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1. Introduction

1.1- Purpose

The purpose of this document is to define the functional, non-functional and system specifications for the implementation of a product management system for small stores that will allow better management of the store's products Lili Market by the owner or designated persons.

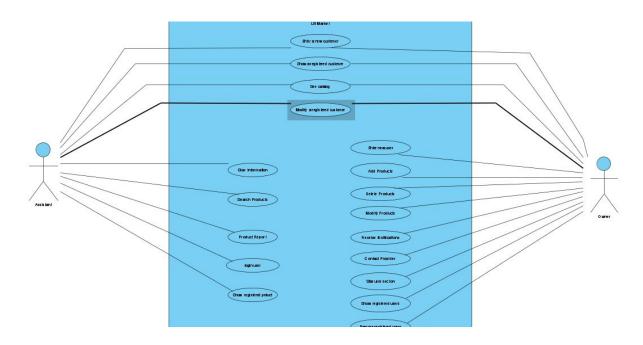
1.2- Audience

Design, development and implementation of the system PMS (product management system)

The PMS will be a system that will work in a Java environment that will allow to manage the products of a small store. This system will support the following processes:

- Product Management
- Receive Notifications
- Inventory management

1.3- Expected use



1.4- Area of application

PMS for small stores at Lili Market

1.5- Acronyms and definitions

- a. **PMS:** The name of the product management system.
- b. **Manage:** Action of adding, modifying, deleting and consulting the information of a certain object or person.
- c. **User:** Person who can enter the private area of the PMS.

2. General description

2.1- Product Insights

The product management system for small stores will be a system designed to work in inventory management, which will allow its use in a decentralized way, in addition to working independently, therefore it will not need to interact with other systems.

2.2- Product Features

The inventory management system will allow to perform the following functions:

- User Administration: The system administrator can manage users (add, modify, delete, search).
- Product administration: The system administrator will be able to manage products (add, modify, delete, search).
- Notifications of expiring products: Users will receive a notification when a product is about to expire to put it on offer and sell it.
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- Navigation: Process by which a person can use the inventory management system.

2.3- User characteristics

The inventory management system will contain 2 types of users that will interact and manage it: assistant and system administrator.

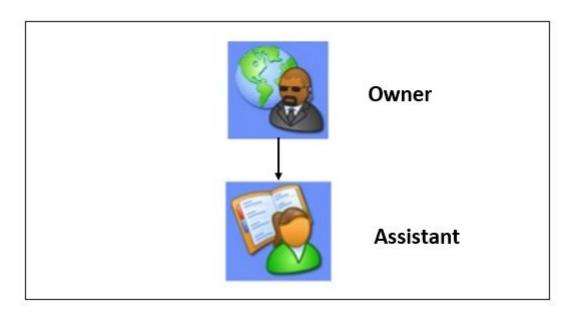
2.3.1- User profile

Each user will have a specific profile so that their interaction with the system is correct and does not lead to failures:

System Administrator: User with great knowledge in the management of the system with previous training by the programmers. In charge of managing the system with great responsibility for the criteria of permissions on users.

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2.3.2- User hierarchy



2.4- Restrictions

2.4.1- Regulatory policies

The application will be developed using open license software, therefore there will be no payment for its use. Management system database (MySQL) and programming language (JAVA).

2.4.2 Hardware limitations

For this application it Will be necessary a server computer in wich it Will be installed MySQL and Java server

2.4.3 Interfaces with other applications

Because the system does not interact with other systems and is autonomous, it does not develop interfaces with other applications. The connections needed to the use of the web server, MySql Will be done through the configuration of these programs

2.4.4 Parallel Operation

It is not a condition in the Project

2.4.5 Audit functions

Being a producto management system could help manage the Audit in this business case 2.4.6 Control Functions

The system must control the emissions that each user has for their accessibility in a correct way, so that you can access the information that corresponds to him according to his role. Must have controls suitable for data validation, in the programming of the store specific activities

2.4.7 Language requirement

All the material that is made for the user and the application must be in english language

2.4.8 Outlined protocols

Communication protocols will be used

2.4.9 Reliability requirements

The information corresponding to the operation of the store and the resources in this case the products must be adjusted to reality to avoid disorganization

2.4.10 Application credibility

To guarantee Good credibility, the system must be subjected to a series of test to establish that it is in accordance with the requirements reflected in the document in both data consistency and application performance, such as response times

2.4.11 Security considerations

Each user in this case the owner and this assistants must authenticate and their acces verified by a single terminal for their respective work according to what their role specifies. All keys security must be secure and failing that, encrypted in the database.data to give good security to the system and its information.

2.5 Attention and Dependencies

- The internal network must be configured to handle protocols, mainly everything related to performance and safety
- Adequate training must be carried out according to what each user is going to perform. You training Will be done when it is necessary and at right people

2.6 Distribute the Requirements

Control and administration of the products necessary for the store and the different suppliers

Manage the time required for the provision of each producto

Product information not for sale

Information notifications about lack of products or early expiration

3. System requirements and features

3.1 Functional requirements

The main challenge of this work was to discover the true needs of the client, and in a clear way so that the members of the work and the owner understand it.

The requirements are classified into the following categories:

visible: It must be done, and the user should know that it has been done.

not visible: Must be done, although it is not visible to users. This category applies to the storage or collection of customer or product data.

The requirements have been grouped into 6 areas, which can be seen in the following table:

| N° Requirements | Funcion | Category |
|-----------------|--------------------|----------|
| R.1 | User Management | Visible |
| R.2 | Product Management | Visible |

| R.3 | Customer Management | Visible |
|-----|--------------------------|---------|
| R.4 | Product Stock Management | Visible |
| R.5 | Report Management | Visible |
| R.6 | Supplier Management | Visible |

3.1.1 User Management

| N° Requirements | Funcion | Category |
|-----------------|------------------------|----------|
| R.1.1 | Enter a new user | Visible |
| R.1.2 | User login | Visible |
| R.1.3 | Show registered user | Visible |
| R.1.4 | Modify registered user | Visible |
| R.1.5 | Delete registered user | Visible |

3.1.2 Product Management

| N° Requirements | Funcion | Category |
|-----------------|---------------------------|----------|
| R.2.1 | Enter a new product | Visible |
| R.2.2 | Show registered product | Visible |
| R.2.3 | Modify registered product | Visible |
| R.2.4 | Delete registered product | Visible |
| R.2.5 | Delete registered user | Visible |
| R.2.6 | Enter new category | Visible |
| R.2.7 | Modify category | Visible |
| R.2.8 | Remove category | Visible |

3.1.3 Customer Management

| N° Requirements | Funcion | Category |
|-----------------|----------------------------|----------|
| R.3.1 | Enter a new customer | Visible |
| R.3.2 | Show registered customer | Visible |
| R.3.3 | Modify registered customer | Visible |
| R.3.4 | Delete registered customer | Visible |

3.1.4 Product Stock Management

| N° Requirements | Funcion | Category |
|-----------------|-------------------------|----------|
| R.4.1 | Product entry register | Visible |
| R.4.2 | Product egress register | Visible |

3.1.5 Report Management

| N° Requirements | Funcion | Category |
|-----------------|------------------------|----------|
| R.5.1 | product stock report | Visible |
| R.5.2 | product release report | Visible |

3.1.6 Supplier Management

| N° Requirements | Funcion | Category |
|-----------------|------------------------------|----------|
| R.6.1 | Enter a new Management | Visible |
| R.6.2 | Show registered Management | Visible |
| R.6.3 | Modify registered Management | Visible |
| R.6.4 | Delete registered Management | Visible |

3.2 Non-functional requirements

| attributes | Details and Restrictions |
|-------------------|--|
| Operating systems | Windows XP /vista / 7/ Linux |
| Interface | Web-oriented, forms and dialog boxes |
| Security | Confidentiality: Access to system data is limited to authorized users. |
| | Integrity: System data can only be erased or modified by authorized users. |
| | Availability: Access to data in a reasonable time is guaranteed for authorized users |