**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Software Requirements Specification**

**Project: Craft Market**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Document Sheet**

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Revision** | **Autor** | **Verified** |
| 22/05/2025 |  | Chicaiza Michael  Fuentes Jorge  Jácome Micaela  Maisincho Pedro |  |

**Content**

[**1 INTRODUCTION 4**](#_4hmasmttz95r)

[1.1 Purpose 4](#_rp1a3n17kfte)

[1.2 Scope 4](#_sh0m0c27vjuj)

[1.3 Involved Staff 4](#_q2wrtrr50fwt)

[1.4 Definitions, Acronyms and Abbreviations 5](#_ayv7wzl0ofzq)

[1.5 References 5](#_483md62x5pmz)

[1.6 Summary 6](#_xrf39tve0ykz)

[**2 OVERVIEW 6**](#_ymair8fp5kup)

[**2.1 Product Perspective 6**](#_ks6liq9mpb7d)

[2.2 Product Functionality 6](#_52bu1y8x4b46)

[2.3 User Characteristics 7](#_uvud87yy1i1v)

[2.4 Constraints 7](#_yfqk70fys3mw)

[2.5 Assumptions and Dependencies 7](#_wdgo3g4wnrf9)

[**3 SPECIFIC REQUIREMENTS 7**](#_ck9mkawj8hsn)

[3.1 Functional Requirements 7](#_ioij8yk9jcp)

[3.2 Non-functional requirements 8](#_oavg9pxissvl)

# 

# 1 INTRODUCTION

This document presents the Software Requirements Specification (SRS) for the Craft Market project, a console-based application developed in Java. The system is designed to facilitate basic management of an artisan market, allowing access through predefined user accounts, ensuring secure and controlled interaction with the application.

The project's main functionalities include registering new products, modifying product names, updating stock quantities, and managing artisan attendance. This application provides a simple yet effective tool for facilitating inventory control and participant tracking at small artisan markets.

## 1.1 Purpose

This project aims to streamline artisans' management of their products, including their inventory, product names, and prices. It also seeks to assist with attendance records, as this information is used to determine a penalty in the distribution of funds at the end of the month.

## 1.2 Scope

The Craft Market system is a Java console application that manages craft markets through predefined accounts, allowing for product registration/modification, stock control, and artisan attendance tracking. It includes local data persistence and simple reporting; however, it excludes graphical interfaces, payment gateways, public user registration, and external integrations. Its scope is limited to automating basic inventory and participation operations for small markets.

## 1.3 Involved Staff

|  |  |
| --- | --- |
| **Name:** | Jahir Sivinta |
| **Rol:** | Developer |
| **Professional Category:** | Student |
| **Responsibility:** | Attendance |
| **Contact:** | kjsivinta@espe.edu.ec |

|  |  |
| --- | --- |
| **Name:** | Rosas Mario |
| **Rol:** | Developer |
| **Professional Category:** | Student |
| **Responsibility:** | Inventory |
| **Contact:** | @espe.edu.ec |

|  |  |
| --- | --- |
| **Name:** | Julio Sanchez |
| **Rol:** | Developer |
| **Professional Category:** | Student |
| **Responsibility:** | Edit Inventoy |
| **Contact:** | mvjacome4@espe.edu.ec |

## 1.4 Definitions, Acronyms and Abbreviations

|  |  |
| --- | --- |
| **Name** | **Description** |
| ERS | Software Requirements Specification |

## 1.5 References

|  |  |
| --- | --- |
| **Document** | **Reference** |
| Standard IEEE 830 | IEEE |

## 1.6 Summary

The first section of this document presents an introduction to the project, including the scope and information about the team's developers.

The second section of the document will present an overview of the system and explain its main functions.

The third section will present the requirements the system must meet.

# 2 OVERVIEW

# 2.1 Product Perspective

The developed system is a console based application in Java designed to facilitate the operational management of an artisan market, in which each artisan is responsible for their own products, sales, and inventory. This product offers specific functionalities for attendance control, sales registration, inventory management, and product administration.

## 2.2 Product Functionality

Diagrama

El contenido generado por IA puede ser incorrecto.

## 2.3 User Characteristics

|  |  |
| --- | --- |
| **User type:** | Emplyed |
| **Category:** | Client |
| **Activities:** | Attendance record, product registration and inventory modification |

## 2.4 Constraints

* Console-only platform.
* Programming language: Java.
* Predefined accounts.
* Does not process data in real time.
* Basic hardware resources.
* Basic authentication.

## 2.5 Assumptions and Dependencies

* It is assumed that the computers where the program will be executed have the hardware and software necessary for its proper operation.
* It is assumed that the users (artisans) will follow the agreed-upon, predefined procedure.
* The program depends on the use of an IDE capable of running Java.

# 3 SPECIFIC REQUIREMENTS

## 3.1 Functional Requirements

|  |  |
| --- | --- |
| Requirement ID: | RF01 |
| Requirement Name: | Generate inventory reports |
| Characteristics: | Users must authenticate to access the  system. |
| Requirement Description: | The system will request a valid username and password to log in and access the  main menu. |
| Non-Functional Requirement: | RNF01, RNF03, RNF04 |
| Requirement Priority: | High |

|  |  |
| --- | --- |
| Requirement ID: | RF02 |
| Requirement Name: | Update inventory records |
| Characteristics: | Artisans must be able to mark their daily  attendance. |
| Requirement Description: | The system will allow users to record attendance, check attendance history, and  calculate penalties for absences. |
| Non-Functional Requirement: | RNF01, RNF03 |
| Requirement Priority: | High |

|  |  |
| --- | --- |
| Requirement ID: | RF03 |
| Requirement Name: | View item transaction history |
| Characteristics: | The system must allow the entry of daily  sales data by artisan. |
| Requirement Description: | The user can register product name, quantity, unit price, date, and artisan's  name. |
| Non-Functional Requirement: | RNF01, RNF03, RNF05 |
| Requirement Priority: | High |

|  |  |
| --- | --- |
| Requirement ID: | RF04 |
| Requirement Name: | User registration and role assignment |
| Characteristics: | Artisans will manage their own product  listings. |
| Requirement Description: | The system will allow artisans to add,  edit, or delete their products. |
| Non-Functional Requirement: | RNF01, RNF04 |
| Requirement Priority: | High |

|  |  |
| --- | --- |
| Requirement ID: | RF05 |
| Requirement Name: | Record product sales |
| Characteristics: | Records product sales by store (inventory outflows) |
| Requirement Description: | Information about of a product'stock is reduced in the inventory |
| Non-Functional Requirement: | RNF01, RNF03 |
| Requirement Priority: | Medium |

|  |  |
| --- | --- |
| Requirement ID: | RF06 |
| Requirement Name: | Generate accounting reports |
| Characteristics: | Users will be able to view the current  inventory. |
| Requirement Description: | The system will display all available  products and allow filtering by artisan. |
| Non-Functional Requirement: | RNF01, RNF03 |
| Requirement Priority: | Medium |

|  |  |
| --- | --- |
| Requirement ID: | RF07 |
| Requirement Name: | Low-stock product notification |
| Characteristics: | Users will be able to view the current  inventory. |
| Requirement Description: | The system will display all available  products and allow filtering by artisan. |
| Non-Functional Requirement: | RNF01, RNF03 |
| Requirement Priority: | Medium |

|  |  |
| --- | --- |
| Requirement ID: | RF08 |
| Requirement Name: | Barcode scanning support |
| Characteristics: | Users will be able to view the current  inventory. |
| Requirement Description: | The system will display all available  products and allow filtering by artisan. |
| Non-Functional Requirement: | RNF01, RNF03 |
| Requirement Priority: | Medium |

|  |  |
| --- | --- |
| Requirement ID: | RF09 |
| Requirement Name: | User access control |
| Characteristics: | Users will be able to view the current  inventory. |
| Requirement Description: | The system will display all available  products and allow filtering by artisan. |
| Non-Functional Requirement: | RNF01, RNF03 |
| Requirement Priority: | Medium |

|  |  |
| --- | --- |
| Requirement ID: | RF10 |
| Requirement Name: | Generate category-based reports |
| Characteristics: | Allows generating reports filtered by clothing type, gender, season, etc. |
| Requirement Description: | Selected filter |
| Non-Functional Requirement: | RNF01, RNF03 |
| Requirement Priority: | Medium |

## 3.2 Non-functional requirements

|  |  |
| --- | --- |
| Requirement ID: | RNF01 |
| Requirement Name: | Usability |
| Characteristics: | * Intuitive console interface with hierarchical menus. * Descriptive and guided error messages. |
| Requirement Description: | The system must allow users without prior experience to perform basic operations. |
| Requirement Priority: | High |

|  |  |
| --- | --- |
| Requirement ID: | RNF02 |
| Requirement Name: | Data Retention |
| Characteristics: | * Saved data is retained. * Saved information is maintained intact. |
| Requirement Description: | The system must ensure that no data is lost when the program is closed. |
| Requirement Priority: | High |

|  |  |
| --- | --- |
| Requirement ID: | RNF03 |
| Requirement Name: | Availability |
| Characteristics: | * Continuous operation. * Scheduled maintenance. |
| Requirement Description: | The system must be available 24/7. |
| Requirement Priority: | Average |

|  |  |
| --- | --- |
| Requirement ID: | RNF04 |
| Requirement Name: | Compatibility |
| Characteristics: | * Must be cross-platform * Has a Java dependency. |
| Requirement Description: | The system must run without errors on Java-compatible operating systems. |
| Requirement Priority: | Low |