

**DEPARTAMENTO DE CIENCIAS DE LA
COMPUTACIÓN**



PROGRAMACION ORIENTADA A OBJETOS

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Index

1. Introduction	3
1.1. Purpose.	3
1.2. Scope of the System.	3
1.3. Definitions, Acronyms and Abbreviations.	4
1.4. References.	4
1.5. Document Overview.	4
 2. General Description	 5
2.1. Product Perspective.	5
2.2. Product Features.	5
2.3. User Characteristics.	6
2.4. Restrictions.	6
2.5. Assumptions and Dependencies.	6
2.6. Future Requirements	6
 3. Specific Requirements	 7
3.1. External Interfaces	9
3.2. Functions	9
3.3. Performance Requirements.	10
3.4. Design Restrictions.	11
3.5. System Attributes.	12
3.6. Other requirements	12

1. INTRODUCTION

1. Introduction

This document is a Software Requirements Specification (ERS) for the System of a store in charge of selling products online. This specification has been structured based on the guidelines given by the IEEE Recommended Practice for Software Requirement Specifications ANSI / IEEE 830, 1998.

1.1. Purpose

The purpose of this document is to define functional and non-functional specifications for the development of an online store system that will speed up purchasing processes and waiting time. This will be used by people in general.

1.2. Scope of the System

The SMARTBUY project seeks to develop and implement a web application that serves as a quick sale for customers in order to strengthen the store area with more modern, precise and effective technological processes.

- On the other hand, with the development of this SMARTBUY web application, it is expected:
- Identify the weaknesses and strengths of the online store to improve any failure and generate a quality service.
- Provide accurate diagnoses based on the evaluation criteria established in the research project.
- Motivate the development, growth and standardization of the online store in order to expand in the market.

1.3. Definitions, Acronyms and Abbreviations

SMARTBUY: Smart buy

IVA: Value Added Tax

ID: Identificación

1.4. References

Standard IEEE 830 – 1998, IEEE.

1.5. Document Overview

The main content of this document consists of the description of the software to be built and its requirements, as well as the design of each of its facets, such as architecture, data, interfaces, etc. Finally, the detail of the implementation, which includes the source code, testing and handling of errors and scenarios.

2. GENERAL DESCRIPTION

2. General Description

The project is aimed at keeping a record of the products of a local as well as their billing and thus a more orderly control can be carried out. The ID of the products will be entered into a database which will carry the number of available products, their price and if it has an additional price such as VAT, it will be in charge of calculating it. All the products in the store will be stored in the application, so at the end they will indicate all the money that must be in the box.

2.1. Product Perspective

It is expected that the application will be comfortable and very useful for the registration of the products of a store and that it can carry the income and expenses of a store efficiently and without errors.

2.2. Product Features

You will occupy a menu to be able to guide yourself through the program, you will keep the accounts of the store for each product that enters and leaves it, you will keep a record of the products and thus you will be able to see which ones are about to run out and which ones still have to the sale. The price of the products can be calculated per unit and per package. It will be taken into account which products are the best sellers and which ones and thus create sales strategies.

2 GENERAL DESCRIPTION

2.3. User Characteristics

The application is aimed at the owners of a store and their workers.

2.4. Restrictions

- Compatibility with other systems
- Hardware limitations
- Versions for mobile phones

2.5. Assumptions and Dependencies

The application is aimed at small stores, so if it were to be used in companies and supermarkets, it would not cover all the demands they present. The application must be constantly updated for the user's comforts. The store owner must have a computer

2.6. Future Requirements

New products, a system update, tax increases or decreases, a more interactive and aesthetic interface.

3. SPECIFIC REQUIREMENTS

3. Specific Requirements

Identification of the requirement:	R1
Requirement Name:	Data register
Characteristics:	Users must register with their data in the system to access any part of the system.
Description of the requirement:	By registering, the user will be able to access the store's interface.
Requirement priority: High	

Identification of the requirement:	R2
Requirement Name:	Store interface
Characteristics:	The store must be efficient and effective and fast
Description of the requirement:	The interface of the store must be simple, fast and comfortable for the user
Requirement priority: High	

Identification of the requirement:	R3
Requirement Name:	Facturation system
Characteristics:	The system is efficient and useful for data processing

Description of the requirement:	The system will be fast and fluid so that the user can make their payments quickly and without impediments (implementation of a good billing system)
Requirement priority: High	

3.1. External Interfaces

The user interface will consist of a set of windows with buttons, lists and text fields. This must be built specifically for the proposed system and will be viewed from an internet browser.

3.2. Functions

- To Buy
- Acquire

3.3. Performance Requirements

Identification of the requirement:	RE1
Requirement Name:	Performance
Characteristics:	The system will guarantee users a performance regarding the data stored in the system, offering reliability to it.
Description of the requirement:	Guarantee the performance of the computer system to the different users. In this sense, the information stored or records made may be consulted and updated permanently and simultaneously, without affecting the response time.
Requirement priority: High	

Identification of the requirement:	RE2
Requirement Name:	Information security
Characteristics:	The system will guarantee users a security regarding the information that is entered in the system.
Description of the requirement:	Guarantee the security of the system with respect to the information and data that are handled such as documents, files and passwords.

Requirement priority: High
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Identification of the requirement:	RE3
Requirement Name:	System reliability.
Characteristics:	The system will have to be in operation 24 hours a day, 7 days a week. Since it is a web page designed for data loading and communication between users.
Description of the requirement:	The availability of the system must be continuous with a service level for users of 7 days per 24 hours, guaranteeing an adequate scheme that allows the possible failure of any of its components, having a contingency, generating alarms.
Requirement priority: High	

3.4. Design Constraints

- Interface to be used with the internet.
- Languages and technologies in use: HTML, JAVA.
- The servers must be able to handle different operations simultaneously.
- The system must have a simple design and implementation, independent of the platform or the programming language.

3.5. System Attributes

- Easy
- Free
- Trustworthy
- Friendly
- Attractive
- Efficient

3.6. Otros Requisitos

- **Create inventories:** to keep track of product entry exit, demand and supply.
- **Create discounts:** those products with low demand will be discounted to make it more attractive to the consumer.
- **Measure user satisfaction:** measure customer satisfaction.