to avoid losses.
- The entry record will be given according to the order of arrival and the date of entry cannot be modified.
- The program will be developed in the Java language.
- For the query of information in the records, the query language SQL (DataBase) will be used

**2.5. Assumptions and Dependencies**

The correct wording of requirements given by the administrator is assumed.

It is assumed that at least the business will have a computer with Windows 10 Operating System or higher.

### 3. SPECIFIC REQUIREMENTS

#### 3.1. External Interfaces

##### ***User Interface:***

The interface will be easy to use, have a friendly and intuitive appearance, it must have menus, it must separate options by categories, with a pleasant interface and with visible lettering. It will use the colors of the store.

##### ***Hardware interface:***

The interface will focus solely on computers.

##### ***Software interface:***

The software interface will be provided by the operating system used by the computers in the store, in this case Windows 7 64bits(or later), meaning that the application will be used within the windowing environment provided by this operating system.

#### 3.2. Functional Requirements

***Product Registration:*** The system will allow registering products in the database through a simple interface, assigning them a name, category, quantity, and a price.

***Product Code:*** The system will assign a unique numerical code to each registered product.

***Product Deletion:*** The system will allow a product to be removed from the database Entering the product code or searching for it through an organized interface.

***Product Editing:*** The system will allow editing the name, category, quantity, price, and code of a product as long as the code is numerical and unique.

***Sales System:*** The system will allow registering each sale and communicate with the database to manage the change in inventory.

##### ***Customer Registration:***

With the recorded purchase data, the system will communicate with the database to handle a record of customers with their name, quantity of purchases, and name of the acquired product(s).

The system will allow manual registration of customers to the database.

***Customer Deletion:*** The system will allow deleting customers from the database.

***Customer Editing:*** The system will allow editing the stored information of a customer, including their name, quantity of purchases, and name of the acquired product(s).

***Inventory Report Generation:*** The system will allow generating a report at any time of all the products in the store. This report should show the category, code, price, quantity, and name of each of them and allow downloading the report in xlsx format.

***Customer Report Generation:*** The system will allow generating a report at any time of all the registered customers in the database. This report should show their name, quantity of purchases, and name of the acquired product(s) and allow downloading the report in xlsx format.

### **3.3. Performance Requirements**

The system must allow a minimum of 1 registration per second for both products and customers, meaning a total of at least 2 registrations per second.

### **3.4. Design Constraints**

The system must run under the following minimum requirements:

SO: Windows 10, 8, 7

Procesador: Dual core 1Ghz+

Memoria: 1 GB de RAM

Gráficos: capable GPU with 256 MB VRAM

Almacenamiento: 3 Gb como máximo

### **3.5. Attributes (e.g., Usability, Reliability, Maintainability)**

***Usability:*** The system must present a friendly, structured, | and intuitive interface for all personnel.

**Reliability:** The system must not register sales or delete sales incorrectly.

### **3.6. Other Requirements**

Possible functional requirements to be implemented in the future could be:

- \* Database with contacts for sales by call
- \* Automatic system of application of discounts for merchandise out of season
- \* Interface customization with inclusion of social networks in strategic parts.
- \* Management of evaluations and customer opinions.

**VERY ADVANCED**

- \* System for online payments through platforms with Virtual Banking.
- \* Merchandise suggestion according to latest searches.
- \* Guarantee application system with their respective legal support.