Medical Control System

Group 4

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Problem

We need a system that helps us to keep the record of medicines in an orderly manner, which facilitates good attention to users who come to buy medicines, to understand this problem we must know a little about the rules of the business, medicines basically it is registered through codes, this gives rise to the need to implement a system that facilitates its registration, thus avoiding the huge encyclopedias with drug codes, causing long search times for a drug with its code.

Overview

Para entender un poco sobre cómo funcionan los sistemas de control de medicamentos tenemos que saber las reglas del negocio, saber que los medicamentos se registran por códigos o por nombre, en este caso el sistema a desarrollar es para una pequeña farmacia que está iniciando dentro de un sector donde no es común ver una de aquellas, por ende las reglas del negocio no serán las mismas que un sistema de control de medicamentos de las grandes farmacias con franquicias en todo el país o el mundo, por ello el desarrollo de nuestro Software será una pequeña delimitación de un sistema de control de farmacias multinacionales, con la diferencia que en ella se aplicara nuestro propio estilo y acoplándose al entorno donde el sistema dara la solucion.

Background

For a couple of years there has been a problem when controlling the entry and exit of drugs either in a pharmacy or hospital, this problem can be the theft of medications, also the lack or in turn the excess of medications which would cause that expire, these problems are due to poor management or are generated by poor inventory control.

To avoid these types of errors, large multinational pharmaceutical companies or even small pharmacies currently have their own system designed for inventory control, which helps reduce the aforementioned problem, where each system has its degree of security and complexity depending on the the pharmacist that manages it, allowing not only the control of medicines but also of the people who handle them or even manage users or personnel who are working at that moment.

In our case, we have decided to try to solve this problem in a small pharmacy where a system is required to control the drug entry inventory, with the aim of facilitating the entry and exit of drugs and thus avoid theft or loss that harms said pharmacy.

Comparative

In the following section, the work team has investigated different pharmaceutical control systems that have been implemented in other organizations to highlight their strengths and thus establish the metrics and solutions that are going to be proposed for our project.

Systems already implemented	**Proposal**
Model focused on the company's mission processes. It seeks to improve existing methods such as storage and picking.	The system will offer an automated solution to control the usual processes carried out by the pharmacy at the inventory level.
System based on a macro in MS Excel that automates the procedure for updating the historical consumption database.	The system will have a database that, in addition to storing the information on the products, will keep a record of the sales of said products through a billing system.

System that unites all the basic functionalities of any pharmacy and at the same time time can be used by anyone who does not have knowledge of computers and information systems.	The proposed system will have intuitive graphic tools and easy access through a web application so that the user has the least amount of inconvenience to perform essential tasks within the business.

Analyst Comparison

To compare analysts, we provide some analysts with a system where each drug will be controlled by an id and its respective informative data for said drug, such as name, entry date, expiration date and description. This system will be controlled by an administrator who will return which medications are available in stock and which are not, thus this group of analysts will have complete control of how many and which medications are available in stock.

On the other hand, other analysts will be asked to have a control themselves on how many medicines enter, how many are available and how many are not in the way that best suits them to visualize how indispensable a medicine control system is, this can be visualized from a better way in the comparison table below.

Actions	**Analysts with use of the system**	**Analysts without use of the system**
Control of entered medications	Through the system you can view the date of entry of each medicine and if it is available in stock, so you have greater control.	Without the system, there is control, but it is less formal and the amount of medication entered can vary, exposing the clinic to the loss of medication.

Control of expired medications	By means of the system, the expiration date can be visualized with which there would be total control of this aspect.	Without the system, expired medications are evidenced and are still available in stock since there is no total control of this.
Medications theft control	Through the system it would be possible to see how many medications are in stock and there would be less insecurity in this aspect.	Without an accurate medication quantity record, there is greater vulnerability to medication theft.