
Document Status: Approved

List of Abbreviations

DFD	Data Flow Diagram
E-R	Entity Relationship
RS	Requirement Specification

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1. Introduction

1.1 Purpose

This Project Aims at developing a Pharmacy Management System, which needs to manage transactions based on the requirements, which includes managing the inventory in the warehouse and keeping a check on the medicines sold and medicines in the stock. This Project also includes raising Invoices to the Retailers and billing to the patients who purchase the Medicines.

This automated system should support them in properly delivering the medicines on time for the patients without making them to wait for longer period

1.2 Scope

The Scope of the project is limited to Admin operations, Admin InCharge operations and Patient Operations.

Admin:- Admin handles the medicines in inventory and manages the stock up to date.

InCharge:- Accept the Orders from patients and Delivers the Medicines on Time, Updates the Stock data

Patient:- Can Register themselves and order the Medicines, keep track of ordered Items and access the Bills related to Medicines

1.3 Definitions, Acronyms and Abbreviations

Admin: - Owner the Pharmacy, Manage the Business operations related to stocks

InCharge :- Responsible for accepting the orders and Delivering Medicines on time.

Patient:- User of this application, can order Medicines and track the Status of order.

1.4 References

1.5 Coordinators

2. Software Requirements

2.1 Operational Requirements

Registration UI:

- Requirement 1: The Registration UI Should Provide secure signup functionality to register patients
- Requirement 2: The Registration UI should also provide a Login Page to securely authenticate users/patients and redirect them to Patient UI pages.

Patient/User UI:

- Requirement 1: The Patient Homepage UI should Provide a List of All medicines Available on Inventory.
- Requirement 2: It Should provide an Option to add the Medicines to the cart and place the Order.
- Requirement 3: The Patient UI should provide an option to track the Status of Ordered Items

- Requirement 4: the Patient UI also provides an Option to access Bills according to the Orders.

InCharge UI:

- Requirement 1: The InCharge UI also provides Option to View the List of Medicines available in the Stock
- Requirement 2: The InCharge UI also provides Option to view and accept the Orders from the patient
- Requirement 3: The InCharge UI also provides Option to Generate Bill to various Options based on Medicines availability in the Stock
- Requirement 4: The InCharge UI also Supports Updating of Medicines according to the Orders received.

Admin UI:

- Requirement 1: The Admin UI provides List of Medicines available in the Stock
- Requirement 2: It provides an Option to Place a order for New Medicines from Retailers
- Requirement 3: The Admin UI also provides an Option to generate Bills based on Items Ordered.
- Requirement 4: It also provides an option to add a new scheme for medicines.

2.2 Functional Requirements

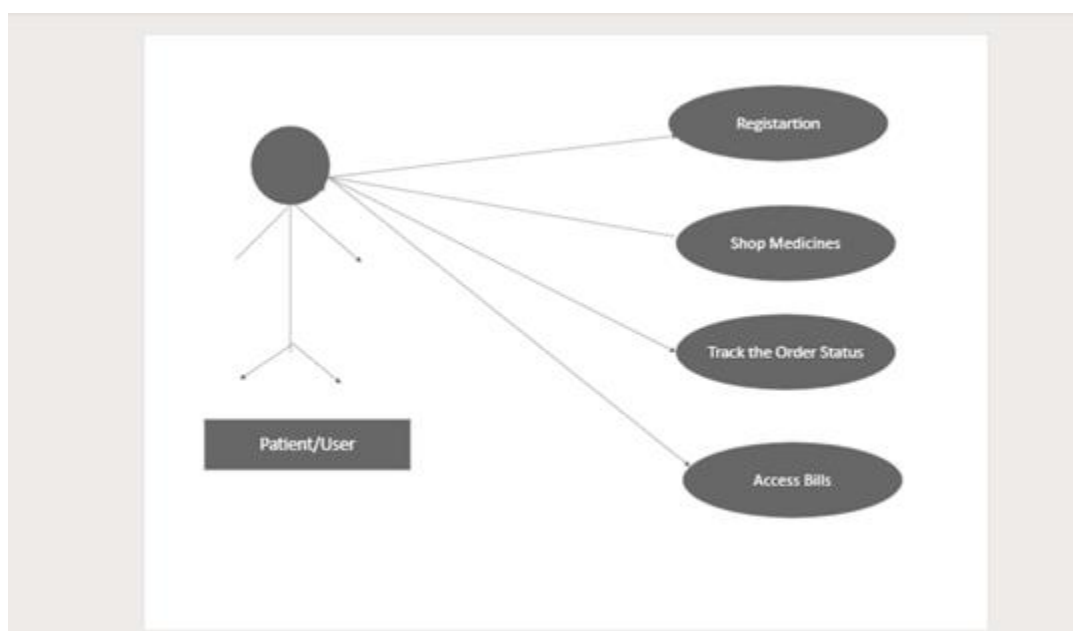


FIGURE 2.2.1 PATIENT USE CASE DIAGRAM FOR PHARMACY MANAGEMENT SYSTEM

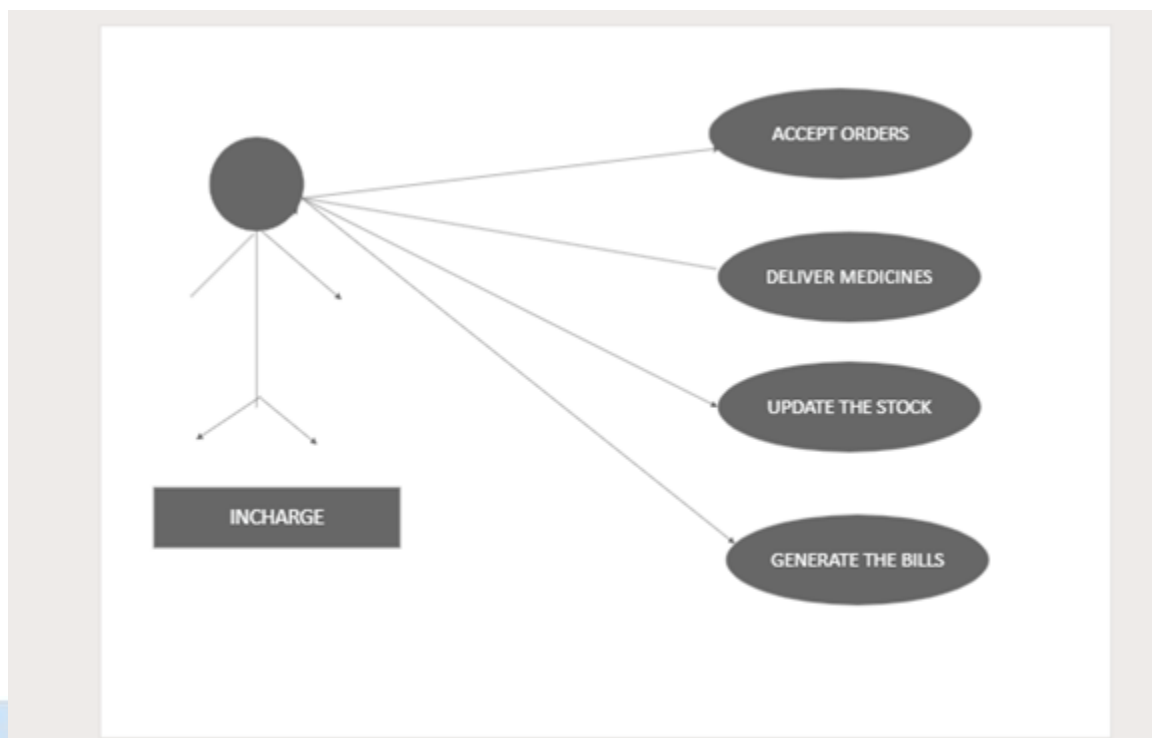


FIGURE 2.2.2 INCHARGE USE CASE DIAGRAM FOR PHARMACY MANAGEMENT SYSTEM

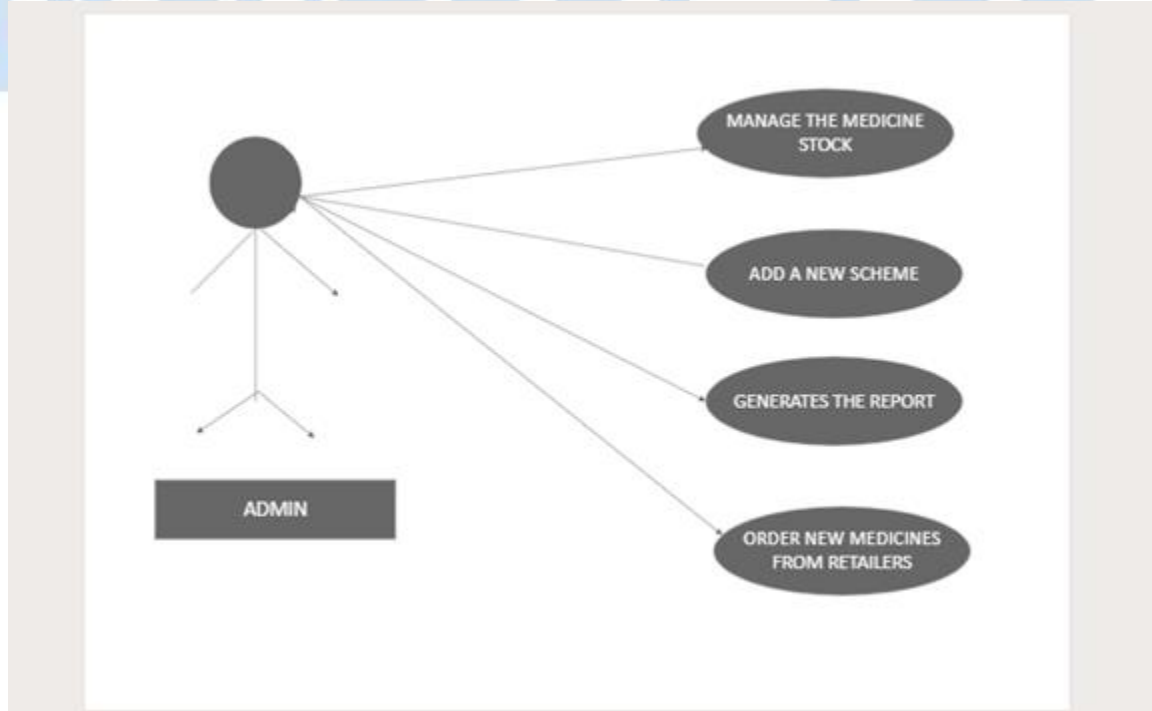


FIGURE 2.2.3 ADMIN USE CASE DIAGRAM FOR PHARMACY MANAGEMENT SYSTEM

New Vehicle Registration

Requirement Tag ID	RS-1-1	
Source/Trigger	Registartion UI	
Description	Input	Email and Password
	Process	The system verifies the entered credentials against stored User credentials and grants access if valid
	Output	On Successful authentication and access to the Patient Home Page UI.
Validation Method	Verify the correctness of patient credentials, authenticate against stored data, and handle incorrect login attempts.	

Requirement Tag ID	RS-1-2	
Source/Trigger	Patient UI - Add Medicines to cart and place order	
Description	Input	List of Medicines available in inventory Stock
	Process	Patient/user can choose wide range of medicines available in the stock and add them into cart. To proceed to place and order
	output	Indication of successfully addition of Order into the order Details
Validation Method	Ensures that the required quantity of medicines entered and placed the order successfully.	

Requirement Tag ID	RS-1-3	
Source/Trigger	Patient UI - View the Order Details and access the Bills	
Description	Input	Patient Login credentials are enough
	Process	Upon successful placement of order, patient can access the list of orders and delivery status and also expected date of delivery along with total bill
	output	Display the List of orders placed by a particular user and provide essential information about the orders.
Validation Method	InCharge Ensures that all ordered medicines are available in stock and generates a bill and starts the delivery process.	

Requirement Tag ID	RS-1-4	
Source/Trigger	InCharge UI - Home Page	
Description	input	InCharge Login credentials [Email and Password]

	<i>Process</i>	<i>Upon successful login the system shows the list of medicines available in the stock and an option to update the Stock. Along with Orders received from patients</i>
	<i>output</i>	<i>can accept the orders and update the stock details.</i>
<i>Validation Method</i>	<i>based on order details InCharge can generate bills and update the stock by validating against the orders</i>	

<i>Requirement Tag ID</i>	<i>RS-1-5</i>	
<i>Source/Trigger</i>	<i>InCharge UI - Accept the Orders</i>	
<i>Description</i>	<i>input</i>	<i>Orders received from the patients</i>
	<i>process</i>	<i>InCharge should cross check with available medicines and ordered medicines, then generate bill accordingly</i>
	<i>output</i>	<i>Confirmation of delivery and change in the status of orders in patient UI.</i>
<i>Validation Method</i>	<i>validate the stocks and also orders from the patients and accept the orders accordingly.</i>	

<i>Requirement Tag ID</i>	<i>RS-1-6</i>	
<i>Source/Trigger</i>	<i>InCharge UI - Update the Stock Details</i>	
<i>Description</i>	<i>Input</i>	<i>completed orders from orders page</i>
	<i>Process</i>	<i>InCharge should update the stock details upon successful delivery of Order</i>
	<i>Output</i>	<i>Change the amount of stock available in stocks</i>
<i>Validation Method</i>		

<i>Requirement Tag ID</i>	<i>RS-1-7</i>	
<i>Source/Trigger</i>	<i>Admin UI - Home page UI</i>	
<i>Description</i>	<i>Input</i>	<i>Admin Credentials in Enough to Login</i>
	<i>Process</i>	<i>Upon successful login Admin can see a set of details like available stock, yet to completed stock, completed stock.</i>
	<i>Output</i>	<i>Provides option to order new medicines from retailers and an option to generate bills, adding a new scheme</i>
<i>Validation Method</i>	<i>Validate the credentials and provide all stock inventory data.</i>	

<i>Requirement Tag ID</i>	<i>RS-1-8</i>	
<i>Source/Trigger</i>	<i>Admin UI - Order Medicines Page UI</i>	

<i>Description</i>	<i>Input</i>	<i>Admin Credentials are enough</i>
	<i>Process</i>	<i>Admin can order new medicines from retailers which are required, based on the stock existing.</i>
	<i>Output</i>	<i>Confirmation of order, admin can be able to generate an invoice related to a particular order.</i>
<i>Validation Method</i>	<i>Validate all required fields and generate the invoice upon successful placement of order.</i>	

Requirement Tag ID	RS-1-9	
Source/Trigger	Admin UI - Add a New Scheme Page UI	
<i>Description</i>	<i>Input</i>	<i>Admin credentials is Enough</i>
	<i>Process</i>	<i>Admin can add a new scheme and choose the medicines this scheme should apply for and submit the details</i>
	<i>Output</i>	<i>Upon successful submission of Scheme medicines data will be changed.</i>
<i>Validation Method</i>	<i>validates all required fields and verify the Details.</i>	

2.3 User Interface Requirements


Login UI :




Pharma Health

Login Here to Continue

Email



Password



LOGIN

Don't have an account? [Register here](#)

Registration UI:

Welcome To Pharma Health



Register Here to Continue

Name

Email

Password

Confirm Password

REGISTER

Admin Home UI:

Health Sure Pharmacy
LOGOUT

- Home
- Add New Scheme
- Generate Reports
- Add New Medicine
- Order New Medicines

Welcome to Admin home page

Sold Out
Quantity: 0

Yet to Sold Out
Quantity: 0

Fully Available
Quantity: 2

Sort By

Filter By

CLEAR

Medicine ID

1

Medicine Name

Paracetamol

Description

For headache

Manufacturer

Medicine ID

3

Medicine Name

Dolo

Description

Relief

Manufacturer

Admin Add New Scheme UI:

Health Sure Pharamcy LOGOUT

Home

Add New Scheme

Generate Reports

Add New Medicine

Order New Medicines

Scheme Name

SchemeType

Choose Option

Start Date

mm/dd/yyyy

End Date

mm/dd/yyyy

RESET

SUBMIT

Admin Generate Reports UI:

Health Sure Pharamcy LOGOUT

Home

Add New Scheme

Generate Reports

Add New Medicine

Order New Medicines

<input type="checkbox"/>	Medicine Name	Retailer Name	Date of Order	Delivery Address	Quantity
<input type="checkbox"/>	Paracetamol	KL Pharma	2023-08-22T09:18:53.140+00:00	Indira Nagar, Bengaluru	50000
<input type="checkbox"/>	Dolo	Arif Bhai	2023-08-22T09:29:52.217+00:00	Indira nagar	60000
<input type="checkbox"/>	IbuProfin	KL Pharma	2023-08-22T09:39:58.497+00:00	Hyderabad	7000

Rows per page 10 1-3 of 3

DOWNLOAD RECEIPT

localhost:3000/generatereport

Admin Add New Medicine UI

Health Sure Pharmacy

LOGOUT

Home

Add New Scheme

Generate Reports

Add New Medicine

Order New Medicines

Medicine ID

SEARCH

Medicine Name

Medicine Description

Manufacturer Name

Stock Quantity

Unit Price

Expiry Date
mm/dd/yyyy

Choose File No file chosen

RESET

SUBMIT

localhost:3000/AddMedicine

Admin Order New Medicines UI

Health Sure Pharmacy

LOGOUT

Home

Add New Scheme

Generate Reports

Add New Medicine

Order New Medicines

Order Medicine

Medicine Name

Strength or Dosage (Optional)

Quantity

Retailer Name

Delivery Address

Instructions (Optional)

RESET

SUBMIT

localhost:3000/OrderMedicines


InCharge Home Page UI

Health Sure

Home

Order Details

Generate Bills



Paracetamol


Manufacturer: JKL Pharma

Cost: 2

Available: 7050

Sold:

UPDATE



Dolo

Manufacturer: JKL Pharma

Cost: 5

Available: 40000

Sold:

UPDATE

Welcome to Incharge home page

Search by Medicine Name or Manufacturer

CLEAR

localhost:3000/home

InCharge Order Details Page UI

Health Sure

Home

Order Details

Generate Bills

Patient Name	Order Id ↑	Delivery Date	Total Amount	Status	Set Status
kousil	1	August 24, 23	5	Shipped	<div></div>

Medicines

Medicine Name	Quantity	Unit Price	Manufacturer Name
Paracetamol	1	5	JKL Pharma

kousil	2	August 23, 23	500	Processing	<div></div>
kousil	3	August 23, 23	35000	Confirmed	<div></div>
kousil	4	August 24, 23	2	Confirmed	<div></div>

InCharge Generate Bills Page UI:

QST-SQA-22; Ver 1.0

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Internal LLD

Health Sure
LOGOUT

Home
 Order Details
 Generate Bills

Patient Name	Order Id	Date of Order ↑	Total Amount	Actions
kousil	1	August 24, 23	5	^

Order ID: 1
 Delivery Date: August 24, 23
 Status: Shipped
Medicines:

- Name: Paracetamol
 Manufacturer: JKL Pharma
 Quantity Ordered: 1
 Unit Price: 5

GENERATE INVOICE

Patient Home Page UI:

Health Sure
LOGOUT

Home
 Delivery Status
 Access Bills

Welcome to the user home page

Sort By ▼
 Filter By Show All ▼

CLEAR

Paracetamol
 Manufacturer: JKL Pharma
 Current Price: 2
 Quantity:

ADD TO CART

Dolo
 Manufacturer: JKL Pharma
 Current Price: 5
 Quantity:

ADD TO CART

Patient Delivery Status Page UI:

QST-SQA-22; Ver 1.0

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03/07/2023

Internal LLD

Health Sure
LOGOUT

Home

Delivery Status

Access Bills

Order Id	Date of Booking ↑	Date of Delivery	Amount	Current Status								
2	August 23, 23	August 23, 23	500	Processing								
<table> <thead> <tr> <th>Medicine Name</th> <th>Quantity</th> <th>Unit Price</th> <th>Manufacturer Name</th> </tr> </thead> <tbody> <tr> <td>Paracetamol</td> <td>100</td> <td>5</td> <td>JKL Pharma</td> </tr> </tbody> </table>					Medicine Name	Quantity	Unit Price	Manufacturer Name	Paracetamol	100	5	JKL Pharma
Medicine Name	Quantity	Unit Price	Manufacturer Name									
Paracetamol	100	5	JKL Pharma									
3	August 23, 23	August 23, 23	35000	Confirmed								
1	August 24, 23	August 24, 23	5	Shipped								

Rows per page: 3 1-3 of 5

Patient Access Bills Page UI:

Health Sure
LOGOUT

Home

Delivery Status

Access Bills

Order Id	Date of Booking ↑	Date of Delivery	Amount	Status
1	August 24, 23	August 24, 23	5	Shipped

Order ID: 1
Delivery Date: August 24, 23
Status: Shipped
Medicines:

- Name: Paracetamol
- Manufacturer: JKL Pharma
- Quantity Ordered:
- Unit Price: 5

DOWNLOAD INVOICE

2	August 23, 23	August 23, 23	500	Processing
3	August 23, 23	August 23, 23	35000	Confirmed

Patient Cart Page UI

Health Sure LOGOUT

Home

Delivery Status

Access Bills

We Deliver On Time

Medicine : Paracetamol

manufacturer : KL Pharma
Cost :2.5
Quantity:

Medicine : Dolo

manufacturer : JKL Pharma
Cost :1.0
Quantity:

Total amount: 350.00

CHECKOUT

localhost:3000/home

2.4 External Interface Requirements

NA

3. Project Execution Related Requirements

3.1 Development Environment

Technologies to be used for development of the Application:

- React JS
- Material UI
- Axios
- Java Script, HTML, CSS

Software tools that can be used for development:

- VS Code
- STS (Spring tool Suite).

3.2 Design requirements

3.3 Coding requirements

Since, entire application is being coded in React Js, Material Ui, Axios, JavaScript, Java, Spring and Microservice are certainly applicable here.

3.4 Error handling requirements

3.5 Resource Requirements

Technologies to be used for development of the Application:

- React JS
- Material UI
- Axios
- Java Script, HTML, CSS

3.6 Training Requirements

- Since the application being developed is greatly dependent on user interaction, the end user should be comfortable with GUI.
- End user should be given a walkthrough of the working of the entire application alone. Training should be provided with respect to efficient GUI usage.

4. Testing Requirements

5. Quality Assurance Activities

6. Software Acceptance Criteria

7. Deliverables

7.1 List of Deliverables

UI Screen for: -

- Admin Module
- Add Medicine Module
- Order New Medicine Module
- Generate Reports Module.
- Add A scheme Module.
- List of Orders Module
- Order Bill generation module.
- Order new Medicines Module
- Track the Order Module
- Access Bills Module.

7.2 Delivery

Delivered Front end design UI screens of Whole Pharmacy management application.

8. Requirements Acceptance Statement

Requirements Acceptance statement consists of agreement to the above-mentioned requirement by the customer & supplier

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