

A woman with dark hair, wearing a dark blue medical-style uniform with a name tag, is looking off to the side with a serious expression. In the background, there's a large screen showing a close-up of a DNA double helix structure. The overall lighting is dim, with a blue tint.

COMMUNITY HEALTHCARE

INFO-5100

Team Members:
Manali Sanjay Raut
Shreya Raut
Kunal Singh Pundir



OUR BIG IDEA

Our mission is to be the foremost leader in online healthcare, dedicated to delivering personalized healthcare services that cater to the individual needs and expectations of every patient Globally.



PROBLEM STATEMENT

The problem statement highlights the challenges in current healthcare systems, including fragmented patient data, inefficient appointment scheduling, delayed diagnosis and treatment, limited emergency service accessibility, ineffective medicine supply chain management, and insufficient government oversight. To address these issues and enhance healthcare quality and efficiency, a comprehensive Healthcare Management System is needed.

1. Fragmented patient data: Information scattered across systems, hindering care coordination.
2. Inefficient appointment scheduling: Centralized system needed to prevent conflicts, long waits, and missed appointments.
3. Delayed diagnosis and treatment: Incomplete records and coordination issues impact patient health.
4. Limited emergency service access: Communication barriers and dispatch inefficiencies hinder access.
5. Ineffective medicine supply chain: Poor tracking leads to medication shortages.
6. Insufficient government oversight: Inadequate reporting and transparency in healthcare.

PROPOSED SOLUTION

1. Doctor Management:

1. Implement a user-friendly interface for doctors to view and manage their schedules.
2. Integrate a system for handling blood test requests and issuing prescriptions digitally.
3. Include notification features to alert doctors about upcoming appointments or urgent test requests.

2. Patient Management:

1. Develop a secure patient portal where they can schedule appointments and request emergency ambulance services.
2. Provide functionalities for patients to view their lab reports, prescriptions, and donate blood.
3. Implement a feedback system for continuous improvement based on patient experiences.

3. Lab Centers:

1. Create a streamlined process for managing and prioritizing test requests.
2. Establish a secure system for uploading and accessing lab results.
3. Integrate with Doctor and Patient Management modules for seamless information flow.

PROPOSED SOLUTION (CONTINUED...)

4. Blood Donation Management:

1. Develop a database to track blood donations and donor information.
2. Implement a matching algorithm to efficiently manage blood type compatibility and urgency.
3. Integrate with Patient Management for potential donors to sign up and track their donation history.

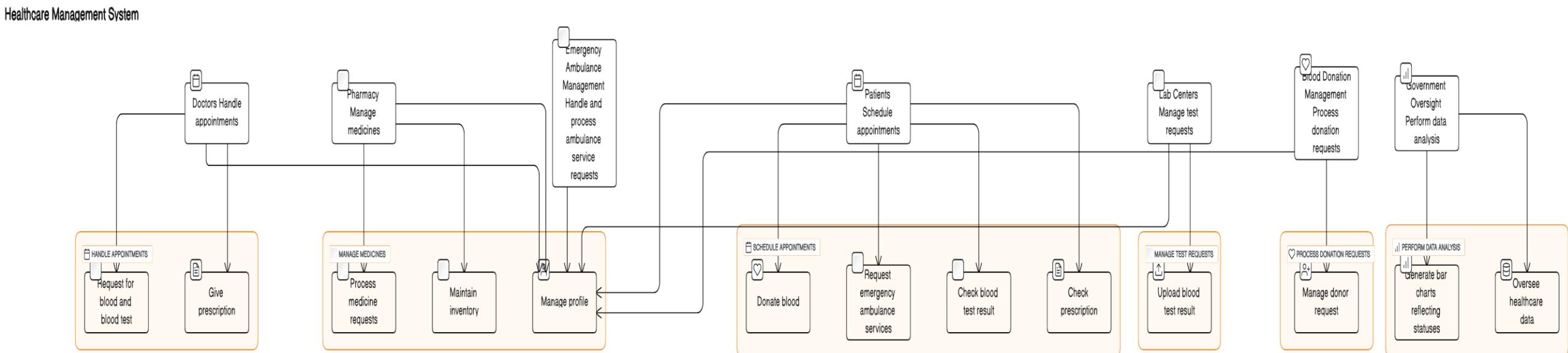
5. Emergency Ambulance Management:

1. Design a real-time tracking system for ambulance locations and availability.
2. Include a feature for emergency dispatch based on location proximity and urgency.
3. Ensure seamless communication channels between patients, dispatchers, and ambulance personnel.

6. Pharmacy Management:

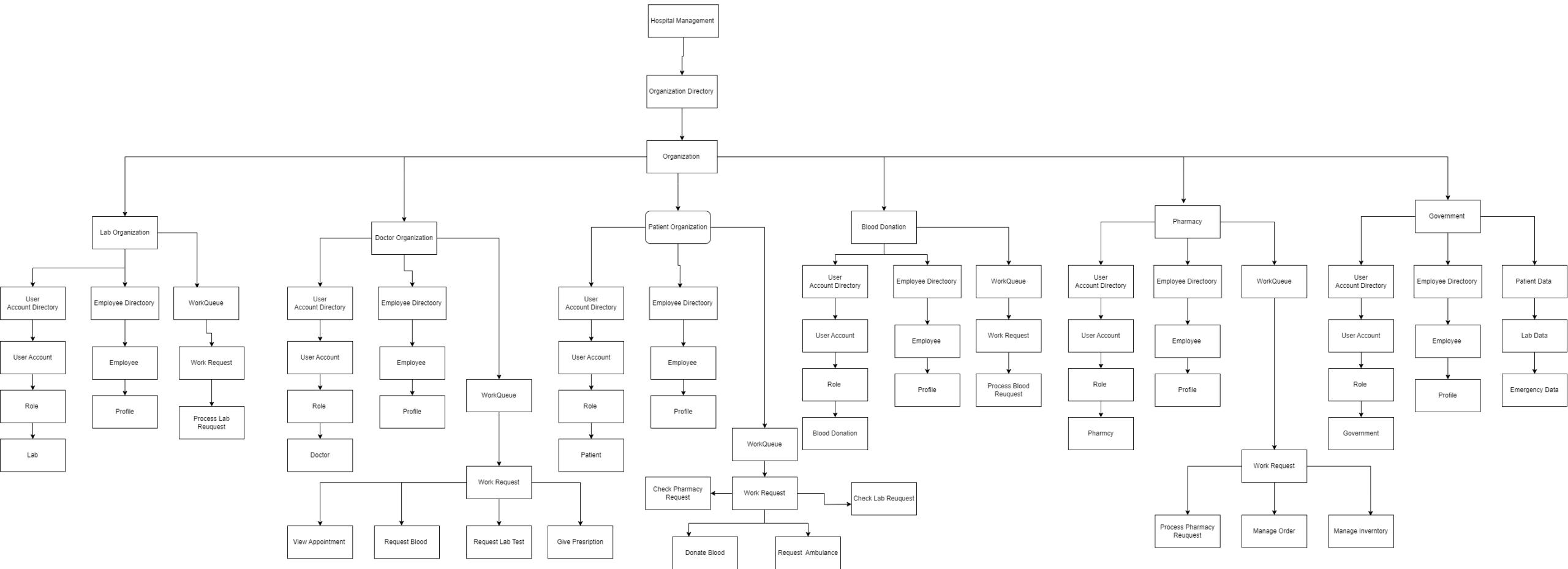
1. Build an inventory management system to track and manage medicine stocks.
2. Integrate with Doctor Management for prescription processing and dispensing.
3. Implement a notification system for low-stock alerts and expiration tracking.

ARCHITECTURE DIAGRAM



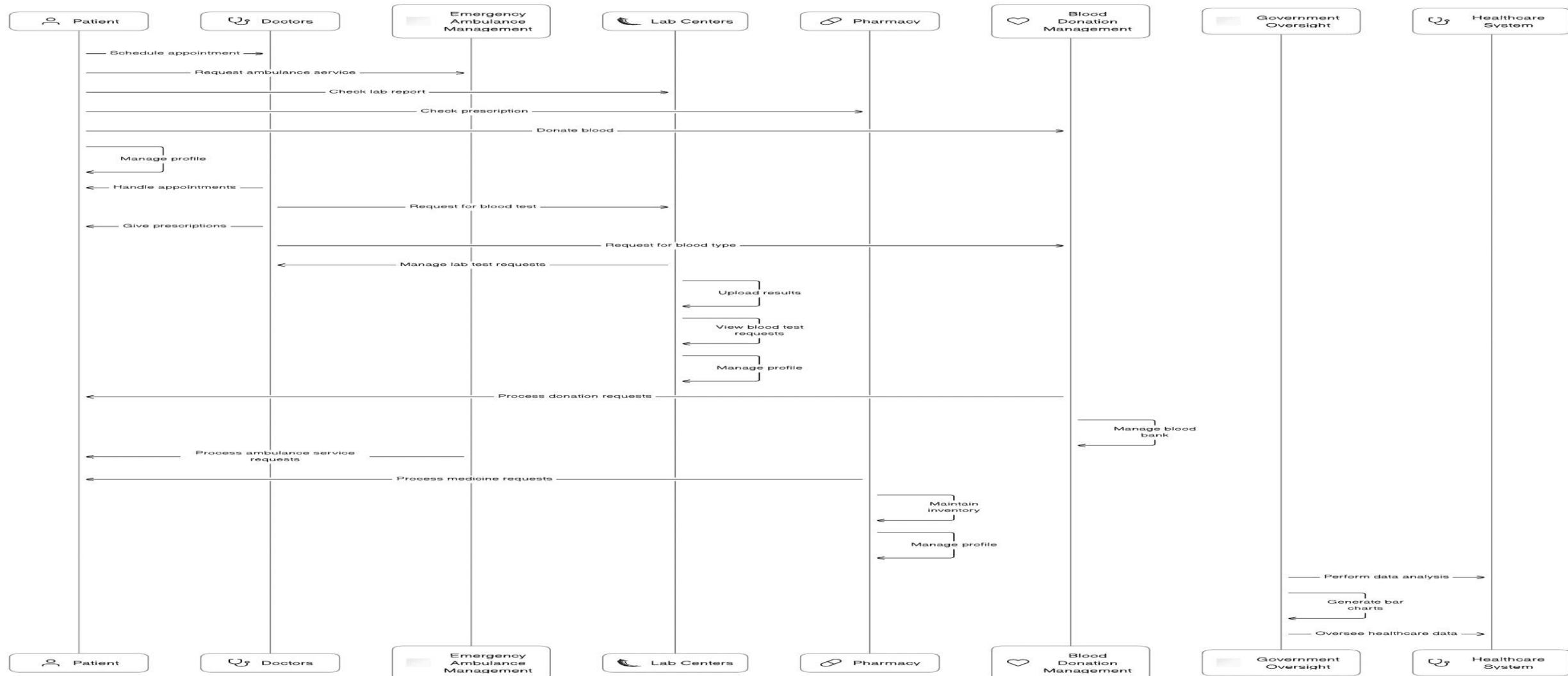
OBJECT MODEL

COMMUNITY HEALTH CARE SYSTEM

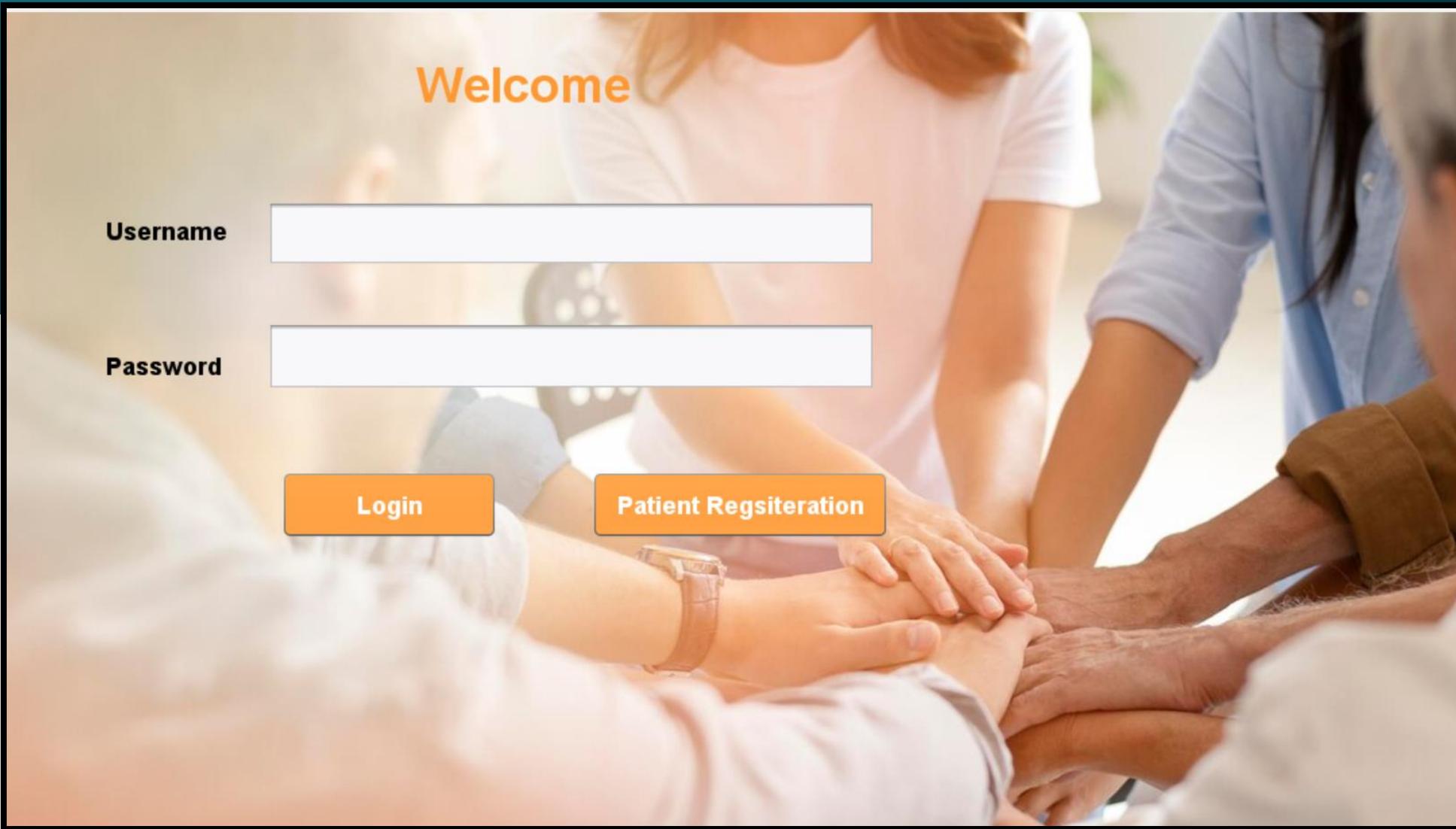


SEQUENCE DIAGRAM

Healthcare Management System Interaction



APPLICATION WALKTHROUGH



APPLICATION WALKTHROUGH



Create Account

Username

Phone

First Name

Last Name

Email

Password

Location

[Sign Up](#)

[Login](#)

APPLICATION WALKTHROUGH

The screenshot shows a desktop application window titled "Community Health Network Dashboard". The dashboard header includes the logo, the title "Community Health Network", a timestamp "3:45 PM", and a "Log Out" button. On the left, there is a sidebar with four menu items: "Manage Profile", "Manage Organizations" (which is highlighted in orange), "Manage Employees", and "Manage Users". The main content area is titled "Manage Organization" and contains a sub-section "Organization List:" with a table. The table has two columns: "ID" and "Name". The data in the table is as follows:

ID	Name
0	Admin Organization
1	Doctor Organization
0	Emergency Organization
0	Lab Organization

Below the table, there is a section titled "Add Organization:" with a dropdown menu labeled "Select Organization Type: Doctor" and a red "Add" button.

APPLICATION WALKTHROUGH

Log Out

Community Health Network Dashboard

Manage everything related to community health network

3:45 PM

Manage Profile

Mange Organizations

Manage Employees

Manage Users

Manage Users

Users List:

User Name	Role
j1	Doctor
Joe1	Doctor
Mirra1	Doctor
Mirandal2	Doctor
Lalisa	Doctor
Josh90	Doctor
Hally	Doctor

New User:

Organization: Doctor Organization

Employee: Dr. John Smith

Role: Doctor

User Name:

Password:

Create Delete

APPLICATION WALKTHROUGH

Community Health Network

Doctor Dashboard

14:23 PM

Log Out

Manage Profile

Manage Appointments

Manage Blood Requests



APPLICATION WALKTHROUGH

Log Out

14:23 PM

Community Health Network Doctor Dashboard

Manage Profile

Mange Appointments

Manage Blood Requests

Enter Details

Name: Dr. John Smith

Location: Boston

Hospital: Hinduza

Email: j1@gmail.com

Specializations: Heart

Password: Admin@123

Phone Number: 9011756590

Update



14

APPLICATION WALKTHROUGH

Log Out

14:23 PM

Community Health Network Doctor Dashboard

Manage Profile

Mange Appointments

Manage Blood Requests

Appointments

ID	Name	Status	Date	Time
75	rik	Processed	2023-12-30	09:00-10:00
44	h	Processed	2023-12-15	09:00-10:00

Process

Lab Test

Prescription



APPLICATION WALKTHROUGH

The screenshot shows the Doctor Dashboard of the Community Health Network. The dashboard features a sidebar with links for 'Manage Profile', 'Manage Appointments', and 'Manage Blood Requests'. The main area displays a 'Request Blood' section with a table showing a single request: Req Id 8, Name B_8, Status In Progress, and Blood Type O+. To the right, a 'Request Blood Form' is displayed with fields for 'Blood Bank' (set to B_8), 'Blood Group' (set to A+), 'Doctor Name' (Dr. John Smith), 'Location' (Boston), and 'Units (oz)' (1-). A large red 'Place Request' button is at the bottom.

Community Health Network Doctor Dashboard 14:23 PM

Manage Profile

Manage Appointments

Manage Blood Requests

Request Blood

Req Id	Name	Status	Blood Type
8	B_8	In Progress	O+

Request Blood Form

Blood Bank

B_8

Blood Group

A+

Doctor Name

Dr. John Smith

Location

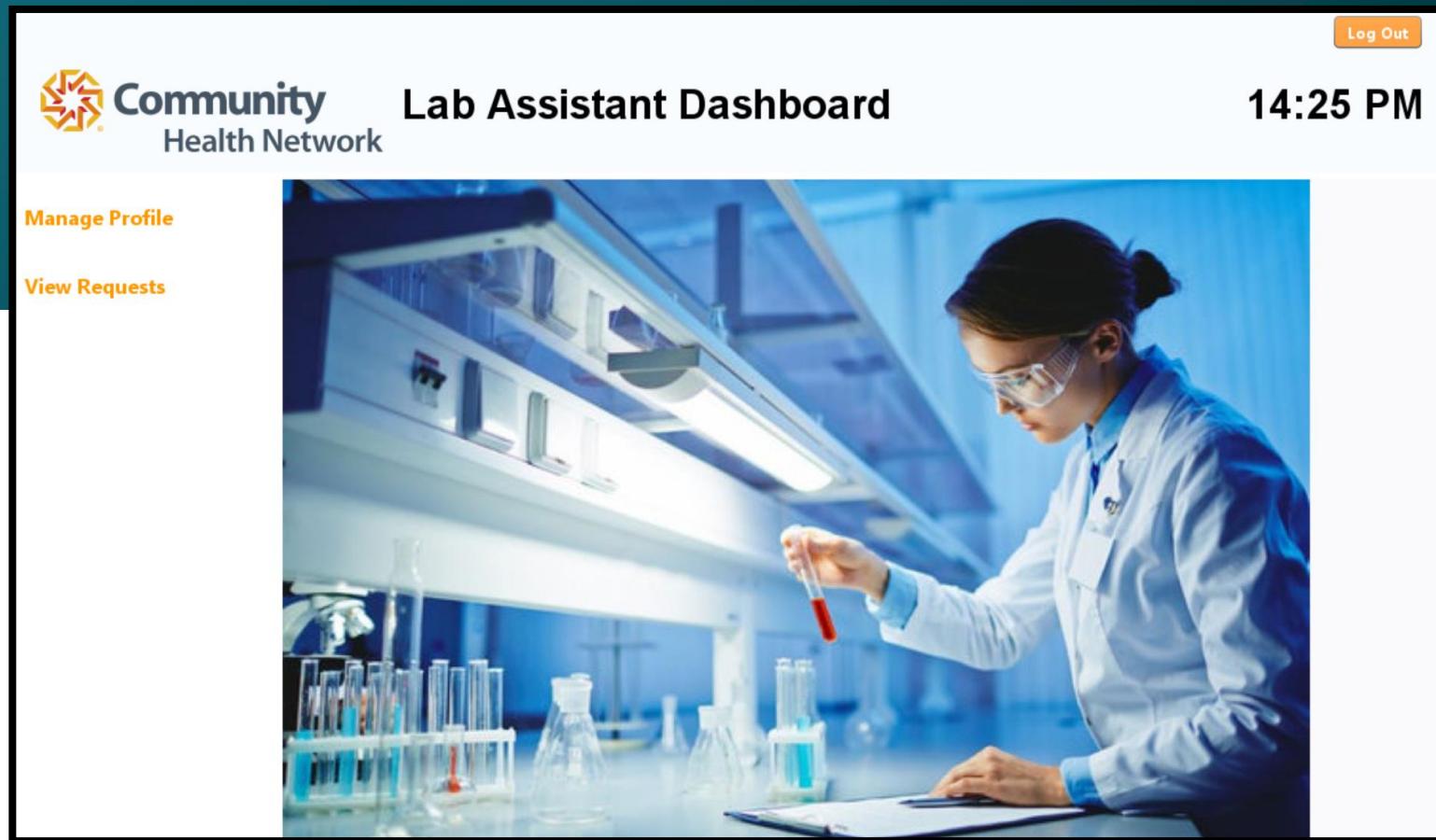
Boston

Units (oz)

1-

Place Request

APPLICATION WALKTHROUGH



APPLICATION WALKTHROUGH

Log Out

Community Health Network

Lab Assistant Dashboard 14:25 PM

Manage Profile

View Requests

Enter Details

Name

Location *

Phone Number *

Email *

Password

Update



APPLICATION WALKTHROUGH

Log Out

Community Health Network

Lab Assistant Dashboard

14:25 PM

Manage Profile

View Requests

Refresh

Message	Sender	Receiver	Status
please test HIV			Sent
please test cancer	Dr. John Smith	lissa1	Processing

Assign to me

Process



APPLICATION WALKTHROUGH

Community Health Network Emergency Dashboard 14:27 PM Log Out

Manage Profile

Mange Requests

Enter Details

Name

Location *

Phone Number *

Email *

Password

Update



20

APPLICATION WALKTHROUGH

Log Out

Community Health Network Emergency Dashboard 14:27 PM

Manage Profile Refresh

Mange Requests

View Emergency Requests

ID	Patient Name	Location	Status
business.WorkQueue.Req_E...	h	Emma	Completed
business.WorkQueue.Req_E...	h	Emma	Completed

Process



APPLICATION WALKTHROUGH

Log Out

Community Health Network

Blood Organization Dashboard 3:45 PM

Manage Profile

Mange Doctor Request

Manage Blood Bank

Manage Patient Request

Enter Details

Name: Babita

Phone Number: 9011756590

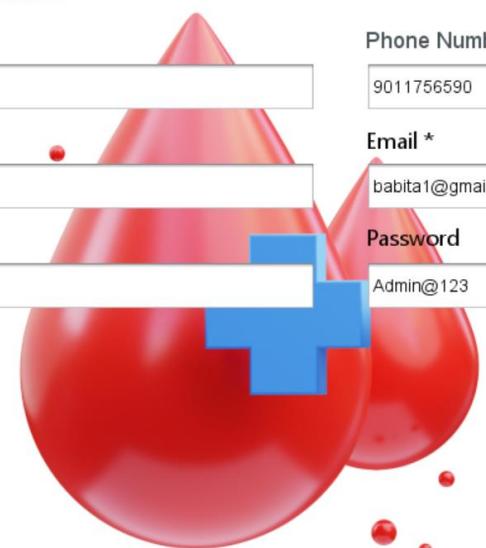
Location: Boston

Email: babita1@gmail.com

Licience: 8909090

Password: Admin@123

Update



APPLICATION WALKTHROUGH

Log Out

Community Health Network

Blood Organization Dashboard 3:45 PM

Manage Profile

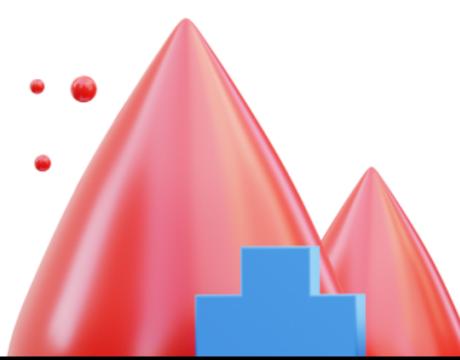
Mange Doctor Request

Manage Blood Bank

Manage Patient Request

Update as Processed

ID	Blood Type	Doctor Name	Request Status
92	O+	Dr. John Smith	Processed
25	O+	Dr. John Smith	In Progress



APPLICATION WALKTHROUGH

Log Out

Community Health Network

Blood Organization Dashboard 3:45 PM

Manage Profile

Mange Doctor Request

Manage Blood Bank

Manage Patient Request

Blood Stock

Update the blood stock here and manage them

Blood Type	Stock Level
A+	90
A-	90
B+	90
B-	90
O+	90
O-	90
AB+	90
AB-	90

Update Stock

APPLICATION WALKTHROUGH

The screenshot shows a web-based dashboard for a blood organization. At the top left is the logo for "Community Health Network". To the right of the logo is the title "Blood Organization Dashboard". In the top right corner, there is a "Log Out" button and the time "3:45 PM". On the left side, there is a vertical sidebar with four orange-colored menu items: "Manage Profile", "Manage Doctor Request", "Manage Blood Bank", and "Manage Patient Request". The main content area is titled "Patient Blood Donation Request" and features a red blood drop icon. Below the title is a table with one row of data. The table has columns for Id, Patient Name, Blood Type, Status, Allergy, and Units. The data row shows: Id 87, Patient Name h, Blood Type A+, Status Processed, Allergy, and Units 0. At the bottom of the main content area is a red "Process" button.

Id	Patient Name	Blood Type	Status	Allergy	Units
87	h	A+	Processed		0

APPLICATION WALKTHROUGH

Community Health Network

Pharmacy Dashboard

3:45 PM

Log Out

Manage Profile

Manage Doctor Request

Manage Inventory

APPLICATION WALKTHROUGH

Log Out

Community Health Network

Pharmacy Dashboard 3:45 PM

Manage Profile

Mange Doctor Request

Manage Inventory

Enter Details

Name: peter

Email: peter1@gmail.com

License: 989898

Password: Admin@123

Local Address: boston

Phone Number: 9011756590

Update



APPLICATION WALKTHROUGH

The screenshot shows the 'Pharmacy Dashboard' application. At the top left is the 'Community Health Network' logo. On the right side, there is a 'Log Out' button and the time '3:45 PM'. The main area is titled 'Pharmacy Dashboard' and contains a sub-section titled 'Process Order'. Below this is a table showing a list of orders. At the bottom is a red button labeled 'Update as Deliver'.

Community Health Network

Pharmacy Dashboard

3:45 PM

Log Out

Manage Profile

Mange Doctor Request

Manage Inventory

Process Order

ID	Patient Name	Doctor Name	Order Status
1	h	Dr. John Smith	DELIVERED
2	h	Dr. John Smith	DELIVERED
3	rik	Dr. John Smith	PENDING
4	shreya1	Miranda	PENDING

Update as Deliver

APPLICATION WALKTHROUGH

Log Out

Community Health Network

Pharmacy Dashboard 3:45 PM

Manage Profile

Mange Doctor Request

Manage Inventory

Medical Inventory

Medicine Name	Price (\$)
capsule	90
capsule 2	901
paracetamol	90
crocin	290
cough syrup	14
acidity pill	34
stomach pain medicine	89
hair loss tonic	899
vitamin b	60
vitamin d	98
vitamin e	190

Please Enter Medicine Please Enter Cost

Add Update Delete

APPLICATION WALKTHROUGH

Log Out

Community Health Network Patient Dashboard 3:45 PM

Manage Profile

Mange Appointments

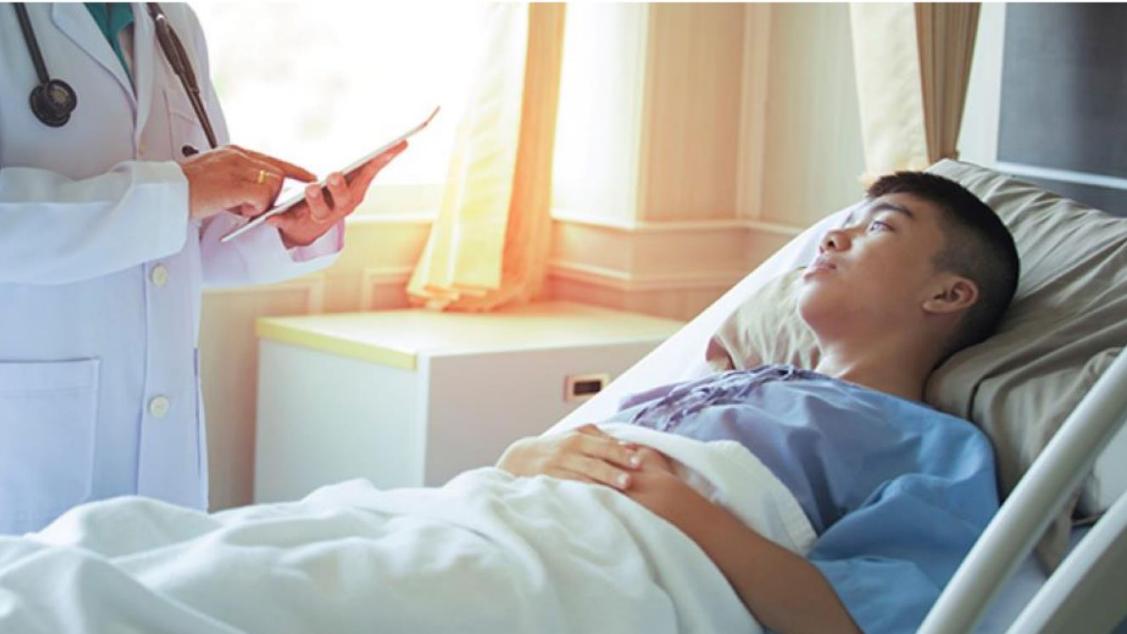
Check Lab Result

Check Prescription

Donate Blood

Request Emergency

My Health Record



APPLICATION WALKTHROUGH

The image shows a Patient Dashboard for the Community Health Network. The dashboard has a sidebar on the left with various options: Manage Profile, Manage Appointments, Check Lab Result, Check Prescription, Donate Blood, Request Emergency, and My Health Record. The main area displays a message titled "Check LAB Result" with a table showing one message sent to "Mirandal2". The time "3:45 PM" is displayed in the top right corner, and a "Log Out" button is in the top right of the header. A cartoon doctor icon is at the bottom.

Message	Sender	Receiver	Status	File
do skin test with som e	Mirandal2		Sent	

APPLICATION WALKTHROUGH

Community Health Network Patient Dashboard 3:45 PM

Log Out

Manage Profile

Mange Appointments

Check Lab Result

Check Prescription

Donate Blood

Request Emergency

My Health Record

Book Appointment

Name	Hospital	Spealization	Phone Number
Dr. John Smith	Heart	Hinduza	

Specialization Date Time

Heart 09:00-10:00

Book Appointment View Appointment Status



APPLICATION WALKTHROUGH

Log Out 3:45 PM

Community Health Network Patient Dashboard

Manage Profile Mange Appointments Check Lab Result Check Prescription Donate Blood Request Emergency My Health Record

Blood Donation Form

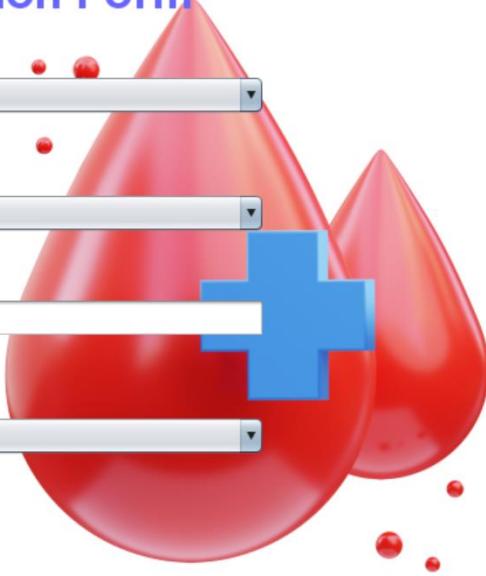
Blood Bank: B_8

Blood Group: A+

Patient Allergy Name: skin

Location: Boston

Place Request



The screenshot shows a patient dashboard for the Community Health Network. The main title is "Patient Dashboard". On the left, there is a vertical sidebar with several menu items: "Manage Profile", "Mange Appointments", "Check Lab Result", "Check Prescription", "Donate Blood", "Request Emergency", and "My Health Record". The "Donate Blood" item is highlighted in orange. The main content area is titled "Blood Donation Form". It contains several input fields: "Blood Bank" (set to "B_8"), "Blood Group" (set to "A+"), "Patient Allergy Name" (set to "skin"), and "Location" (set to "Boston"). Below these fields is a large, stylized graphic of two overlapping red blood drops, with a blue cross symbol in the center. At the bottom of the form is a pink button labeled "Place Request". In the top right corner of the dashboard, the time "3:45 PM" is displayed. In the top right corner of the entire window, there is a small orange "Log Out" button.

APPLICATION WALKTHROUGH

Community Health Network Patient Dashboard 3:45 PM Log Out

Manage Profile

Mange Appointments

Check Lab Result

Check Prescription

Donate Blood

Add

Request Emergency

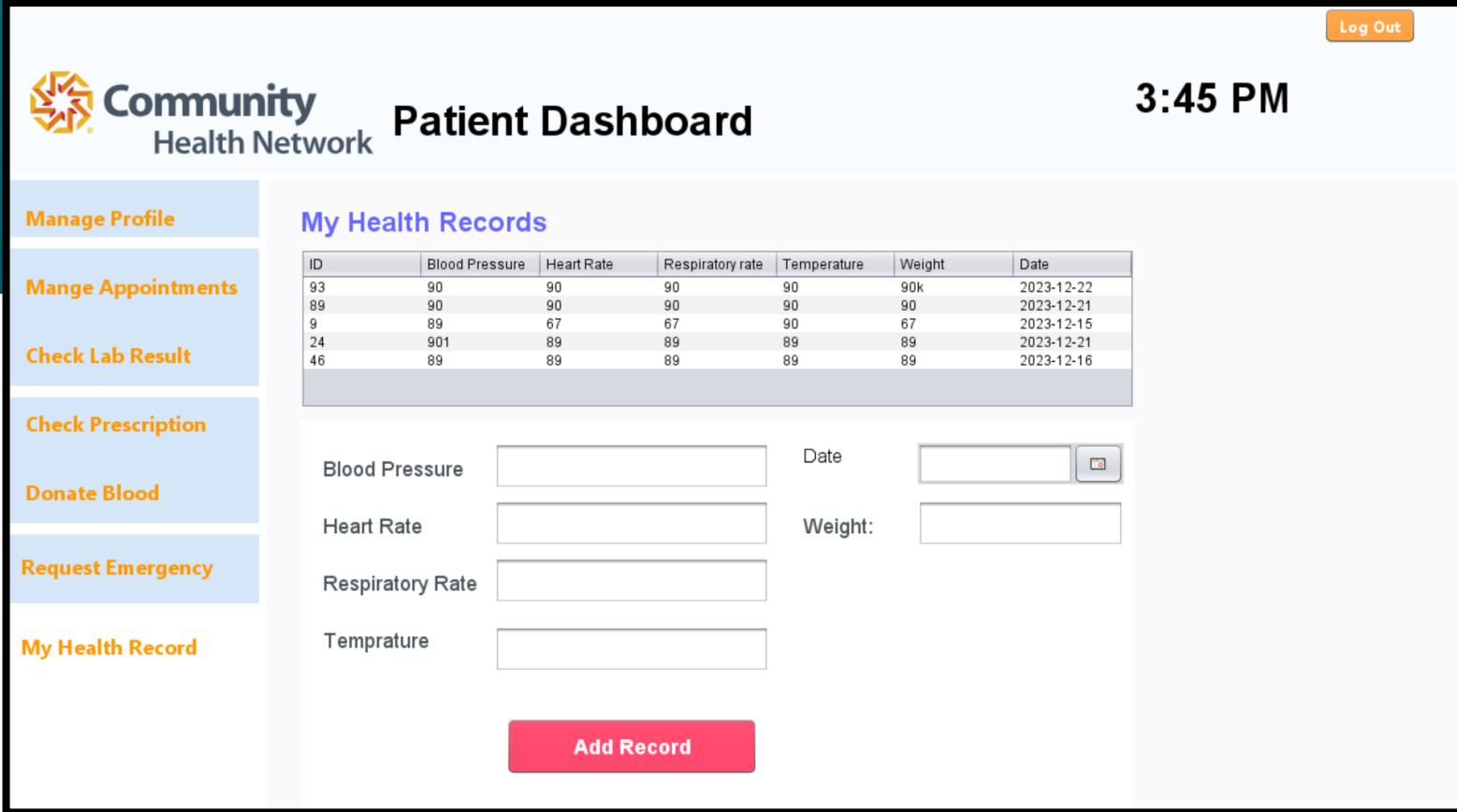
My Health Record

Request Health Care Emergency :

ID	Emergency Name	Location	Phone Number
Emergency(emergency...)	Emma	Boston	9011756590
Emergency(emergency...)	Elessa		
Emergency(emergency...)	Rony	Boston	9011756590
Emergency(emergency...)	Tom	Boston	9011756590
Emergency(emergency...)	Teresa	New Youk	9011756590
Emergency(emergency...)	Tommy	LA	9011756590
Emergency(emergency...)	Robin	Georgia	9011756590



APPLICATION WALKTHROUGH



The screenshot shows the Community Health Network Patient Dashboard. At the top right, there is a "Log Out" button and the time "3:45 PM". The dashboard features a sidebar on the left with various links: "Manage Profile", "Manage Appointments", "Check Lab Result", "Check Prescription", "Donate Blood", "Request Emergency", and "My Health Record". The main content area is titled "Patient Dashboard" and contains a section titled "My Health Records" with a table of historical data. Below this, there are input fields for adding new health records: "Blood Pressure" (input field), "Date" (input field with a calendar icon), "Heart Rate" (input field), "Weight" (input field), "Respiratory Rate" (input field), and "Temperature" (input field). A red "Add Record" button is located at the bottom of the form.

Community Health Network Patient Dashboard 3:45 PM

Manage Profile

Manage Appointments

Check Lab Result

Check Prescription

Donate Blood

Request Emergency

My Health Record

My Health Records

ID	Blood Pressure	Heart Rate	Respiratory rate	Temperature	Weight	Date
93	90	90	90	90	90k	2023-12-22
89	90	90	90	90	90	2023-12-21
9	89	67	67	90	67	2023-12-15
24	901	89	89	89	89	2023-12-21
46	89	89	89	89	89	2023-12-16

Blood Pressure:

Date: 

Heart Rate:

Weight:

Respiratory Rate:

Temperature:

Add Record

APPLICATION WALKTHROUGH

Log Out

3:45 PM

Community Health Network Patient Dashboard

Manage Profile

Mange Appointments

Check Lab Result

Check Prescription

Donate Blood

Request Emergency

My Health Record

Check Prescription Order Status

ID	Doctor Name	Pharmacy	Status
5	joe	peter	DELIVERED

List of all Medicines :

Medicine name : crocin , Cost: 290
Medicine name : cough syrup , Cost: 14
Medicine name : acidity pill , Cost: 34



A photograph of a woman with dark hair and glasses, wearing a light blue lab coat over a white shirt. She is looking down at several test tubes held in her hands. The background is blurred, showing more laboratory equipment.

THANK YOU
