Software Development Plan

TITLE PAGE CONTENT

Quack Pharmacy System

March 11, 2023

Version 1.0

Presented To:

The chain of Quack pharmacies

Submitted By: Quack Team

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REVISION HISTORY

Date	Author	Distributed to	Version	Description
11\ 03\2023	The chain	Quack Team	Version 1.0	Initial Version

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1. PRODUCT DESCRIPTION

Product Description:

The Pharmacy Website Project is a comprehensive web development undertaking that aims to build a user-friendly and informative website for a pharmacy or drug store. This project includes creating an e-commerce platform that allows customers to purchase products online, in addition to providing detailed information about the pharmacy's products and services. Moreover, the website should offer valuable resources such as drug information, health tips, and other related information to enhance the customer experience.

What problems do we solve?:

The Pharmacy Website Software addresses several common challenges faced by traditional pharmacies. Firstly, the software overcomes the issue of limited accessibility by enabling customers to purchase medications from anywhere, at any time, without having to visit the physical store. Secondly, the software provides an extensive selection of medications, thereby solving the problem of limited choices caused by space constraints. Thirdly, the software eliminates the issue of Traditional pharmacies by allowing customers to order their medications online. Lastly, the software offers competitive prices, allowing customers to save money as compared to traditional pharmacies that have higher prices due to overhead costs..

Audience and Goals:

The target audience for the Online Pharmacy Software is diverse and encompasses individuals from all walks of life who need prescription medication or other health-related products. Some specific demographics that may find the software particularly useful include:

The Online Pharmacy Software caters to the needs of busy individuals who value convenience and prefer to have their medications delivered straight to their doorstep, without having to visit a physical pharmacy.

Elderly individuals who may have mobility issues or find it difficult to visit a physical pharmacy.

Patients with chronic illnesses who require ongoing medication and may find it easier to order refills online.

Individuals who live in rural or remote areas with limited access to traditional pharmacies.

Individuals who are hesitant to visit physical pharmacies due to concerns about privacy or stigma associated with their condition.

The Online Pharmacy Software is an ideal solution for individuals who need specialty medications that are not readily available in their local area and must be ordered from a specialty pharmacy. The software enables such individuals to order the required medication online and have it delivered to their doorstep, regardless of their location.

The Online Pharmacy Software is a valuable resource for patients who need medications that may be challenging to find or purchase due to supply shortages or backorders. The software allows such individuals to easily order the required medication online and have it delivered directly to their doorstep, ensuring that they receive the necessary treatment on time.

Functionality and features:

Secure online transactions: Online pharmacies should provide secure transactions to protect customer information and financial data.

Comprehensive product catalog: Online pharmacies can offer a wide range of healthcare products, including prescription medications, over-the-counter medications, vitamins, supplements, and personal care items.

Fast and reliable shipping: Online pharmacies should offer fast and reliable shipping options to ensure that customers receive their medications in a timely manner.

Convenience: The main advantage of using an online pharmacy is convenience. Customers should be able to order their medication from the comfort of their own home without having to physically visit a pharmacy.

Accessibility: Online pharmacies should be accessible to everyone, including those with disabilities or those who live in remote areas where traditional pharmacies may not be available.

Safety and security: Customers should be able to trust that the online pharmacy they are using is safe and secure. This includes ensuring that the pharmacy is licensed and regulated, that the medication is legitimate, and that customer data is kept confidential.

Competitive pricing: Customers should be able to find competitive prices on medications at online pharmacies. Some online pharmacies may also offer discounts or promotions to help make their products more affordable.

Timely delivery: Customers should receive their medications in a timely manner, with clear communication about the delivery process and any potential delays.

Quality customer service: Online pharmacies should provide quality customer service, including the ability to speak with a pharmacist if needed, answer questions promptly, and provide assistance with any issues that may arise.

2. TEAM DESCRIPTION

What skills does the project need?

1- Soft- Skills and problem solving
2- Requirement gathering
3- Business analysis
4- Front – end) Html , CSS, JavaScript, React, angular)
5- Database (MySql)

6- Back-end (Laravel)
7- Content Management System(CMS)
8- UI Testing
9- Interpersonal skills
10- Responsive design skills

What skills does the team have?

Skills/ Team	Hesham Qutb	Fatma Mohammed	Dalia Mostafa	Reem Ashraf	Ahmed Mahmoud
Soft- Skills and problem solving	√	√	√	√	√
Requirement gathering	√	√	√	√	√
Business analysis	√	√	√	√	√
Front - end	√	×	×	√	×
Database	×	√	×	√	×
Back – end	×	×	√	√	√
Content Management System(CMS)	√	×	√	×	×
UI Testing	√	×	√	×	√
Responsive Design Skills	√	√	√	√	√

Is there a need for a Subject Matter Expert (SME)?

Subject matter experts are especially useful in identifying potential challenges in complicated areas and creating unique solutions. They can apply specific knowledge and experience in a subject that other employees may not possess.

So we asked for help from Dr. **Mohammad Bushary** (graduated from the Faculty of Pharmacy in 2022, Assiut Uni.)

He can help us in the medical and pharmaceutical part and how to deal with the patients in the case of required medications

What expertise is missing?

Medical information and laws.

3. SOFTWARE PROCESS MODEL DESCRIPTION

Used methodology:

Incremental.

Why

1- Requirements understanding and deliver

Requirements of the system are clearly understood

When demand for an early release of core functions of the system

2- Risk

When high-risk features and goals are involved

3- Expected life-time

The project is not done until deliver all requirements to customer

4- Develop team

Not require high expert team but require very good communication between them

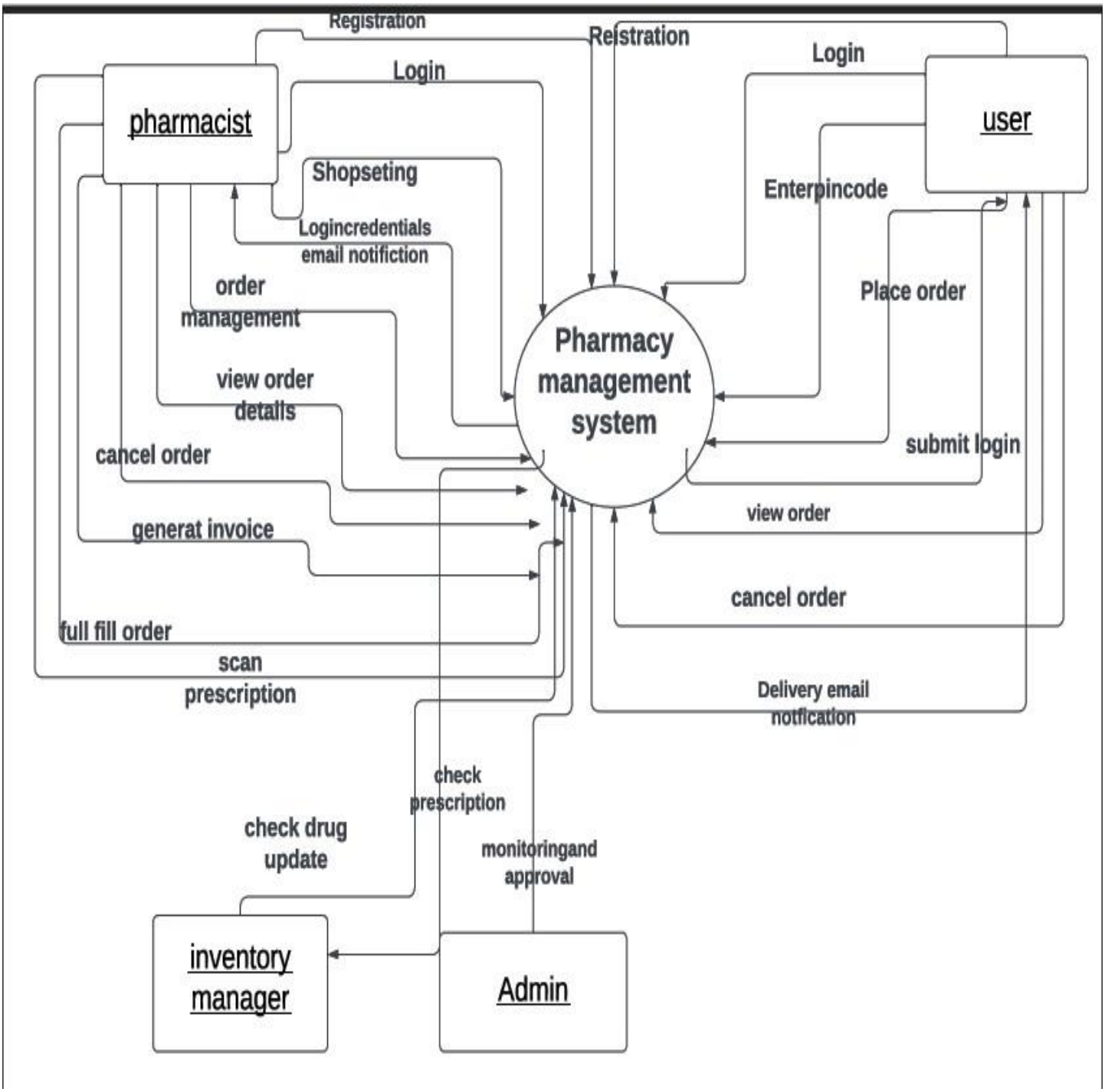
5- Customer evolvement

The customer is part of the team, he participate in choice with requirement will be in next release and give us a feedback about the previous one.

4. PRODUCT DEFINITION

Describe the users and user environment.

Context Diagram



Personas

Patients

Users

Doctors

Admin

User Stories

1- I am a pharmacist

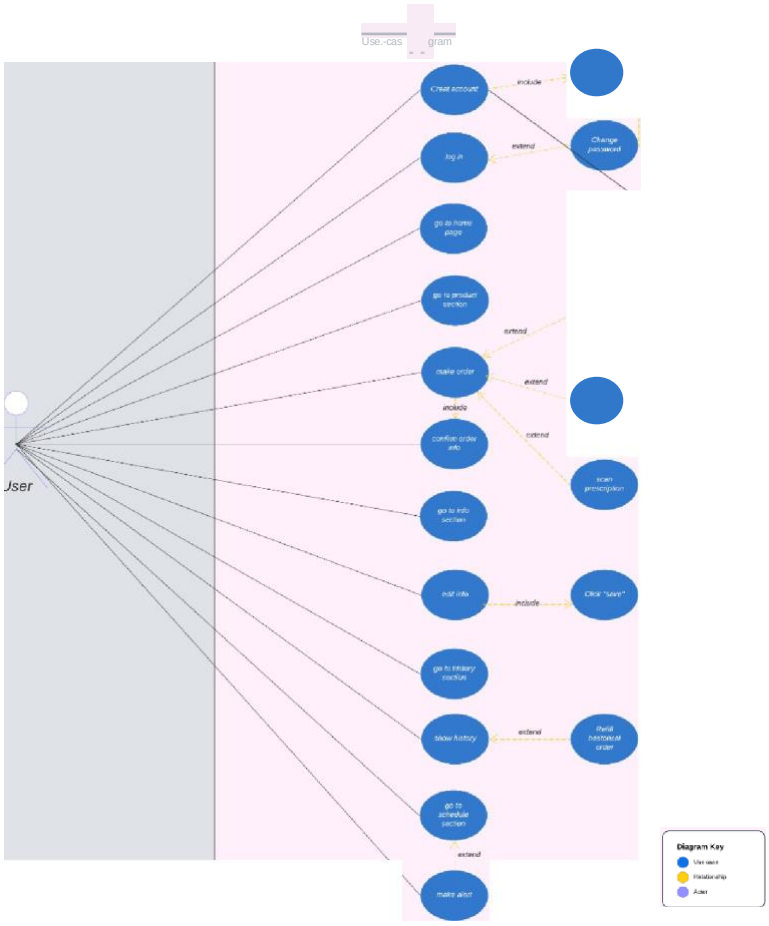
I need to expand my business with a marketing website and at the same time serve the community. I want it to include many functions that help me manage the pharmacy, including data and commercial transactions

I also want to see some of the customer data, such as the medications they take, by making it possible to see the old orders of the customer

2- I am a Patient

I can't find my medicine in regular pharmacies, so I search for it and can't find it. I also want the task of buying my medicine to be as easy as possible, and to be able to communicate with the pharmacy at any time. I also need an alert for my medication appointments. I need a health assistant on my tablet

High Level Use Cases

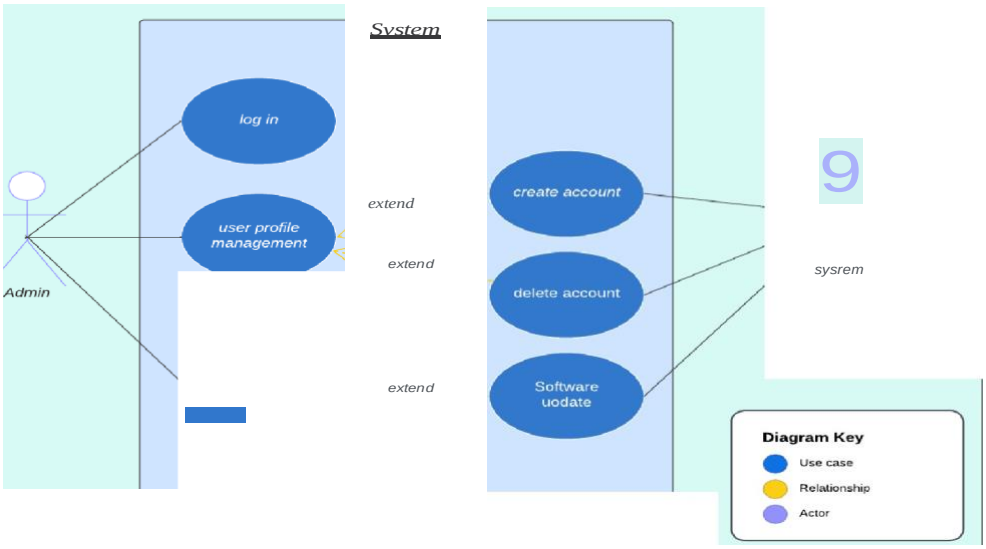

Use.-cas gram
Create account
log in
go to home page
go to product section
make order
confirm order info
go to info section
edit info
go to inbany cactus
view history
go to schedule section
make alist
include
extend
include
extend
extend
include
extend
extend
Change password
scan prescription
Click "save"
Refill terminal order
User
Diagram Key

Sysrem

. usecase

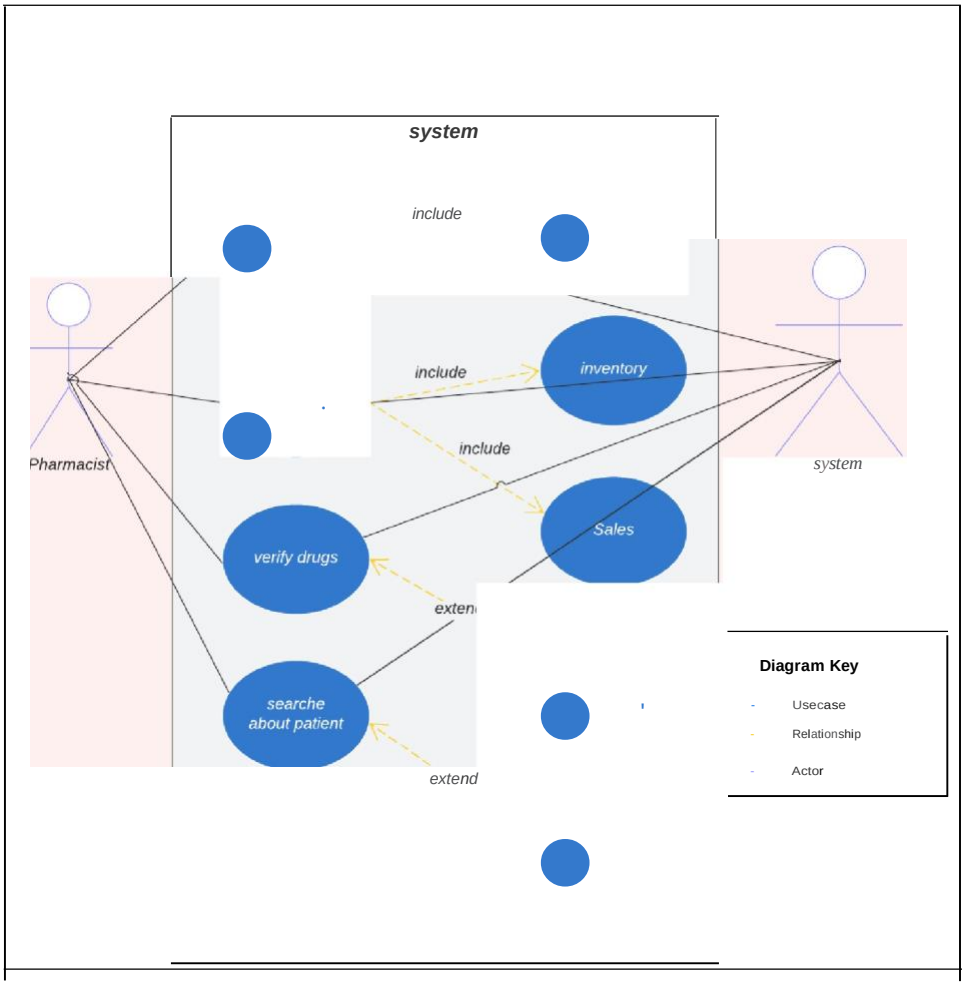
Admin

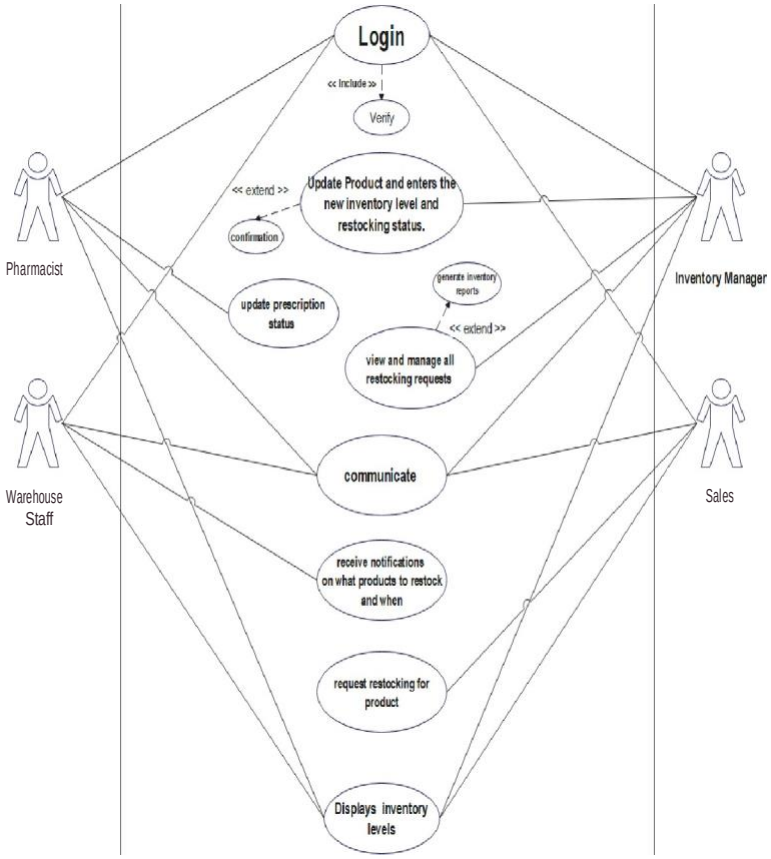
Reem Ashraf March 19, 2023



Pharmacist diagram

Reem Ashraf · March 19, 2023




Login
<< Include >>
Verify
<< extend >>
Update Product and enters the new inventory level and restocking status.
confirmation
Pharmacist
Inventory Manager
update prescription status
generate inventory reports
<< extend >>
view and manage all restocking requests
communicate
Warehouse Staff
Sales
receive notifications on what products to restock and when
request restocking for product
Displays inventory levels

Use Case Descriptions

Create account

Use case name	Create account
Unique ID	SPI_100
Area	Application
Actor(s)	User
Description	User creates account(name, address, ID, number of card, E-mail)
Triggering Event	User click “CRAET ACCOUNT” button in the application
	- Emeil, number phone
Preconditions	- The user needs to have internet access
Postconditions	- User has successfully created account
Assumptions	- Have a device connected to the internet to go to the website - A valid data

Steps Performed	Information for Steps

1- website **2- Go to the sin up page** 3- User enters his data 4- Click on “Create Account” button 5- Validation of entered data by application	Steps: Name, address, ID, number of card, E-mail

Extensions (Alternative Flows)	- doesn’t log in without verify email - If user entered a non-valid data, a warning message should appear to him

VERIFY EMAIL

Use case name	Verivy email
Unique ID	VE_100
Area	Application
Actor(s)	User,system
Description	User chek email (message of verification)
Triggering Event	User click “VERIFY EMAIL” button in the application
Preconditions	−Internet is available −Create account and open the website
Postconditions	- User has successfully verify email
Assumptions	- A valid data

Steps Performed	Information for Steps
1- After creating the account, a confirmation email message appears, so the user must be verified **2- Refer to the email** **3-Click the Verify Email button** **4- Go back to the website page** **5- log in**	Steps: Log in(E_mail ,password)

Extensions (Alternative Flows)	- If user entered a non-valid data, a warning message should appear to him

Show history and reorder

Use case name	Show history
Unique ID	SHH-122
Area	Application
Actor(s)	User,system
Description	User can show his history and can do another order
Triggering Event	User click “show history” button in the application
Preconditions	−has account and I have previous orders −connect with internet and open the website
Postconditions	- User has successfully preorder
Assumptions	- A valid data

Steps Performed	**Information for Steps**
1- Open the website	Steps:

2-Login 3- Enter the history page and click on the old order 4- Submit order 4- Go back to the website page	Log in(E_mail ,password)
Extensions (Alternative Flows)	- If user entered a non-valid data, a warning message should appear to him

Help Patient

Use Case Name	- Help patient
Unique ID	- HP-001
Area	- Application
Actor(s)	- Pharmacist
Description	- Pharmacist Helps Patient
Triggering Event	- Patient Call the Pharmacy to take Medical consultation
Preconditions	- The Patient doesn't need to have an account on the website to get the hot number - The Patient must have a smart phone, Pc or laptop Connected to the internet to get into the website
Postconditions	- Patient has successfully communicated with pharmacist
Assumptions	- A device connected to the internet - A phone to call

Steps Performed	Information for steps
1- Open the website, home page 2- Go to the contact section in it 3- Call the hot number that described in it or email	Accessing to contact info does not need to have an account on our website

Dangerous drugs

Use Case Name	- Dangerous drugs

Unique ID	- DD-001
Area	- Application
Actor(s)	- Pharmacist - User
Description	- An Order have a Dangerous drugs or conflicting drugs without Prescription
Triggering Event	- Pharmacist Call the Patient to Send the prescription if not, the order will be rejected.
Preconditions	- The Patient must have a smart phone, Pc or laptop Connected to the internet to get into the website - Patient have an account to Order
Postconditions	- Pharmacist Call the Patient to Send the prescription if not, the order will be rejected.
Assumptions	- A device connected to the internet - An account

Steps Performed	**Information for steps**
1- Open the website, home page 2- Log in and make Order **3-** Pharmacist Call the Patient to Send the prescription **4-** if not, the order will be rejected and notify the user about it	Step 2: Email, Password

Extensions (Alternative Flows)	- If user entered a non-valid data, a warning message should appear to him

Update Info

Use Case Name	- **Update Info**
Unique ID	- UI-101
Area	- Application
Actor(s)	- User (Patient)
Description	- User Wants to update his/her personal info in Profile
Triggering Event	- Go to the info that user want in update it and Click “Edit” then save

Preconditions	- The Patient must have a smart phone, Pc or laptop Connected to the internet to get into the website - Patient have an account
Postconditions	- Patient Successfully update his/her own info
Assumptions	- A device connected to the internet - An account

Steps Performed	**Information for steps**
1- Open the website, home page 2- Log in and go to profile info 3- Click on the wanted info to be updated 4- Choose edit 5- Allowing typing and editing **6-** Click on save after finishing editing	Step 2: Email, Password

Extensions (Alternative Flows)	- If user entered a non-valid data, a warning message should appear to him

Change Password

Use Case Name	- **Change Password**
Unique ID	- CP-101
Area	- Application
Actor(s)	- User (Patient)
Description	- User can change his\her profile password at any time
Triggering Event	- User click on “Forget Password” in log in page
Preconditions	- The Patient must have a smart phone, Pc or laptop Connected to the internet to get into the website - Patient have an account
Postconditions	- Patient Successfully Change his/her own Password
Assumptions	- A device connected to the internet - An account

Steps Performed	**Information for steps**

1- Open the website, home page 2- Go to log in page 3- Click on “forget Password” 4- Typing the email 5- Open verify message in email 6- Type the wanted Password 2 times cause of correctness 7- Log in again with the new Password	Step 7: Email, Password

Extensions (Alternative Flows)	- If user entered a non-valid data, a warning message should appear to him

Log in

Use Case Name	- **Log in**
Unique ID	- SPI - 200
Area	- Application
Actor(s)	- User (Patient)
Description	- User Logs in after creating account by his/her email & Password
Triggering Event	- User click on “Log In” Button
Preconditions	- The Patient must have a smart phone, Pc or laptop Connected to the internet to get into the website - Patient have an account
Postconditions	- Patient Successfully Logs in
Assumptions	- A device connected to the internet - Patient have an account

Steps Performed	**Information for steps**
1- Open the website, home page 2- Go to log in page 3- Typing the email 4- Typing the Password 5- Click on “log in” button	None

Extensions (Alternative Flows)	- If user entered a non-valid data, a warning message should appear to him

Remind Medicine Time

Use Case Name	- **Remind Medicine Time**
Unique ID	- RMT - 010
Area	- Application
Actor(s)	- User (Patient)
Description	- User goes to the schedule and alert his/her Medicine time
Triggering Event	- User click on “Schedule It!” Button
Preconditions	- The Patient must have a smart phone, Pc or laptop Connected to the internet to get into the website - Patient have an account
Postconditions	- Patient Successfully did the alert
Assumptions	- A device connected to the internet - Patient have an account

Steps Performed	**Information for steps**
1- Open the website, home page 2- Log in 3- Go to the schedule 4- Click on New alert 5- Type Alert Info 6- Click on save alert 7- Click to save Schedule	Step 2: Email, Password Step 5: Medicine name, hours between every potion(جرعة دواء) , choose every day or custom days

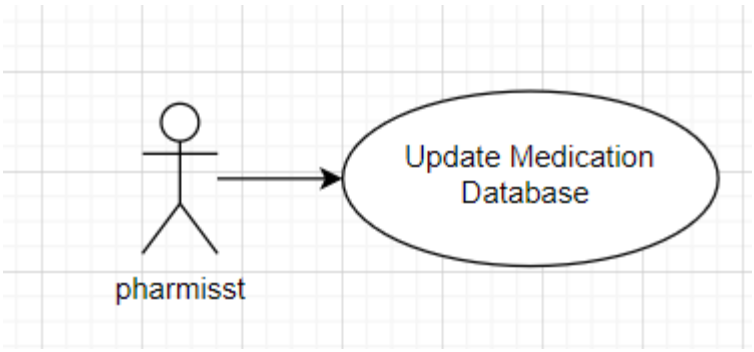
Extensions (Alternative Flows)	- If user entered a non-valid data, a warning message should appear to him

Make an Order

Use Case Name	- **Make an Order**
Unique ID	- MO - 100
Area	- Application
Actor(s)	- User (Patient)
Description	- User makes order by searching about it
Triggering Event	- User click on “Submit Order” Button
Preconditions	- The Patient must have a smart phone, Pc or laptop Connected to the internet to get into the website - Patient have an account - It’s good to have a credit card
Postconditions	- Patient Successfully made the order
Assumptions	- A device connected to the internet - Patient have an account - It’s good to have a credit card

Steps Performed	Information for steps
1- Open the website, home page 2- Log in 3- Go to product page 4- Confirm the products by click on “correct” or delete it by reject it 5- After confirm click on “Order!” 6- In order page, Check the quantity and types you want and also check if you want to add something else 7- Click “Submit Order!” to confirm the Order	Step 2: Email, Password

Extensions (Alternative Flows)	- If user entered a non-valid data, a warning message should appear to him - Every order

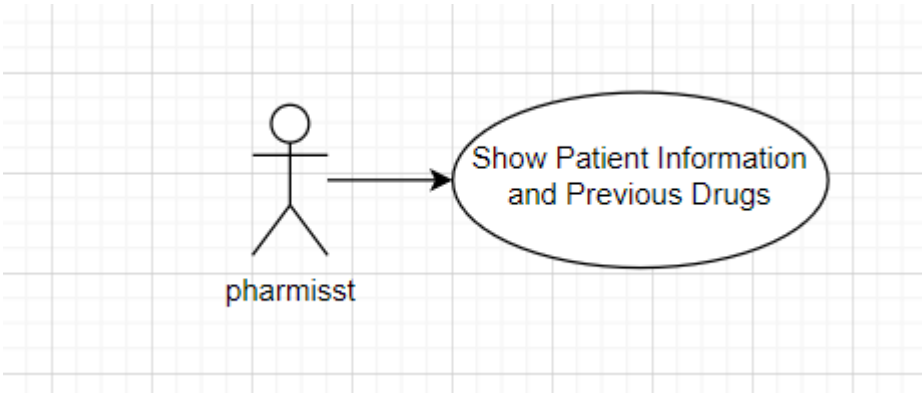


Update Medication Database

Use Case Name:	**Update Medication Database**
Unique ID	UMD-001
Area	Pharmacy Management System - application
Actor	Pharmacist
Description	This use case describes the process of updating the pharmacy's medication database.
Trigger Event	Pharmacist identifies a medication that needs to be added, modified, or removed from the database.
Precondition	Pharmacist is logged into the pharmacy management system and has the necessary permissions to update the medication database.
Postcondition:	The medication database has been successfully updated with the new information with a message.
Assumptions	The pharmacist has the necessary information and authorization to make changes to the medication database.

Steps Performed	**Information for Steps done**
1- The pharmacist navigates to the medication database section of the pharmacy management system. 2- The pharmacist selects the medication that needs to be updated. 3- The pharmacist reviews the current information for the medication.	Step 2: The pharmacist uses the search function or navigates through the medication list to locate the medication that needs to be updated.

4- The pharmacist updates the information as necessary 5- The pharmacist saves the changes to the medication database. 6- The pharmacist reviews the updated information to ensure it is accurate and complete. 7- If the medication is being removed from the database, the pharmacist enters a reason for the removal. 8- The pharmacist logs out of the pharmacy management system.	Step 4: The pharmacist updates the relevant fields using the form provided in the medication profile. Step 5: The pharmacist clicks the "Save" button to apply the changes to the medication database

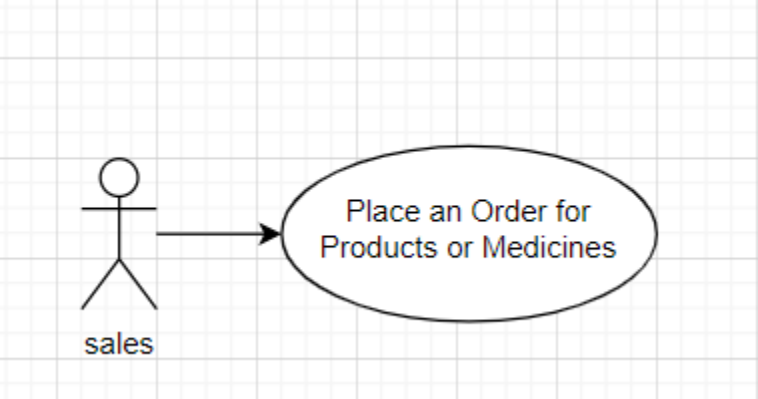


Show Patient Information and Previous Drugs

Use Case Name:	**Show Patient Information and Previous Drugs**
Unique ID	SPID-007
Area	Pharmacy Management System
Actor	Pharmacist /staff
Description	This use case describes the scenario when a staff or a pharmacist needs to access the patient information and their previous drugs information.
Trigger Event	- The patient order new products - The staff or the pharmacist needs to access the patient information and their previous drugs information.
Precondition	- The user is logged in and has the necessary access rights. - The patient had a profile in our database

Postcondition:	The patient information and their previous drugs information is displayed to the user.
Assumptions	The patient information and their previous drugs information is stored in the database and is up to date.

Steps Performed	Information for Steps done
1- The sales staff or the pharmacist opens the pharmacy management system. 2- The user selects the "Patient Information" option from the main menu. 3- The system presents the user with a search field to enter the patient's name, ID number, or any other relevant information. 4- The user enters the search criteria and clicks on the "Search" button. 5- The system searches the database for the patient's information and displays the search results. 6- The user selects the patient from the search results. 7- The system displays the patient's basic information, including their name, address, contact details, and any other relevant information. 8- The user selects the "Previous Drugs" option from the patient information page. 9- The system retrieves and displays the patient's previous drugs information, including the name of the drugs, the dosage, the frequency, and the duration. 10- The user can print or save the patient's information and previous drugs information.	Step 3: The user can enter the patient's name, ID number, or any other relevant information to search for the patient's information. Step 5: The system can display a list of search results if multiple patients match the search criteria. Step 7: The user cannot edit the patient's information without patient agreed. Step 9: The system can display a warning message if the patient has any allergies to the drugs



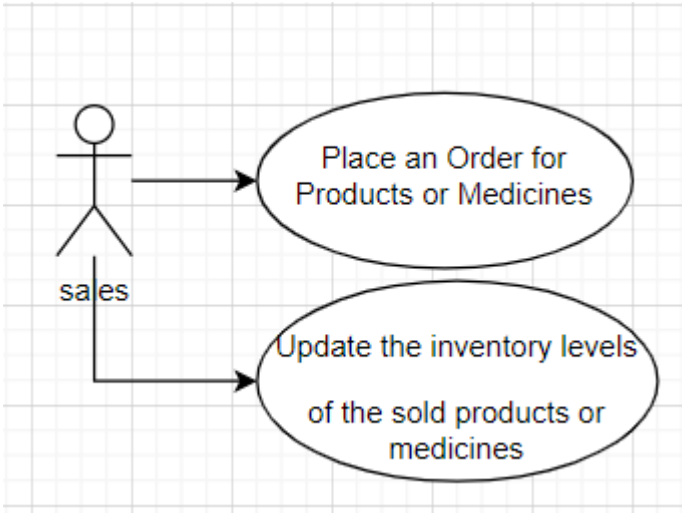
Place an Order for Products or Medicines

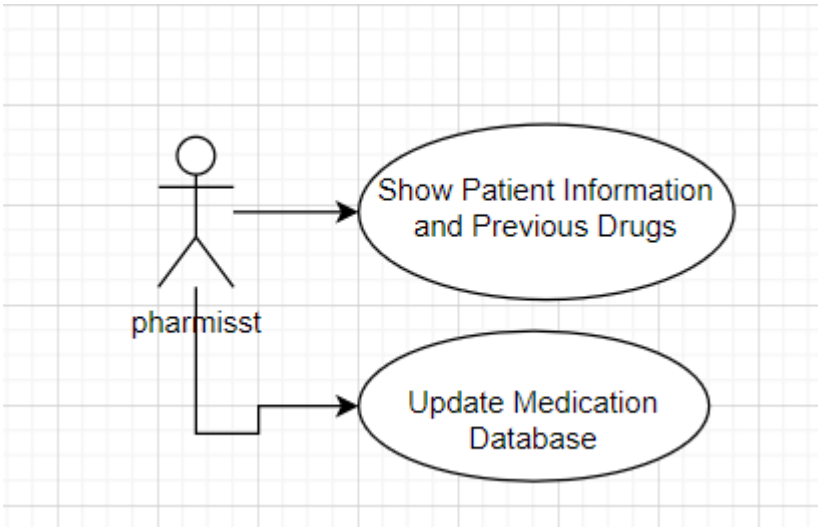
Use Case Name:	**Place an Order for Products or Medicines**
Unique ID:	POPM-004
Area:	Pharmacy Management System – sales management
Actor:	Sales staff
Description:	This use case describes the steps a sales staff takes to place an order for products or medicines when the stock is low.
Trigger Event:	The stock level of a product or medicine is below the minimum required level.
Precondition:	The sales staff is logged into the system and has access to the order placement feature.
Post condition:	The order is placed and recorded in the system.
Assumptions:	The staff member has the authority to place orders and the necessary information about the product or medicine is available.

Steps Performed:	Information for Steps:
1- The system notifies the staff of a low stock level for a specific product or medicine.	Step 1: The system may use a notification or alert system to notify the pharmacist and staff of a low stock level.

2- The staff accesses the order placement feature of the system. 3- The system displays the order placement form. 4- The staff communicate with pharmacist to enter necessary detail. 5- The pharmacist enters the necessary details of the order, including the product or medicine name, quantity, and supplier information. 6- The system validates the order details and confirms the availability of the ordered product or medicine. 7- If the ordered product or medicine is available, the system generates a purchase order. 8- The pharmacist reviews the purchase order and makes any necessary changes. 9- The staff submits the purchase order to the supplier. 10- The system records the purchase order in the system and updates the stock level of the product or medicine. 11- The supplier delivers the ordered product or medicine to the pharmacy. 12- The pharmacist receives the delivery and checks the order for accuracy.	Step 3: The order placement form may include fields for product or medicine name, quantity, supplier information, delivery date, and cost. Step 5: The system may check the availability of the ordered product or medicine by accessing the supplier's inventory system. Step 6: The purchase order may include the order details, delivery date, and cost. Step 8: The purchase order may be submitted electronically or by mail. Step 10: The delivery may include a packing slip or delivery note. Step 11: The pharmacist may use a barcode scanner or manual entry to check the accuracy of the delivery Step 13: The invoice may include the order details, delivery date, and cost. Step 15: The invoice may be submitted electronically or by mail. The payment method may be specified in the invoice

13- The staff updates the stock level of the product or medicine in the system. 14- The system generates an invoice for the order. 15- The pharmacist and staff reviews the invoice and makes any necessary changes. 16- The staff submits the invoice for payment. 17- The system records the invoice and updates the financial records.	



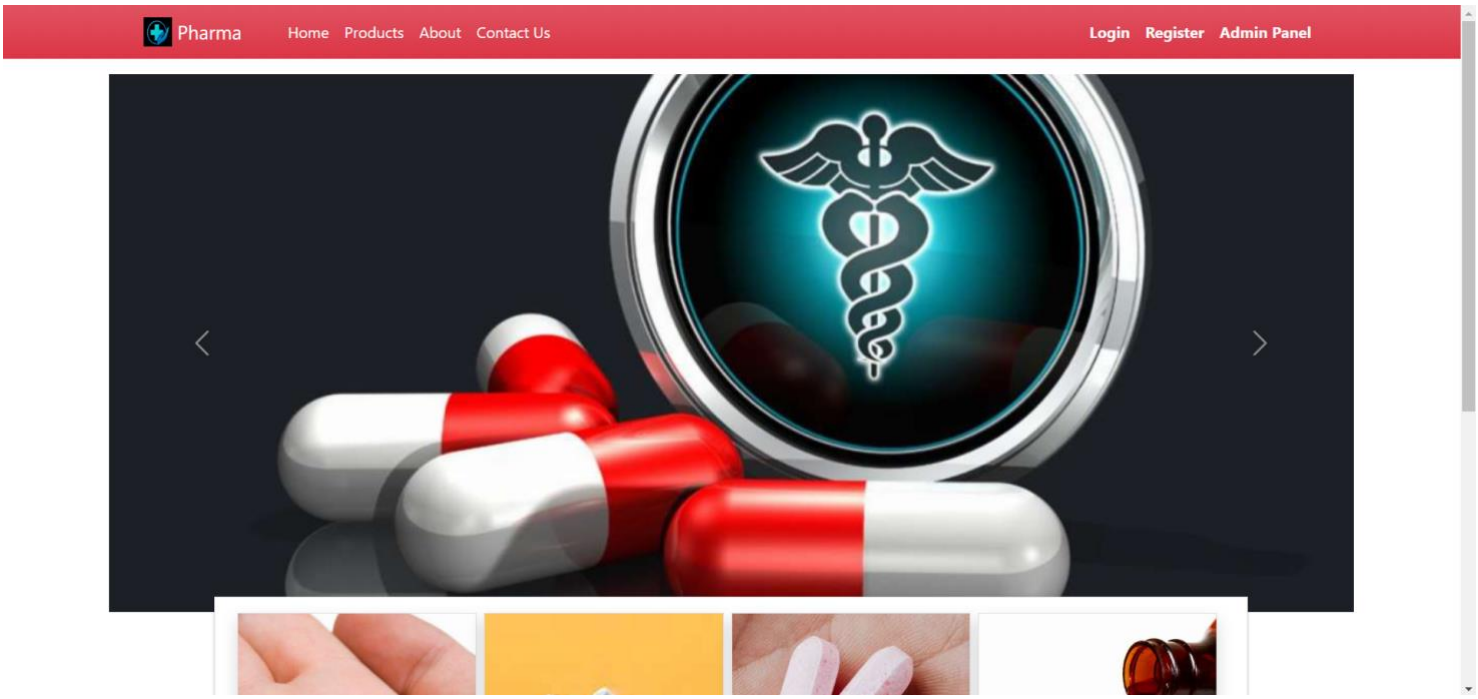


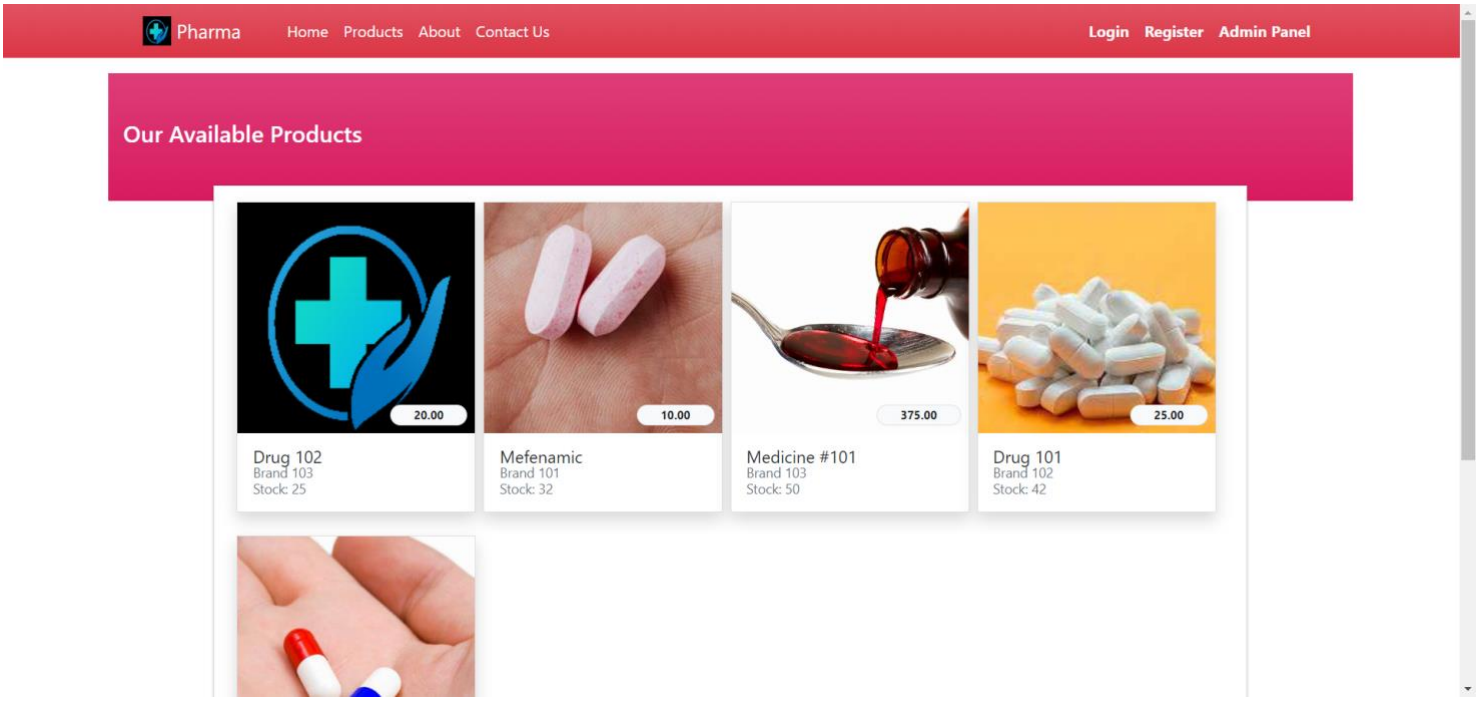
Manage Inventory

Unique Name	Manage Inventory
Actors:	Inventory Manager, Sales Team, Warehouse Staff, Pharmacist
Entry Conditions:	The Inventory Manager, Sales Team, Warehouse Staff, and Pharmacist have access to the online pharmacy's inventory
Exit Conditions	The inventory levels and restocking status of all products are accurately updated in the system, and all relevant stakeholders are notified of any updates or inventory issues.
Flow of Events:	1- All relevant stakeholders log into the inventory. 2- The system displays the current inventory levels and restocking needs for products. 3- The Inventory Manager selects a product to update and enters the new inventory level and restocking status. 4- The system sends a confirmation message to the Inventory Manager that the update was successful. 5- The Sales Team can request restocking for products they sell and communicate inventory needs with the Inventory Manager. 6- The Pharmacist can update prescription status and communicate prescription needs with the Inventory Manager. 7- Warehouse Staff receive notifications on what products to restock and when. 8- The Inventory Manager can view and manage all restocking requests and generate inventory reports.
Special Requirements	The system should be able to handle multiple inventory updates to be processed simultaneously, and should have security measures in place to prevent unauthorized access

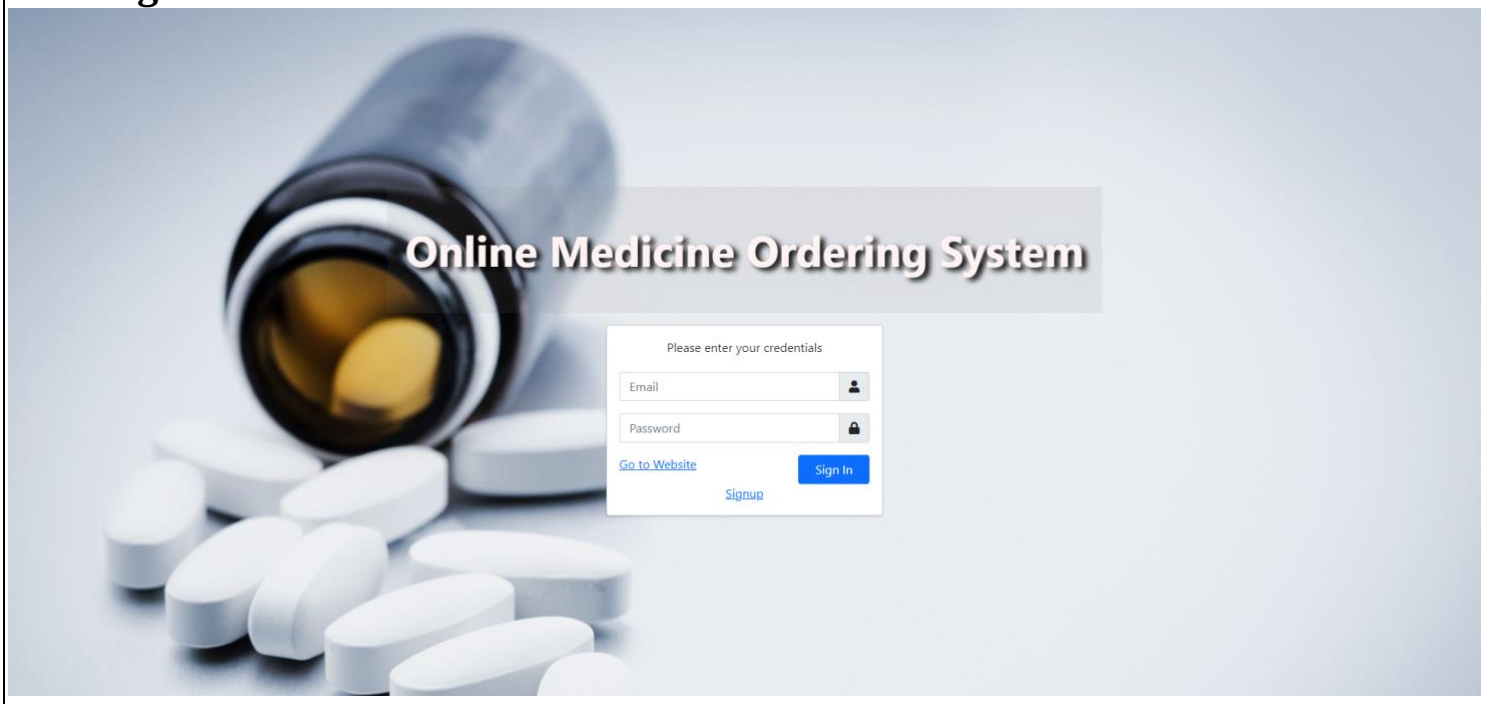
	to inventory data. The system should be able to generate reports on inventory levels, restocking needs, product demand, and prescription status to help the Inventory Manager, Sales Team, and Warehouse Staff make informed decisions about future inventory management. The system should allow for communication between the Inventory Manager, Sales Team, Pharmacist, and Warehouse Staff to discuss inventory needs and potential restocking strategies

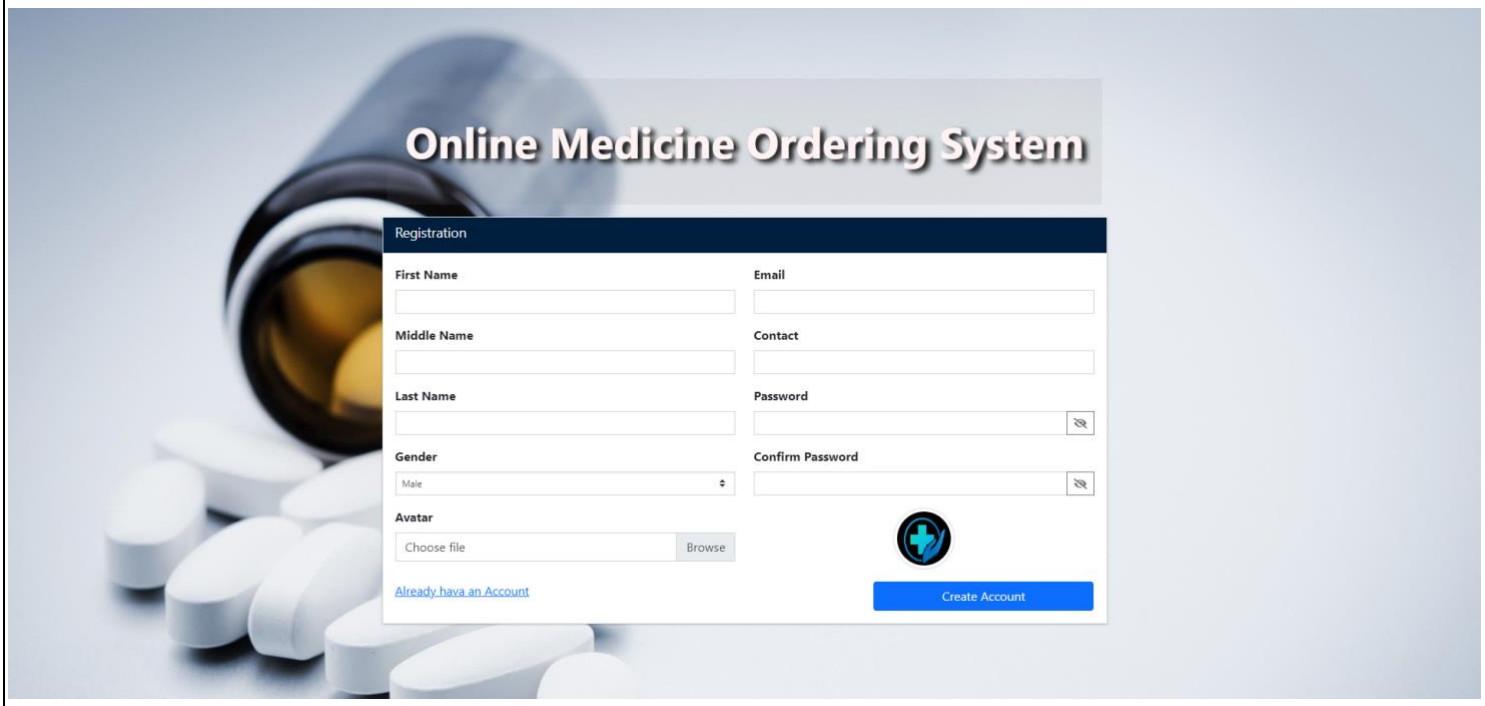
5. USER EXPERIENCE WIREFRAMES



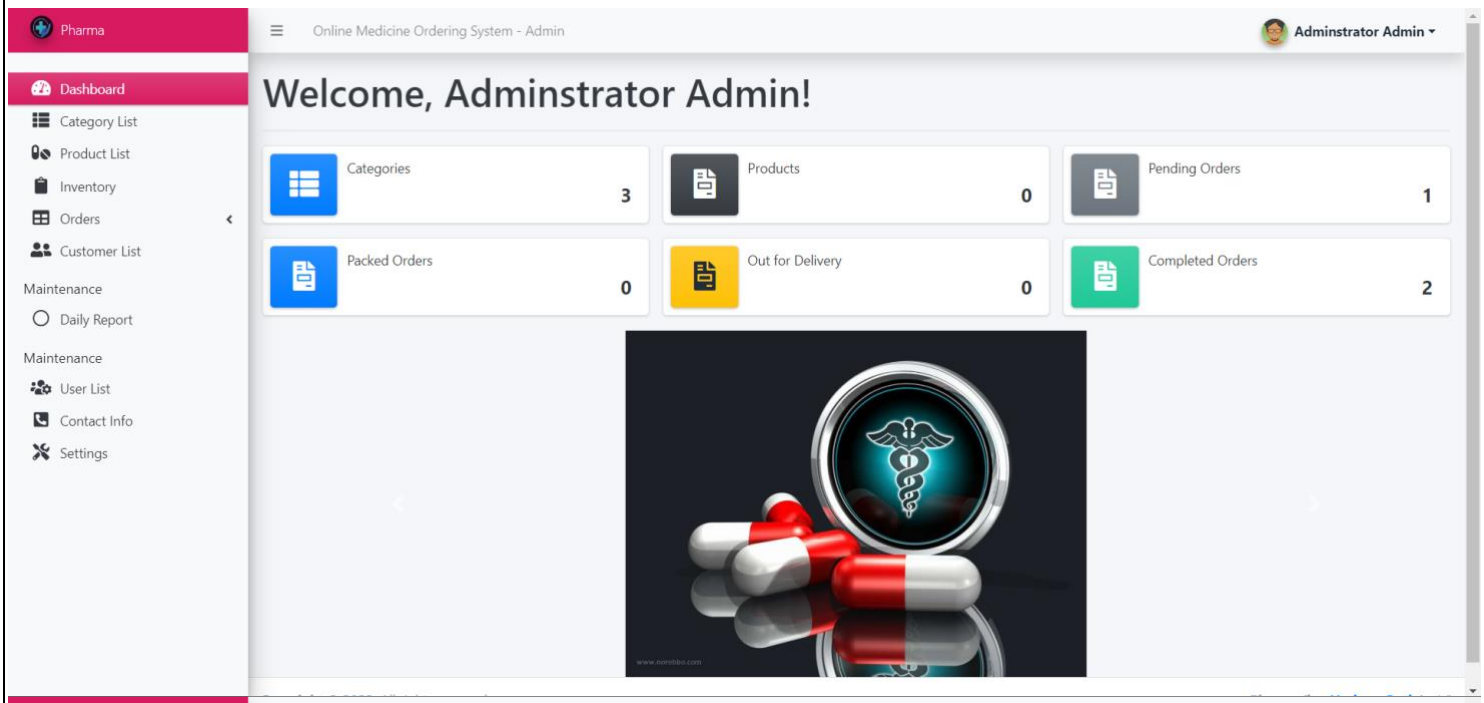


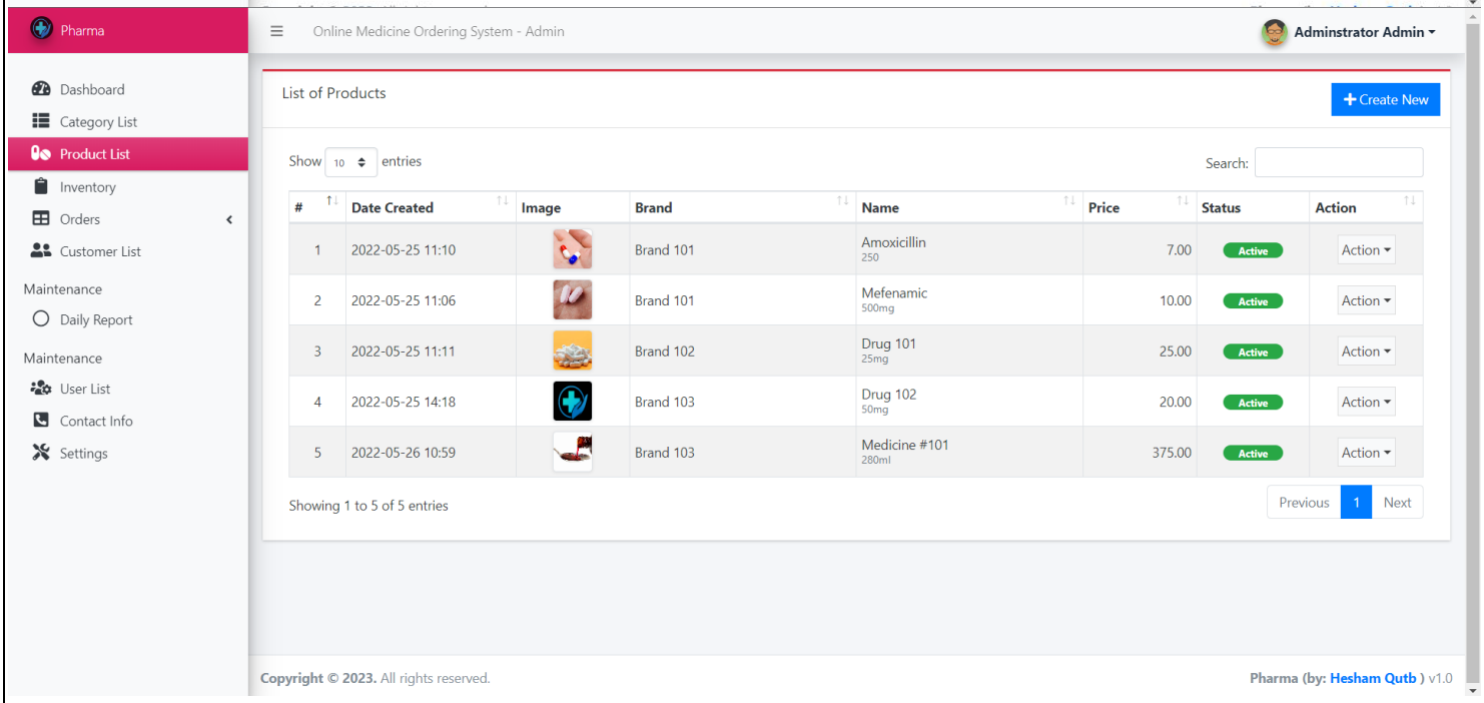
User login

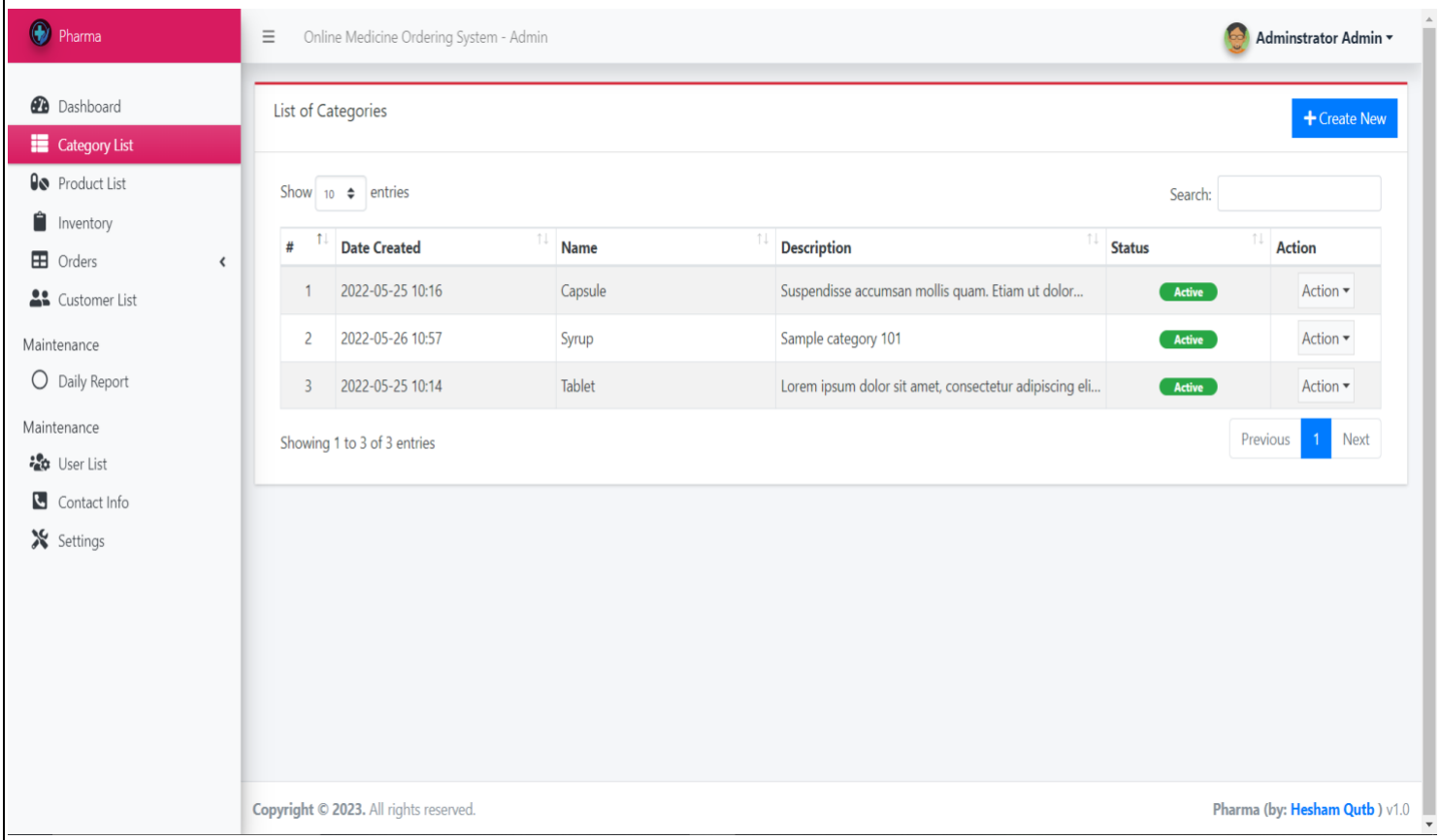

Online Medicine Ordering System
Please enter your credentials
Email
Password
Go to Website
Sign In
Signup


Online Medicine Ordering System
Registration
First Name
Email
Middle Name
Contact
Last Name
Password
Gender
Male
Confirm Password
Avatar
Choose file
Browse
Already hava an Account
Create Account

Admin Dashboard






Pharma
Online Medicine Ordering System - Admin
Adminstrator Admin
Dashboard
Category List
Product List
Inventory
Orders
Customer List
Maintenance
Daily Report
Maintenance
User List
Contact Info
Settings
List of Categories
+ Create New
Show 10 entries
Search:
Date Created Name Description Status Action
1 2022-05-25 10:16 Capsule Suspendisse accumsan mollis quam. Etiam ut dolor... Active Action
2 2022-05-26 10:57 Syrup Sample category 101 Active Action
3 2022-05-25 10:14 Tablet Lorem ipsum dolor sit amet, consectetur adipiscing eli... Active Action
Showing 1 to 3 of 3 entries
Previous 1 Next
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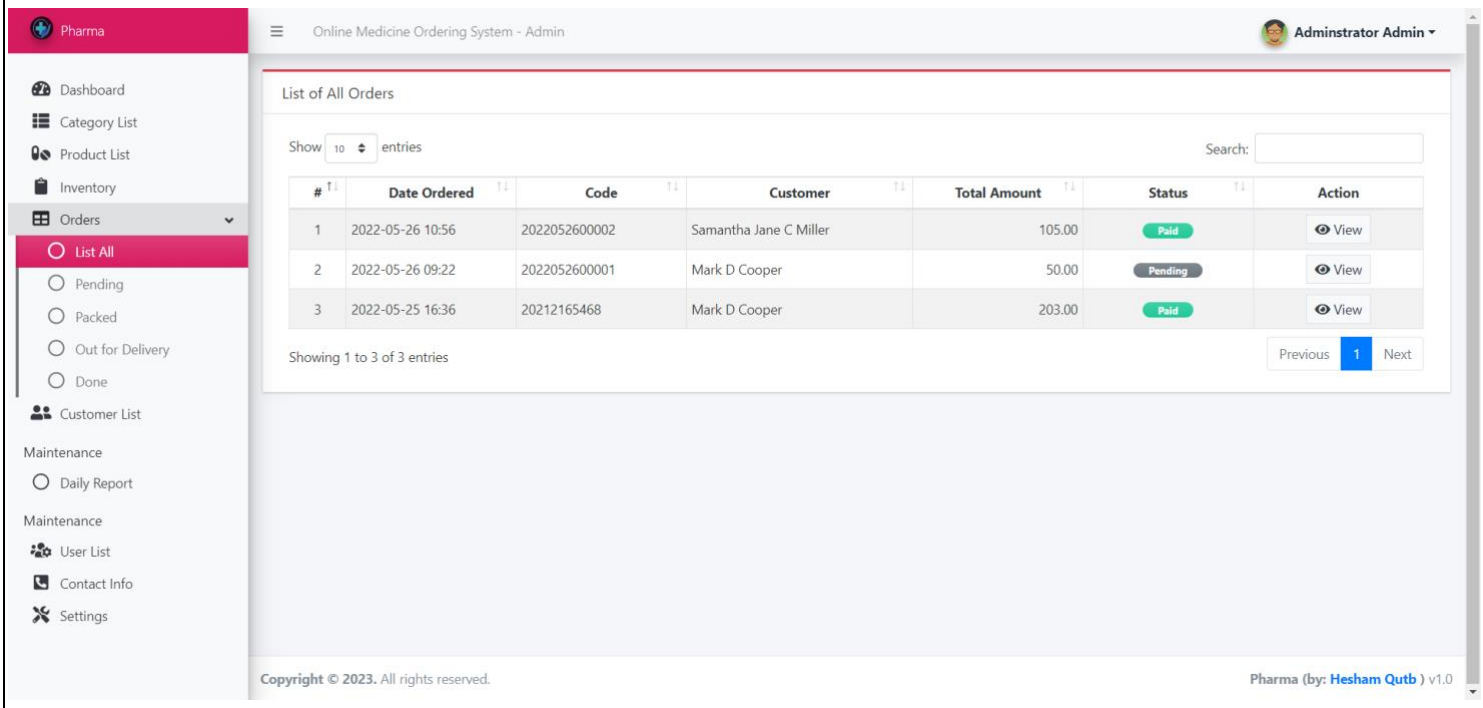
Pharma (by: Hesham Qutb) v1.0


Pharma
Online Medicine Ordering System - Admin
Adminstrator Admin
Dashboard
Category List
Product List
Inventory
Orders
List All
Pending
Packed
Out for Delivery
Done
Customer List
Maintenance
Daily Report
Maintenance
User List
Contact Info
Settings
List of All Orders
Show 10 entries
Search:
Date Ordered Code Customer Total Amount Status Action
1 2022-05-26 10:56 2022052600002 Samantha Jane C Miller 105.00 Paid View
2 2022-05-26 09:22 2022052600001 Mark D Cooper 50.00 Pending View
3 2022-05-25 16:36 20212165468 Mark D Cooper 203.00 Paid View
Showing 1 to 3 of 3 entries
Previous 1 Next
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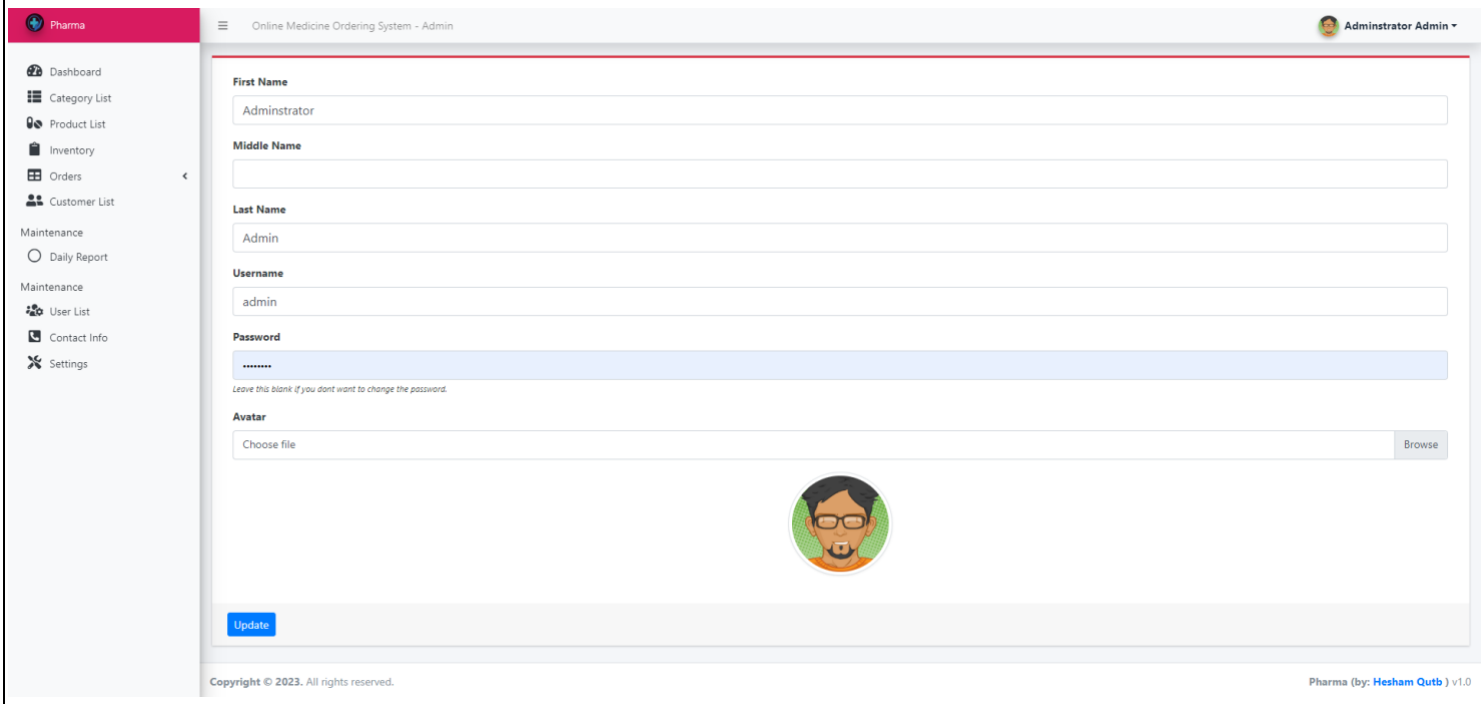
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Daily Report
Maintenance
User List
Contact Info
Settings
First Name
Adminstrator
Middle Name
Last Name
Admin
Username
admin
Password
Leave this blank if you dont want to change the password.
Avatar
Choose file
Browse
Update
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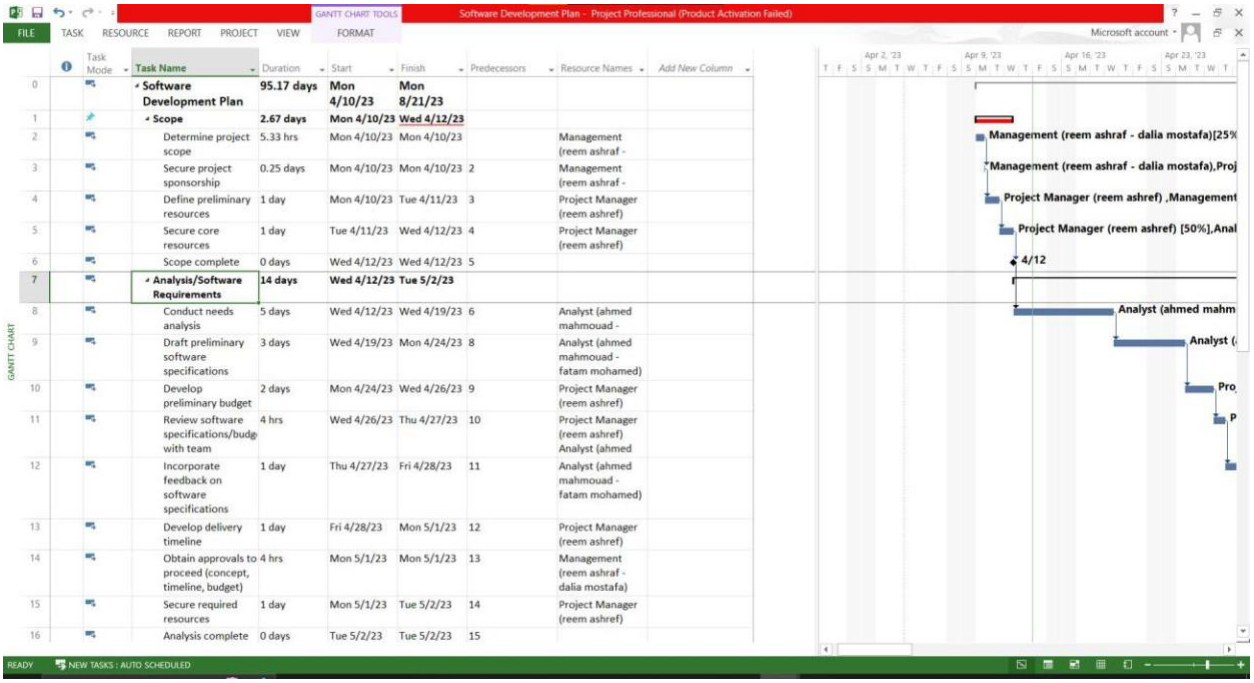
6. PROJECT ORGANIZATION

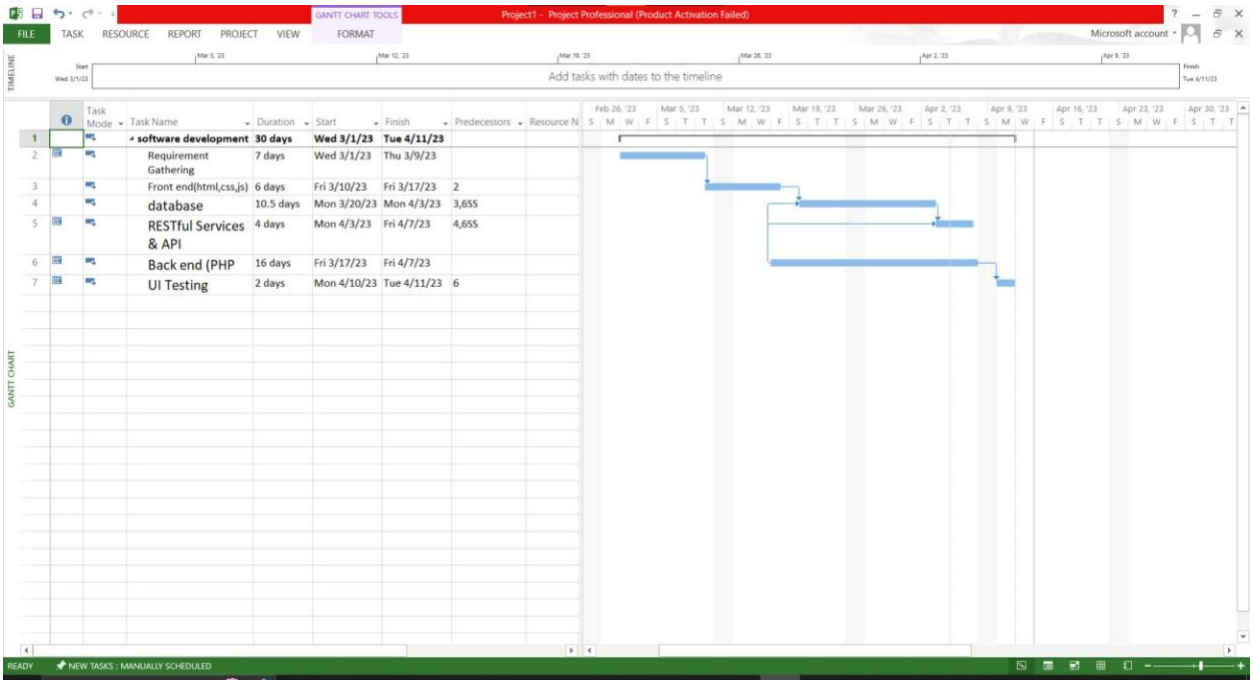
Matrix of Responsibilities

Tasks	Members	Head of task
Requirement Gathering	Reem ashraf-dalia mostafa – hesham qutb –fatma mohammed-ahmed mahmoud	Reem Ashraf
Front end(html,css,js)	Hesham Qutb	Hesham Qutb
Database(Mysql)	Fatma Mohammed	Fatma Mohammed
Project Architecture	Dalia mostafa- Hesham Qutb	Hesham Qutb
Back end (PHP)	Dalia Mostafa – Reem Ashraf- Ahmed Mahmoud	Dalia Mostafa
UI Testing	Ahmed Mahmoud- Dalia mostafa- Hesham Qutb	Hesham Qutb
QA Engieer	Reem Ashraf	Reem Ashraf
Product Owner	Quack Pharmacy	
Dev Team	Dalia Reem-ahmed-hesham	
Project Manager	Reem Ashraf	Reem Ashraf

PERT / Gantt Chart



	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names
0		**Software Development Plan**	**95.17 days**	**Mon 4/10/23**	**Mon 8/21/23**		
1		**Scope**	**2.67 days**	**Mon 4/10/23**	**Wed 4/12/23**		
2		Determine project scope	5.33 hrs	Mon 4/10/23	Mon 4/10/23		Management (reem ashraf -
3		Secure project sponsorship	0.25 days	Mon 4/10/23	Mon 4/10/23	2	Management (reem ashraf -
4		Define preliminary resources	1 day	Mon 4/10/23	Tue 4/11/23	3	Project Manager (reem ashref)
5		Secure core resources	1 day	Tue 4/11/23	Wed 4/12/23	4	Project Manager (reem ashref)
6		Scope complete	0 days	Wed 4/12/23	Wed 4/12/23	5	
7		**Analysis/Software Requirements**	**14 days**	**Wed 4/12/23**	**Tue 5/2/23**		
8		Conduct needs analysis	5 days	Wed 4/12/23	Wed 4/19/23	6	Analyst (ahmed mahmouad -
9		Draft preliminary software specifications	3 days	Wed 4/19/23	Mon 4/24/23	8	Analyst (ahmed mahmouad - fatam mohamed)
10		Develop preliminary budget	2 days	Mon 4/24/23	Wed 4/26/23	9	Project Manager (reem ashref)
11		Review software specifications/budg with team	4 hrs	Wed 4/26/23	Thu 4/27/23	10	Project Manager (reem ashref) Analyst (ahmed
12		Incorporate feedback on software specifications	1 day	Thu 4/27/23	Fri 4/28/23	11	Analyst (ahmed mahmouad - fatam mohamed)
13		Develop delivery timeline	1 day	Fri 4/28/23	Mon 5/1/23	12	Project Manager (reem ashref)
14		Obtain approvals to proceed (concept, timeline, budget)	4 hrs	Mon 5/1/23	Mon 5/1/23	13	Management (reem ashraf - dalia mostafa)
15		Secure required resources	1 day	Mon 5/1/23	Tue 5/2/23	14	Project Manager (reem ashref)
16		Analysis complete	0 days	Tue 5/2/23	Tue 5/2/23	15	



	Task Mode	Task Name	Duration	Start	Finish	Predecessors
1		**software development**	**30 days**	**Wed 3/1/23**	**Tue 4/11/23**	
2		Requirement Gathering	7 days	Wed 3/1/23	Thu 3/9/23	
3		Front end(html,css,js)	6 days	Fri 3/10/23	Fri 3/17/23	2
4		database	10.5 days	Mon 3/20/23	Mon 4/3/23	3,6SS
5		RESTful Services & API	4 days	Mon 4/3/23	Fri 4/7/23	4,6SS
6		Back end (PHP	16 days	Fri 3/17/23	Fri 4/7/23	
7		UI Testing	2 days	Mon 4/10/23	Tue 4/11/23	6

7. VALIDATION PLAN

The definition of done and success is:

1- Website can behave in a good way under load of 100 user as maximum in 1 second
2- When 1 person can go through the entire application from beginning to end.
3- When the project fulfills the following use cases:
    - The entire purchase process and options for the customer to enter what he orders
    - Create accounts on the site

Complete the online payment process

8. FEASIBILITY STUDY

- Are there skills missing?

No

Is there a language or architecture you want to learn or need for this application?

Yes, one of them learned mysql (jQuery)to use it in the work of the data base project, and another one learned php to make project backend

Risk Identification

1. Scope creep

Scope risk, occurs when the initial project objectives aren't well-defined. It's important to communicate your project roadmap with stakeholders from the beginning and hold firm to those parameters. If you don't communicate your project scope effectively, stakeholders may try to change requirements mid-project.

2. Low performance

Performance risk occurs when the project doesn't perform as well as initially expected. While you can't always identify the root cause of low performance, you can identify project risks that may lead to low performance and look for ways to prevent those risks. Examples of these risks include a time crunch and miscommunication among team members.

3. Time crunch

Time risk, also known as project schedule risk, is the risk that tasks in your project will take longer than expected. Delayed timelines might impact other things like your budget, delivery date, or overall performance. When you're not doing the work yourself across lots of moving pieces, it's easy to underestimate the time it'll take team members to complete a project during the initial planning phase.

4. Loss of traffic, SEO impact

In order to ensure the new site does not drop the level of traffic, we would recommend that you inventory current incoming URLs and include in the content migration plan time to create redirects that map the old URLs to new URLs. We've worked with clients who've experienced serious search traffic decline and can tell you, it's not fun. We put together a 2-part blog series on our best practices for fixing the problem- how to identify the search traffic decline and how to recover from a post-launch search decline.

5. Operational changes

Operational risk involves changes in company or team processes, like an unexpected shift in team roles, changes in management, or new processes that your team must adjust to. These things can create distractions, require adjustments in workflows, and may impact project timelines.

6. Lack of enterprise search product with content faceting

As user expectations of search continue to increase, the need for a true search product becomes more necessary. Thankfully something like Coveo for Sitecore is free to use, just make sure you set aside the time and money for the deployment, infrastructure and configuration. Training for search administrators would also be highly recommended. We're big fans of Coveo and tend to recommend it to most of our clients.

Risk Prioritization. Prioritize the list from highest to lowest.

1- Scope creep

2- Low performance

3- Time crunch

4- Operational changes

5- Loss of traffic, SEO impact

6- Lack of enterprise search product with content faceting

-The top 3 risks

1- Scope creep

2- Low performance

3- Time crunch

Risk Mitigation

1- scope creep

How to mitigate scope creep:

Creating clear project parameters from the start will strengthen your project scope. Agreeing upon the project scope and communicating that vision with stakeholders from the beginning will leave less room for scope creep. Scheduling regular progress check-ins can also ensure the project stays in line with the original project scope.

2- Low performance

How to mitigate low performance: Anticipating potential performance risks early on in the planning process can help you prepare. Using project management software lets you follow your processes in real time, plan your project thoroughly, and promote open communication between team members.

3- Time crunch

How to mitigate a time crunch:

To mitigate time risk, a rule of thumb is to overestimate the time needed to complete tasks in the planning phase and build in time contingency. That way, you'll have wiggle room for scheduling later on. You can also create a project schedule using a time line or Gantt chart . Having clarity into work, dependencies between work, and any delays can help project managers dynamically adapt to

time risk as it crops up. Understanding your project lifecycle can also help you determine how long each task will take.

9. CONFIGURATION AND VERSION CONTROL

1. Process: The version control process for an online pharmacy website should include the following steps:

- Identify the artifacts that need version control, such as source code, documentation, and design files.

- Choose a version control system (VCS) that is appropriate for the project, such as Git or Subversion.

- Create a repository in the VCS to store the artifacts.

- Define a branching strategy that outlines how changes will be managed and merged into the main codebase.

- Use a consistent naming convention for branches and commits to make it easy to track changes.

- Use a code review process to ensure that changes are reviewed and approved before they are merged into the main codebase.

- Use automated testing and continuous integration to ensure that changes do not introduce bugs or regressions.

2. Attributes: The version control system should have the following attributes:

- Ability to track changes to all project and product artifacts, including source code, documentation, and design files.

- Ability to create and manage branches to support parallel development and feature branching.

- Ability to merge changes from different branches and resolve conflicts.

- Ability to revert changes if necessary.

- Ability to tag releases and create release notes.

- Integration with other tools such as issue tracking and continuous integration.

- Access control to ensure that only authorized users can make changes to the repository.

10. TOOLS

1. Content management system (CMS): A CMS is used to manage the website's content, including product descriptions, images, and pricing.

2. E-commerce platform: An e-commerce platform is used to manage the website's online store, including product listings, shopping cart functionality, and payment processing.

3. Inventory management software: This software is used to track product inventory levels and ensure that the website accurately reflects product availability.

4. Customer relationship management (CRM) software: This software is used to manage customer data, including order history, preferences, and contact information.

5. Analytics tools: Analytics tools are used to track website traffic, user behavior, and sales data. This information can be used to optimize the website's performance and improve the user experience.

6. Marketing automation software: This software is used to automate marketing tasks such as email campaigns, social media posts, and targeted advertising.

7. Security tools: Security tools are used to protect the website from malicious attacks and unauthorized access. These may include firewalls, intrusion detection systems, and encryption tools.

8. Shipping and logistics software: This software is used to manage the shipping and delivery of products, including tracking and order fulfillment.

9. Point-of-sale (POS) system: A POS system is used to manage sales and inventory for physical store locations.

11. ARCHITECTURE

Three-tier architecture

While two-tier website architecture is sufficient for many businesses, you may need three-tier e-commerce website architecture if you handle many processes and require more functionality.

A three-tier architecture is a well-established software application architecture that groups applications into three logical, physical computing layers:

- The presentation layer or user interface.
- The application layer, in which data is processed.
- The data layer, where the information is related to the application.

Three-tier architecture offers greater flexibility than two-tier architecture in terms of platform configuration and deployment. This improves data integrity and provides a higher level of security, as the client lacks direct access to the database.

1. Web server: This component serves web pages to users and handles user requests. It may be a cluster of servers to handle high traffic.

2. Application server: This component runs the application code that generates dynamic content for the website. It may communicate with a database server to retrieve and store data.

3. Database server: This component stores and manages the website's data, including product information, user data, and transaction records. It may be a relational database like MySQL or PostgreSQL, or a NoSQL database like MongoDB or Cassandra.

4. Load balancer: This component distributes incoming traffic across multiple web servers to ensure that no single server is overloaded. It can also help improve website availability and scalability.

5. Content delivery network (CDN): This component caches website content on servers located around the world, allowing users to access the content more quickly and reducing the load on the web server.

6. Payment gateway: This component handles payment processing and ensures that transactions are secure and compliant with industry standards.

7. Inventory management system: This component tracks product inventory levels and updates the website in real-time to reflect product availability.

8. Customer relationship management (CRM) system: This component manages customer data, including order history, preferences, and contact information.

9. Security components: These components help protect the website from malicious attacks and unauthorized access. They may include firewalls, intrusion detection systems, and encryption tools.

10. Monitoring and logging tools: These components help track website performance, identify issues, and troubleshoot problems.