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# **Revision / Document History**

Ver.	Date	Changed by	Modifications
1.0	28/07/2023	Kousil Lakkapragada	

## **List of Abbreviations**

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

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#### Introduction 1.

#### 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 also 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 also 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

Not Applicable

#### 1.5 Coordinators

1.

2.

#### 2. **Software Requirements**

#### 2.1 **Operational Requirements**

Registration UI:

- Requirement 1: The Registration UI Should Provide secure signup functionality to register
- Requirement 2: The Registration UI should also provide 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 List of All medicines Available on Inventory.
- Requirement 2: It Should provide an Option to add the Medicines to the cart and and place the Order.

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- 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
- Requirement2: 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 on medicines.

## 2.2 Functional Requirements

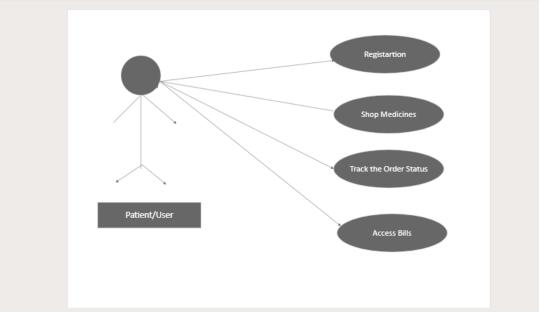


FIGURE 2.1 PATIENT USE CASE DIAGRAM FOR PHARMACY MANAGEMENT SYSTEM

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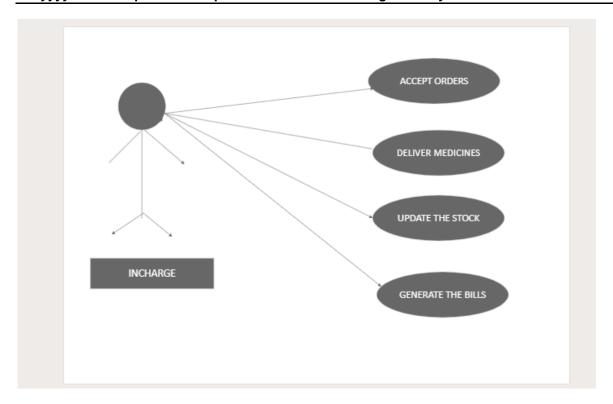


FIGURE 2.2 INCHARGE USE CASE DIAGRAM FOR PHARMACY MANAGEMENT SYSTEM

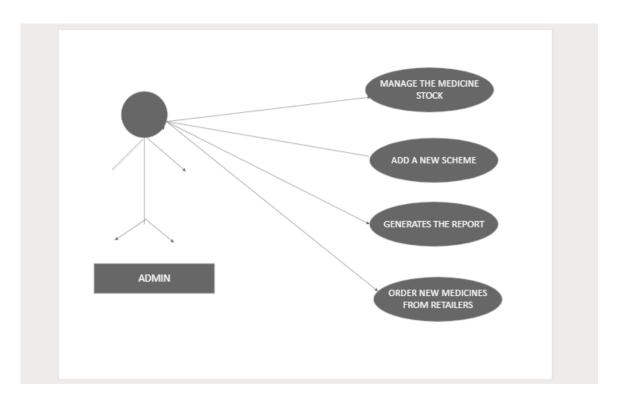


FIGURE 2.3 ADMIN USE CASE DIAGRAM FOR PHARMACY MANAGEMENT SYSTEM

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Requirement Tag ID	RS-1-1	
Source/Trigger	Registarton 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 corre	ectness of patient credentials, authenticate against stored
	data, and handl	le incorrect login attempts.

Requirement Tag ID	RS-1-2	
Source/Trigger	Patient UI - Ad	d 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 - V	iew 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	U	ures that all ordered medicines are available in stock and ill 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]
	Process	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
	output	can accept the orders and update the stock details.
Validation Method	based on order	r details incharge can generate bills and update the stock by
	validating aga	inst the orders

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

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

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

Requirement Tag ID	RS-1-8	
Source/Trigger	AdminUI - Order	r Medicines Page UI
Description	Input	Admin Credentials are enough
	Process	Admin can order new medicines from retailers which are required, based on the stock existing.
	Output	Confirmation of order, admin can be able to generate an invoice related to a particular order.
Validation Method	Validate all requ	ired fields and generates the invoice upon successful
	placement of orde	er.

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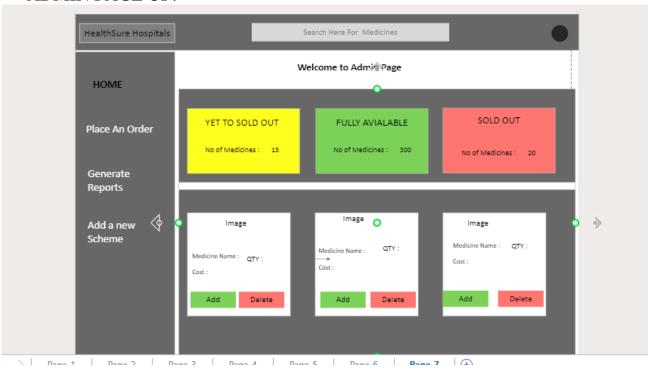
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Source/Trigger	AdminUI - Add a New Scheme Page UI		
Description	Input	Admin credentials is Enough	
	Process	Amdin can add a new scheme and choose the medicines the this scheme should apply for and submit the details	
	Output	Upon successful submission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

#### **User Interface Requirements** 2.3

### **ADMIN PAGE UI:**



Add New Scheme Page UI:

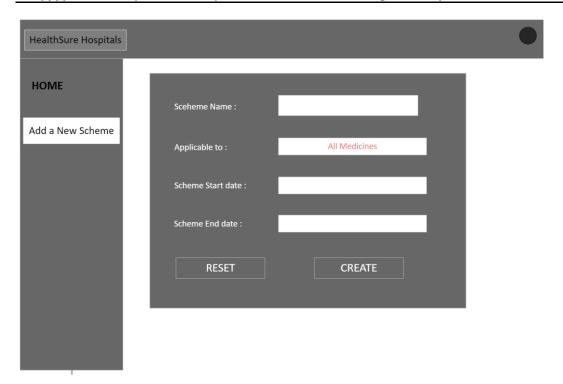
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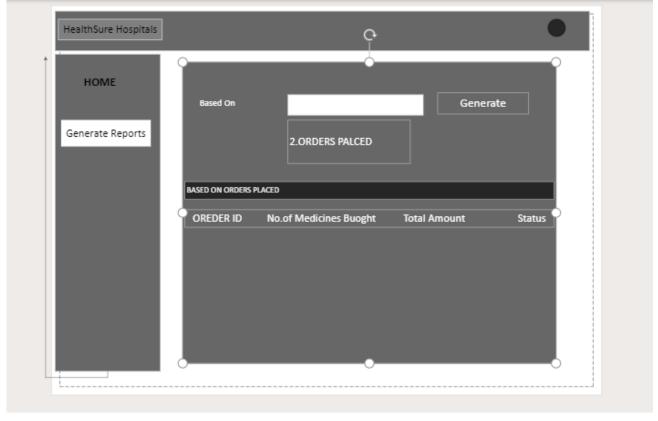
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## Generate Reports page UI:



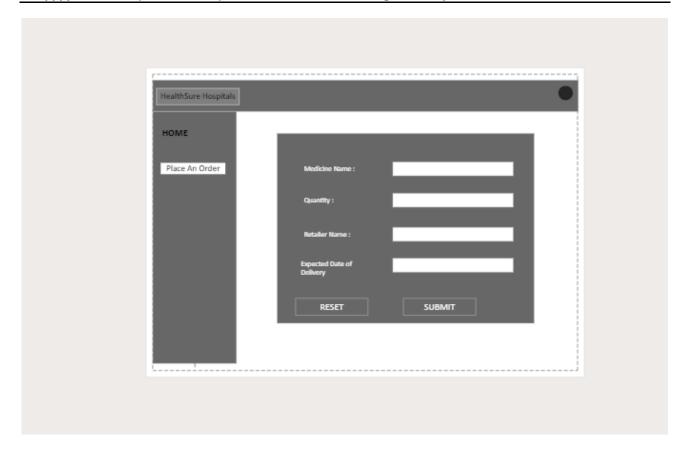


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## InCharge UI:

InCharge Home Page UI:

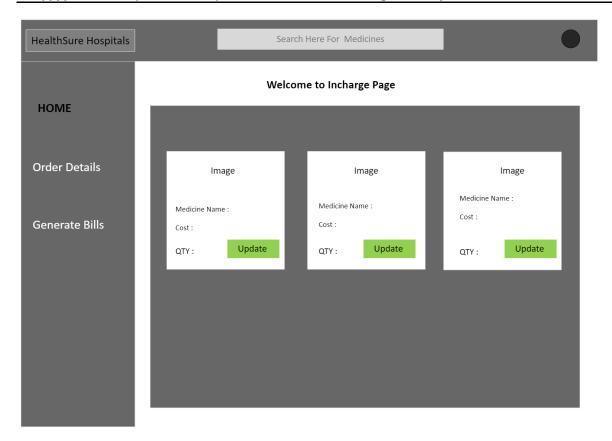
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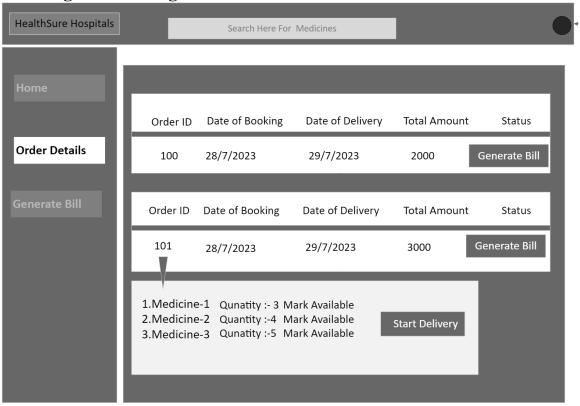
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## In Charge Orders Page UI:



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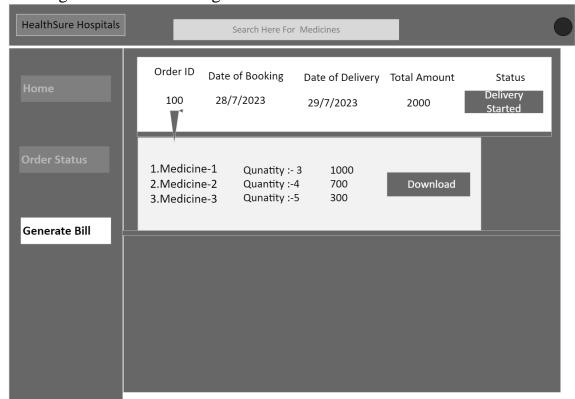
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InCharge Generate Bills Page UI:



## **Patient UI Pages:**

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Patient UI Login Page:



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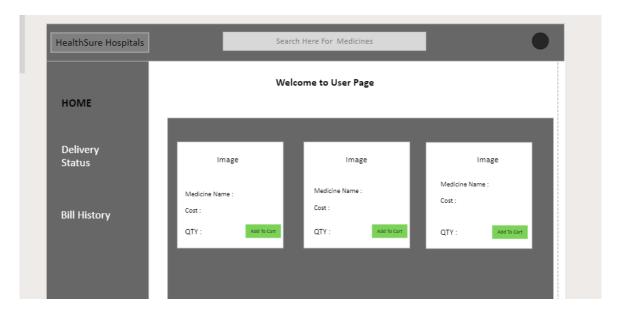
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Patient Home Page UI:



Patient Delivery Status page UI:

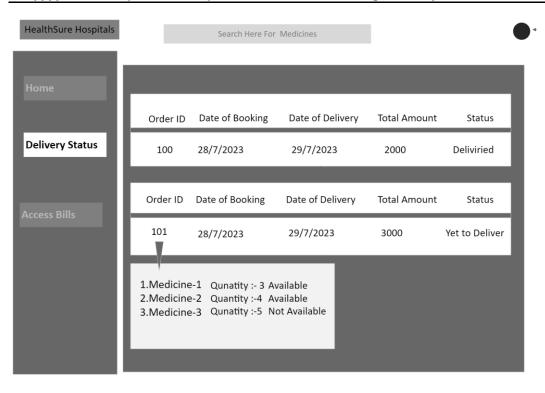
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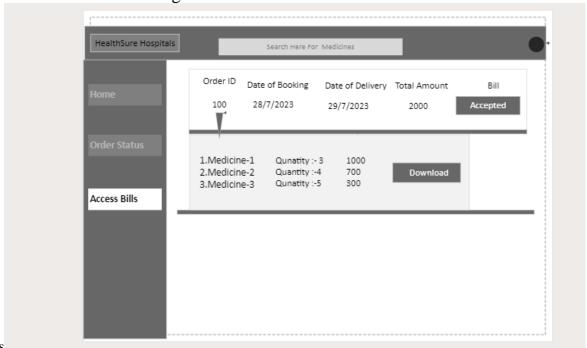
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Patient Access Bills Page UI:



#### **External Interface Requirements** 2.4

NA

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# 3. Project Execution Related Requirements

## 3.1 Development Environment

Technologies to be used for development of the Application:

- React JS
- Material UI
- Axios
- Java, Spring boot, Mongodb

Software tools that can be used for development:

- VS CODE [Visual Studio]
- STS[ Spring tool suite]

## 3.2 Design requirements

Not applicable.

## 3.3 Coding requirements

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

## 3.4 Error handling requirements

NA

## 3.5 Resource Requirements

*Technologies to be used for development of the Application:* 

- React JS
- Material UI
- Axios
- Java Script,
- Java
- SpringBoot
- MongoDB

### 3.6 Risk management

Not applicable.

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#### **3.7 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 along. Training should be provided with respect to efficient GUI usage.

#### 4. **Testing Requirements**

### **5. Quality Assurance Activities**

NA

#### **Software Acceptance Criteria** 6.

#### **Deliverables** 7.

#### 7.1 List of Deliverables

Not applicable

#### 7.2 **Delivery**

Not Applicable

#### 8. **Requirements Acceptance Statement**

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

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