Specification of Requirements according to the standard from IEEE 830

IEEE Std. 830-1998

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Resume

This document shows us the process and the requirements that a program or application needs to be developed, tested, and distributed to a specific company or public.

The IEEE 830 standard is not free from defects or prejudices, and for this reason it has been justly criticized by multiple authors and from multiple points of view, even questioning whether it is really a standard in the usual sense that the term has in other engineering. This document does not intend to pronounce itself in favor or against one or the other: it only reproduces, for fundamentally educational purposes, how a Requirements Document would be organized according to the IEEE 830 standard.

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1. Introduction

1.1 Purpose

The appliance store project is aimed at companies that are responsible for selling all types of appliances, the program is in charge of managing all types of data that enter, leave and are in the company.

1.2 Scope of the system

Appliances Store
The system has to work like an appliance store, it has to be a complete system that stores the products to be sold in an inventory with all its attributes and prices, it must also have a sales system that stores the price of the appliances. and the profit from each sale.
The system will show all the appliances that are sold and the ones that you want to buy can be saved and a total purchase value will be generated.
The goal is for the system to function properly as a store and meet all the requirements that we have put into the main design of the home appliance store.

1.3 Definitions, Acronyms and Abbreviations

Perspective: A way of representing one or more objects on a flat surface, which gives an idea of the position, volume and situation they occupy in space with respect to the observer's eye.

Attributes: Attributes are the individual characteristics that differentiate one object from another and determine its appearance, state, or other things.

Interface: Functional connection between two systems, programs, devices or components of any type, which provides communication at different levels, allowing the exchange of information.

Reliability: Probability that a system, apparatus or device fulfills a certain function under certain conditions during a certain time.

Maintainability: the ability of an item, under certain conditions of use, to retain, or be restored to, a state in which it can perform the required function, when maintenance is performed under certain conditions and using established procedures and resources.

Portability: It is defined as the characteristic that software has to run on different platforms, that is, portability refers exclusively to the property that software has that allows it to be run on different platforms and / or operating systems.
Security: Absence of danger or risk.

1.4 References.

(Documents referenced in the ERS)

1.5 Document Overview

Carry out a program that meets the needs that the client has previously specified, in the time established for the completion of the project, said software will be focused on the problem of registering the purchases and sales made by the commercial house.
Keeping an inventory which will be updated by the workers of the establishment by means of a password, and the manager will have the task of verifying if the adequate processes for the acquisition or dispatch of merchandise are complied with.

2. General Description

2.1 Product Perspective

The appliance store system is focused on improving the warehouse management of appliance stores and providing the user with quick access to products by viewing them on the screen and being able to know their attributes and value.

2.2 Product features

The main function of our system is to create an appliance store that mainly stores the different objects to be sold and each of their attributes in the appliance store, as can be seen in figure 1.

Each object will have its own attributes and its own serial number to be identified and each of them will generate its profit, finally the system will be controlled by a manager who will receive all the store data. electronics.

2.3 User Characteristics

The users to whom the following project is directed is given by a group of employees who work in an electrical appliance store, they will be in charge of knowing the operation and being able to make good use of it.
Workers must have the following characteristics:

- Have an age which must be between 18 and 69 years old.
- Must have completed high school studies.
- You do not need to have a college degree.
- You need to have experience selling products.
- Know how to capture the customer's attention.
- Know in detail the products to be sold.
- Possess communication skills.
- Availability of schedules.

2.4 Restrictions

- Policies of the company or organization for whom the program is directed.
- Product hardware must not be faulty.
- Design must be different than other applications.
- The control must be carried out according to what is requested.
- The programming language must be only one.
- The developer team must be very well communicated.
- The application must be tested to be approved.
- You must have security for possible cyberattacks.

2.5 Assumptions and Dependencies

The system will only be installed on the company's computers, which will have the Windows operating system that to date is the most up-to-date. The program will automatically save each change that the user registers in it once the password has been entered.

In case of forgetting the password, the program will ask the user for his company identification and will ask a security question, being previously established by himself.

The manager was the only one with the ability to remove personal data or information from each worker.

2.6 Future Requirements

- Improved interface to make it more user-friendly.
- Implementation of new sections for easy user access.
- Visual improvement.
- Correction of errors that persist in the interface.
- Implementation of a customer help system.
- Implementation of an online shopping system.

3. Specific Requirements

3.1 External interfaces

The requirements that affect the user interface are not many since the system is very basic and can be run with any hardware and does not require any external software.

3.2 Functions

The system should show a screen that contains the store data such as:

- Name
- Direction
- Telephone numbers
- Social media
- Logo

The system must allow the entry of the data of the user who is going to use the program, such as:

- Name
- ID number
- Id of the worker

The system should keep a record of all clients such as:

- Name
- ID number
- Phone number
- Address of your home
- Email

The system must allow the registration of all products that are in stock.

The system must allow adding the characteristics of each of the registered products such as:

- Weight
- Colour
- Size
- Price
- Functions

The system must allow the sale of products.

The system must allow generating an invoice which will contain:

- •Client data
- •Date
- • Name of the articles
- • Quantity of each item
- •Unit price
- • VAT
- •Final price
- • Buyer's signature
- • Signature of the seller
- •Store's name
- • Store ruc number
- • Invoice number
- • SRI authorization number
- • Name of the printer
- •Observations

3.3 Performance Requirements

It is estimated that the program can work for all the people who use it, limited to a single sector with a total of more than a thousand people, for that reason the program must have a system that supports independent terminals for users who use the program who can carry out both transactions and purchases smoothly and without any errors.

For that reason the database must store their data and ask the user if they want to eliminate them, in that way they can have more security when using our program, being of easy access, availability and data management.

3.4 Design constraints

It must be taken into account that the computers have enough memory for the installation of the program

Like all users, they have adequate training for the proper handling of the system.

3.5 System Attributes

• Reliability.

- • Secure system for access to authorized users.
- • System in charge of making your agreement.
- • Efficient and educational system.
- • System used to improve the organization of a company.
- • System capable of satisfying the user's need.
- • System capable of operating as agreed.
- • System capable of deleting, adding and recovering data.

• Maintainability.

- • System capable of being modified effectively and efficiently.

- System capable of being modified without introducing faults or defects.
- System capable of establishing tests to verify compliance with said criteria.
- System used to have minimal impacts when changing components.
- System used to be used in one or more systems.

• Portability.

- System capable of efficiently adapting to different hardware and software environments.
- Easy installation and / or uninstallation system.
- System capable of being used instead of another product.

•Safety.

- System capable of protecting data and unauthorized information, whether accidental or deliberate.
- System capable of preventing unauthorized access or modifications.
- System capable of providing information on modifications and accesses.
- System capable of proving the identity of a subject or a resource.

4. Appendices

* Images of entry and exit of the program.

* Costs if any paid app was used.

* Language in which it was programmed.