



**The Project “FAMSE”
Software specification requirements**

UNIVERSIDAD DE LAS FUERZAS ARMADAS

ESPE



“OOP”

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Software specification requirements

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Instructions for the use of this format.

It is based on and conforms to IEEE Std 830-1998.

Document Tab

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1. Introduction

The purpose of this document is to describe the software requirements for the product control system of the nut store. This document is intended for the software development team and the customer.

1.1 Purpose.

We propose an integrated inventory management system designed specifically for nut store owners, allowing them to streamline their operations and effectively control their products, prices, quantity, and stock. With this solution, the nut store owner will have complete visibility and control of their inventory, resulting in improved efficiency, reduced costs, and increased customer satisfaction.

1.2 Reach

Future “NPU” System.

We are pleased to present an advanced product control system designed specifically to empower nut store owners with enhanced control over their inventory, sales, costs, discounts, daily product quantities sold, product search capabilities, and price per pound management. This comprehensive solution offers a range of features to streamline operations and optimize profitability.

1.3 Definitions, Acronyms and Abbreviations

SW: Software

NPU: Nutty Pick Up

IEEE: Institute of Electrical and Electronics Engineers

O: The person, or persons, who pay for the product and usually (but not necessarily) decide the requirements. In the context of this recommended practice the customer and the supplier may be members of the same organization.



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1.4 Staff involved.

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1.5 Reference

Reference	Title	Route	Date	Author

1.6 Abstract.

Until this part we describe the purpose of the project, what we want to achieve with the project, giving a solution to the problem that the client presents us and his objectives with the future NPU



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(Nutty Pick Up) system, which will allow efficiently manage their products, prices, quantity, and stock in a single program..

General Description

1.7 System Perspective

This advanced product control system, nut store owners can gain a comprehensive and implicit control system for their products, sales, costs, discounts, daily quantities sold, product search capabilities, and price per pound management. This solution empowers store owners to make data-driven decisions, streamline operations, and maximize profitability, ultimately leading to greater success in the nut retail industry.

1.8 Product Functionality

The product reservation system will allow customers to:

- Product Management.
- Inventory Tracking.
- Sales Management.
- Integration with Payment Systems.
- Reporting and Analytics

Store personnel will be able to:

- View sales status.
- View the stock of each product.
- View the price of each product.

1.9 User Characteristics

Type of User	Employee
Training	Unknown
Abilities	Unknown
Activities	Controller

Type of User	Administrator
Training	Business
Abilities	Businessman
Activities	Seller



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1.10 Restrictions

The program must ensure the security of stored data, such as inventory information, sales, and customer data. Security measures must be implemented to protect the confidentiality and integrity of the information stored in the system.

The program must have an intuitive and easy-to-use user interface for both store owners and employees. It should be accessible even to those with little technical experience, which will facilitate its adoption and efficient use.

1.11 Assumptions and Dependence

Factors that could affect the requirements of the nut reservation and sales system are changes in product availability, changes in government regulations related to the sale of food.

1.12 Foreseeable Evolution of the System

Implementing advanced data analytics capabilities in the system could provide valuable information on sales trends, customer behavior and market preferences. This would enable store owners to make more informed decisions in terms of pricing, promotions and marketing strategies.

Specific Requirements

1.13 Functional Requirements

The system must allow customers to create and access an online account.

Requirement Number	R1					
Name of Requirement	Product management					
Type		Requirement			Restriction	
Requirement Priority		High/Essential			Medium/Desired	
					Low/Optional	

Requirement Number	R2					
Name of Requirement	Price control					
Type		Requirement			Restriction	
Requirement Priority		High/Essential			Medium/Desired	
					Low/Optional	



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Requirement Number	R3					
Name of Requirement	Stock management					
Type		Requirement			Restriction	
Requirement Priority		High/Essential		Medium/Desired		Low/Optional

Requirement Number	R4					
Name of Requirement	Sales processing					
Type		Requirement			Restriction	
Requirement Priority		High/Essential		Medium/Desired		Low/Optional

Requirement Number	R5					
Name of Requirement	Report generator					
Type		Requirement			Restriction	
Requirement Priority		High/Essential		Medium/Desired		Low/Optional

Requirement Number	R6					
Name of Requirement	Product reservation					
Type		Requirement			Restriction	
Requirement Priority		High/Essential		Medium/Desired		Low/Optional



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1.14 Non-Functional Requirements.

1.14.1 Usability.

- Intuitive, user-friendly interface to ensure minimal learning curve and ease of navigation and use of the system.
- Fast system response to minimize loading times and ensure a smooth user experience.
- Adaptive and responsive design that adjusts to different devices and screen resolutions.

1.14.2 Performance.

- Fast response times to ensure agile interaction and no delays.
- Ability to handle a high volume of simultaneous transactions without degrading performance.
- Efficient data and query processing to avoid unnecessary delays.

1.14.3 Security.

- Protection of sensitive data, such as personal customer information and financial data, through encryption and appropriate security measures.
- Access control to ensure that only authorized users can access and perform actions on the system.
- Auditing and logging of activities to detect and prevent suspicious or fraudulent activities.

1.14.4 Maintainability.

- Clean, modular code that facilitates future maintenance and bug fixes.
- Complete and up-to-date documentation describing the system structure, functionalities, and configurations.
- Ease of performing software updates and upgrades without interrupting the normal operation of the system.

1.14.5 Portability.

- The system must be compatible with various mobile devices and browsers.



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Apprentices

- **Menus:** They will include the complete menus of the restaurant, with detailed descriptions of each dish, ingredients, prices and special options. This will help to understand the requirements related to managing and displaying the menus in the software.
- **User interface design:** This includes sketches or drafts of the proposed user interface for the software, showing how the various screens will look and how the elements will be arranged. This helps to visualize how the software will look and work.
- **Report Templates:** If the software generates reports, you can add sample report templates that are expected to be generated, this will help establish your reporting and data requirements.