# Software Requirements Specification
# for
# Pharmacy Management System

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# Revision History

| Name | Date | Reasons for Changes | Versions |
|---|---|---|---|
| Final Change | 09 May, 2021 | User update | 1.1 |
| | | | |

# 1 Introduction

## 1.1 Purpose

The software we aim to develop is an electronic point of sale (EPOS) system that will additionally manage other administrative sections of a pharmacy or drug store. Since large-scale chain drug stores already have distributed management systems, we intend to cater to those single pharmacies that have not yet adopted technological means to operate. Our vision is to take our country a step closer to digitalization.

This document represents the Software Requirements Specification for the product mentioned above, which will specify all the relevant information such as - user requirements, constraints, assumptions, risk definitions, etc.

## 1.2 Intended Audience

This document is intended to be referred to by all the members associated with this project, including all the potential stakeholders, project managers, software developers, and testers. Other departments, specifically the marketing department, may use this document to get a clearer idea of the product. People who will be responsible for hardware setups can also refer to this document.

## 1.3 Intended Use

The suggestions on how to use this document effectively are described below-

**Purpose** - All potential stakeholders are requested to look at this part to get a brief idea of what we aim to achieve with our product.

**Product Scope and Overall Description** - The marketing/sales department may refer to this to better understand how our product compares to existing products in the market and plan strategies to do the initial launch.

**User Needs and Classes** - This information is vital to the project manager, and other leaders as this will allow them to dictate which features will be used by whom and which features are an absolute must in our product. This will help the project managers determine the functional requirements of the product.

**Operating Environment** - Developers need to pay importance to this section to determine what tools/frameworks they may use during the implementation. People who will be involved in setting up machines for our product should also refer to this section.

**Requirements (Functional and Non-functional)** - Developers will refer to this while implementing the features while keeping the confirmations in mind from the user stories. Testers will also be required to refer to the features to design the appropriate test-cases.

### 1.4 Product Scope

This application's primary goal is to digitalize most of the processes done manually by the pharmacies. Adding technology to this process will make it more efficient and convenient for the users who previously did all of this on paper. This will also add a sense of reliability and robustness to the entire process. However, since single pharmacies may be less inclined to invest in such a product, our primary focus will be only on the essential features, thus keeping the production costs low. This also means that the maintenance costs should be kept minimum so that the customer does not get discouraged from investing in the initial set-up.

### 1.5 Risk Definitions

There are several risk factors for this project. Our target customers are pharmaceutical shops and hospital pharmacies. As 90 percent of them are selling and managing their shops manually. So, some of them may not be interested to purchase this kind of product as it needs some initial investment to set it up. The other risk factor is it can hamper the sale if it crashes even for a few minutes in the working hours. Because sales, inventory management, availability of products, accounts everything will be dependent on this management system.

## 2 Overall Description

The software(a web app), that we are building is a Pharmacy Management System. It's not a new product entirely. There are some pharmacy management system in the market but they are way too expensive and the maintenance cost is also high. For this reason, only a fraction of all pharmacy shops uses those management systems. Our target is to keep the price of this product minimum. So, we will add only the most essential features.

## 2.1 User Classes and Characteristics

Primary users of our product will be Pharmacy shops and hospital pharmacies. In a pharmacy the pharmacists will use this to sell and manage the inventory, the manager will use this to keep track of the sales and employees. Secondary users will be anyone other than the mentioned category, who can use this software only for inventory management or selling the products.

## 2.2 User Needs

The software will be developed according to the need of the users. In a pharmacy, a pharmacist needs to find the medicine, check the expiry date, check for OTC (the product he is going to sell, is it over the counter or not), record the sales, managing the inventory after selling to keep track of short products, order the products from suppliers, keep track of any expiry product. A manager needs to keep track of all the employees, total sales, individual sales of each pharmacist, managing inventory, add new products, employees, suppliers and a manager can additionally sell like a pharmacist if it is required. The pharmacy as a whole needs to keep track of all the customers who are buying the products. Some may change or back the product, some may buy in cash/card o. Keeping track of customer account (name, phone number, address(optional)) to track them.

## 2.3 Operating Environment

This software is a web app, that can be operated from any browser. The web app is expected to be hosted on an Apache server that is in-house (resides on the hardware) or can be hosted on any online server to access it from anywhere. The hosting will be decided according to the user's need. Due to the web-based nature of this software, it can be operated from any OS that has a browser (Google Chrome, Microsoft Edge, Firefox preferable). Due to the design and nature of the software, the UI may not be as appealing as it should be on small devices as it will have many features, buttons, and information on every single page. The Pharmacy shops need to use desktop PC or laptop or notebook to operate this software for better user experience and convenience. Small devices are not recommended for this software.

## 2.4 Constraints

The system must have a connection with the internet if the user chooses to take online database services as all the data will be fetched from the

database over the internet. We have to finish the software before the end of this semester i.e(before 11th week)

### 2.5 Assumptions

We can assume that the user will have a functional computer with an operating system and an internet connection. The computer must be capable of running the required software i.e(an internet browser,web server software etc). Since the application is a web-based application we assume that the user is capable of functioning a computer and using the internet through a web browser. we assume that the user knows English as every instruction in the software and the names of the medicines are in English.

## 3 Requirements

### 3.1 Functional Requirements

1. **As a User, I want to log in to the system.**
    - Confirmation: After providing user-ID and Password.
        - Success- The user is valid and the home page is loaded.
        - Failure- Displays Incorrect user-ID or Password message and loads the login page so the user can try again.
2. **As a User, I want to see relevant information about the pharmacy.**
    - Confirmation: From the different sections of the application the user can see different information.
        - Home: Total sales, Number of medicine companies, Total number of medicines, number of expired medicines.
        - Medicines: Medicine name, expiry date, stock amount, Shelf no, and price.
        - Shortage: Medicines that are running low on stock will be listed here.
        - Companies: All the information about the medicine companies that deal with the pharmacy will be found here.
        - Employees: the user can access information about all the employees i.e(Phone number, salary, email, and address).

- Sales:The user can access all the information about all the sales made from the pharmacy.

3. **As a user, I want to edit existing data and add new data also I want to delete existing data if I want.**

   - Confirmation: All the information the user can see, he can also update them, can add new information, and if wishes delete them.
     - Normal users: can add new medicines, update information about the existing ones and delete the existing ones. These alterations can be done to the information of the medicine companies and their Representatives.

4. **As a user, I want to search for medicines present in the store.**

   - Confirmation: In the medicine section we can search for medicines in many ways.
     - By Name: we can search for a medicine by typing in its real name or the generic name.
     - By company: If we type in a medicine company name we will see all the medicine of that company present in the store.

5. **As a user, I want to add medicines to my cart.**

   - Confirmations: From the medicine section we can add medicines to our cart and in the cart, we can manage them.
     - Quantity: In the cart, we can decide the amount of a specific medicine we want to sell.
     - Remove: If we don't want any of the medicines we selected we can just remove them from the cart.
     - Clear: If we want to remove everything in the cart we can do it by clicking a button.

6. **As a user, I want to confirm my sale.**

   - Confirmations: From the cart, we can confirm the order.
     - Customer Detail: We have to ask the customer for their information i.e(Name, phone number)
     - Cart: After the transaction is complete the cart is cleared
     - Stock: After the transaction is complete the medicine stock gets adjusted.

  - Sales: After the transaction is complete it gets recorded in the sales section.
  - Order: After the transaction is complete information about the entire order along with which employee made the sale gets recorded.

### 3.2 Non Functional Requirements

- The web application should load the pages in under 2 seconds.
- Fair amount of people should be able to use the application simultaneously without any problem.
- Any alteration made to the database should be updated immediately. There should not be any data inconsistency.
- Auto-generated information should always be accurate and precise.
- No one should be able to access the data in the database without proper authentication.
- Response time with the database should be less than 2 seconds.
- As the number of users increases the application should be scalable enough to handle the workload.
- The application should not break down during heavy sale hours.
- The application should be easily accessible.
- There should be a backup of all the data in case of an accident.
- The storage capacity should be sufficient so that the user should not have to face any issues regarding storage down the line.