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TECHNOLOGY

UNIT CODE: **BBIT 04105 FINAL YEAR PROJECT I**

PROJECT TITLE: **MEDTRUST PHARMACY**

MANAGEMENT SYSTEM

SOFTWARE REQUIREMENTS SPECIFICATION (SRS)

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Introduction

1.1 Purpose

The pharmacy management system is designed to provide complete solutions for the admin and employees of Medtrust Pharmacy. It will improve accuracy and to enhance safety and efficiency in the pharmaceutical store. It is a computer-based system which helps the Pharmacist to improve inventory management, cost, medical safety etc. The system allows the user to enter a manufacturing and expiry date for a particular product or drug during opening stock and sales transaction. The system will also give sales report hence sales become effortless as employees can take care of those by selecting available medicines and quantities. The purpose of this document is to illustrate the requirements of the project Pharmacy Management System. It gives a detailed description of both functional and non-functional requirements. This document provides use cases for both employees and admin personnel of the pharmacy. The goal of the project is to help save time, increase the productivity of the staff and the business as well as simplifies record-keeping with the ability to export sales and purchase reports in PDF format, ensuring efficiency, compliance, and seamless management of pharmaceutical operations.

1.2 Intended Audience and Reading suggestions

The document describes the scope, functionality and features of a Pharmacy Management System. It is extremely useful to developers and testers due to its detailed analysis of the system design, features, implementation and performance. The basic functionalities are then explained in detail along with the interface, system features and non-functionality requirements are examined.

1.3 Project scope

The development of a pharmacy management system will be a web-based application that allows the admin to handle products and medicine, categories, suppliers and they will have full control of the system. The employee panel, also known as the sales-person hub will provide a comprehensive view of the pharmacy system record through graphs and reports enabling data driven decisions.

Overall Description

2.1 User Classes and Characteristics

Employee panel - This can either be the staff or a sales person of the pharmacy. The features of the users are-:

- Can create an account in the system.
- Can manage their own profile in the system
- Can search for a particular medicine.
- Can see the comprehensive view of the pharmacy system records through graphs and reports.
- Can view the medicine stock and whether the medicine is expired.

Admin- The admin will be the controller they will have all the administrator privileges. The features of an admin are-:

- Can manage all the medicines
- Can manage all the categories
- Can manage all the suppliers
- holds the keys to a comprehensive overview of all records encompassing medicines, categories, sales and suppliers.
- Can view sales data and supplier information
- Can delete employee accounts

2.2 Operating Environment

Being a web- based system it will run on Windows 10 and later.

Google Chrome (78 and later); Mozilla Firefox (70 and later).

Internet Explorer (11 and later).

Microsoft Edge (18.18362 and later).

Mac OS X: Apple Safari (13.0.1 and later).

The Internet is a basic necessity for the system to be accessed.

2.3 Design and Implementation Constraints

The constrains are:

- Because the system relies on real-time updates, the servers must be able to handle sufficiently high traffic bursts which is not always the case.
- Anyone without proper customer account cannot avail the services of this website. If suppose a damage is being reported at the time of delivery, refund of money can be done, or the product can be sent back for alterations or to fix the damage or replace.

- The end users should have proper understanding of the system
- The system is more tailored towards the need of the employees sales than the admin with employee functionalities being more elaborate than admin functionalities.

2.4 User Documentation

The product will come with an instruction manual which will include the product overview, software configuration, technical details and contact information. There will also a link to be familiarized with the system

2.5 Assumptions and dependencies

The assumptions are:

- The code should be error free.
- The pharmacy management system is running 24hrs a day
- Users have access from any computer that has an internet browser
- The system should be user friendly
- The system should have enough storage capacity and provide fast access to the database
- Internet connection is available and it is fast and reliable

The dependencies are:

- The admin should have a proper understanding of the product
- Any update regarding the medicine from the pharmacy is to be recorded to the database that is accessible by the system.
- The specific hardware and software required to run the product
- The system will be developed and run based on the requirements and specifications listed
- The information of all employees, medicines, suppliers and admin must be stored in a database that is accessible by the website.

Functional Requirements

3.1 System Features

3.2.1 Employee and Admin Log in

Priority and description

The system will have both admin and employee (sales person) portal. If they are new to the system, they can signup and if the already have an account they can simply log in.

Stimulus/Response sequence

To log in or signup, the employee and admin enters username and password into the various textbox and displays the home page.

Functional Requirements

REQ: Account details

- User: Admin and employee

- Input: In the login page, type in the email address and password

- Output: home page

- Alternative flow(s): If log in the details are wrong, displays 'email or password incorrect.

3.2.2 The Search function

Priority and Description

Both employee and admin can search for a product in the database. They can either search for a product using key words related or by typing the full name. Then relevant options are listed and displayed

Stimulus/Response sequence (Input/Output)

To find the medicine, the employee and admin enters keywords into a search box and this action immediately displays the most likely product depending on the key words. The user then selects the product he or she wishes to view

Functional Requirements

REQ-1: Search medicine

- User: Admin and employee
- Input: In product page, click the search box and type in the keywords related to the medicine
- Output: List of products related to the book or author searched for
- Alternative flow(s): Displays 'No results for the searched product

REQ-2: View Dashboard

- User: Admin and client
- Input: click on the dashboard button
- Output: Details of the sales, available categories, expired medicines, system users, recent sales and graph report.

3.2.3 Admin Panel

Priority and Description

This is a window that allows all the functionalities of the admin in the system like managing products, categories, suppliers and users.

Stimulus/Response Patterns

The admin can manage products, categories, suppliers and system users and its details to the database, the admin can also view employee profile and see the number of sales they have made and as well as delete the user's profile

Functional Requirements

REQ-1: Search medicine

- User: Admin
- Input: In the product page the user inputs key words in the search box like name of product or the supplier
- Output: List of products related to the keywords
- Alternative Flow(s): Displays 'No results for the searched keyword/product' or 'Try checking your spelling or use more general terms'

REQ-2: Add category

- User: Admin
- Input: Click the add button on the category page
- Output: The category is added to the database
- Displays: Added

REQ-3: Add purchase

- User: Admin
- Input: Click the add button on the purchase page
- Output: the add purchase page
- Displays: The page where the user inserts medicine name, category, supplier, cost price, quantity, expiry date and the product image

REQ-4: Add product

- User: Admin
- Input: Click the add button on the products page

- Output: The product is added to the database
- Displays: Added

REQ-5: View Sales

- User: Admin
- Input: Click the sales page
- Output: sales dashboard
- Displays: Various sales made

REQ-6: Add Sales

- User: Admin
- Input: Click the add button on the sales page
- Output: The sales is added to the database
- Displays: Product has been sold

REQ-7: View Supplier

- User: Admin
- Input: Click the supplier page
- Output: supplier dashboard
- Displays: Various suppliers to the pharmacy

REQ-8: Add supplier

- User: Admin
- Input: Click the add button on the supplier page
- Output: The supplier is added to the database
- Displays: Added

REQ-9: View Sales Report

- User: Admin
- Input: Click the reports page
- Output: sales reports dashboard
- Displays: Generate report button

REQ-10: View Purchases Report

- User: Admin
- Input: Click the reports page
- Output: purchase reports dashboard
- Displays: Generate report button

REQ-11: Add user

- User: Admin
- Input: Click the users page then add button
- Output: users dashboard with the added user to the database
- Displays: users list

REQ-12: Delete user

- User: Admin
- Input: Click the users page then delete button
- Output: users dashboard with the updated users in the database
- Displays: users list

REQ-11: View profile

- User: Admin
- Input: Click the profile page
- Output: profile dashboard
- Displays: Various admin profile

REQ-12: View dashboard

- User: Admin
- Input: log in to the system
- Output: Dashboard page
- Displays: The day's sales, categories, graph report and the number of expired medicines

3.2.4 Employee Panel

Priority and Description

The sales person can view the sales page and generate reports as well as manage their profile. They can also view the general dashboard which consists of categories, the total sales made on a specific day.

Stimulus/ Response

To add a certain sale, the employee enters into the sale page. This action immediately displays the drop-down list of medicines available. The user then selects the product he or the want to sell. Once the user has selected the product, they go on to input the quantity, there is a save changes button which when pressed removes the product from the database.

Functional Requirements

REQ-1: View dashboard

- User: Employee
- Input: log in to the system
- Output: Dashboard page
- Displays: The day's sales, categories, graph report and the number of expired medicines

REQ-2: Add Sales

- User: Employee
- Input: Click the add button on the sales page
- Output: The sales is added to the database
- Displays: Product has been sold

REQ-3: View Sales

- User: Employee
- Input: Click the sales page
- Output: sales dashboard
- Displays: Various sales made

REQ-4: View Sales Report

- User: Employee
- Input: Click the reports page
- Output: sales reports dashboard
- Displays: Generate report button

REQ-5: View profile

- User: Employee
- Input: Click the profile page
- Output: profile dashboard
- Displays: Various employee profile

3.2.5 Log out function

Priority and description

This functionality allows both the employee and the admin to log out of the system and return back to the homepage

Stimulus/Response

The employee and admin click on the log out section and this action immediately log out of the system and takes them to the homepage.

Functional Requirements

REQ: Log out

- User: Employee and admin
- Input: Click on the log out/sign out section
- Output: Returns to the home page
- Displays: The homepage

3.2.6 Create Account

Priority and description

This allows the user and the admin to create a new account and get registered into the pharmacy management system. They can enter their usernames and passwords into the text boxes which are then stored into the database and their accounts become registered into the management system. The usernames will be in email format.

Stimulus/ Response

To create an account, they enter the username and password of their choice into the text box then click the signup button. This action immediately registers them to the system and displays the home page of the pharmacy management system where they can see what the system has to offer.

Functional Requirements

REQ: Account Details

- User: Employee and admin
- Input: In the signup page they enter their name, email address and password of their choice here
- Output: The home page of the management system is displayed
- Alternative flow(s): Incase the username is not in email format, they have to re-enter valid username displays 'check email format'.

External Interface Requirements

4.1 User Interface

a) Home page

The homepage of this pharmacy management system is designed to be attractive and user friendly

It includes: Admin and employee login or register buttons

b) Dashboard page

It shows the sales of the day, available categories, number of expired medicines, system users and the graph report.

c) Categories page

It will entail the categories of the medicines and displays a button to add a category and also edit and delete buttons of various categories.

d) Purchase page

It will entail the categories of the medicines and displays a button to add a category and also edit and delete buttons of various categories. It also displays the suppliers to various products.

e) Products page

It will entail the list of the medicines and displays a button to add a product and also edit and delete buttons of various products. It also displays the products that are expired and out of stock.

f) Sales page

It will entail the list of the medicines sales and displays a button to add a sale and also edit and delete buttons of various sales.

g) Supplier page

It will entail the list of the suppliers and displays a button to add a supplier and also edit and delete buttons of various suppliers.

h) Reports page

It will entail a generate button to generate the reports and it will also have a date field to specify the period that you want the report to range

4.2 Hardware Interface

Any Operating system with internet access

4.3 Software Interfaces

- All the web pages of this pharmacy management system are majorly built using development tools like HTML5, CSS, PHP and Laravel.
- This pharmacy management system is accessible through the internet on any Operating System like Unix, Linux, Mac, Windows etc.
- The complete information about the products is stored in the databases of the system.
- This system stores the product data, customer data and seller data in the database.

4.4 Communication Interface
- The user can gain access to the pharmacy management system via the internet by typing the system's name into a web browser
- For internet communication the, system must use HTTP protocol

Other Nonfunctional Requirements

5.1 Performance Requirements
- Increase customer satisfaction.
- Pharmacy must allow customers to access its services 24 hours a day.
- Reduce overall costs.
- The same resources of pharmacy management can be used many times by users.
- We have data backup we any data is deleted we can recover the data

5.2 Safety Requirements
- Backup, recovery and business continuity the pharmacy should ensure adequate backup of data as may be required by their operations.
- Both data and software should be backed up periodically.
- An off-site backup is necessary for recovery from major failure to ensure business continuity.

5.3 Security Requirements
- The user will enter his information and he can change it.
- The admin can check employee profile he can make changes to system and he can add or remove products or update them.
- Proper use of authentication should be used
- There should be separate accounts for admin and employee such that no employee can access the database and only the admin has the right to update certain aspects of the database.
- No one should be able to hack other users' password
- System will use a secured database

5.4 Software Quality Attributes
- The system should also be highly adaptable, with servers capable of handling high volumes of traffic.
- The system must be interoperable and operate without compromising website performance or quality.
- It should be built modularly so that additional features can be easily added and removed without causing too much disruption.
- The adaptability of the system is critical for both types of users.

Other Requirements

A strong commercial backend that separates employee and admin information is required. A general management backend is also required, along with general system requirements

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