



CPRM – Centralized Patient & Resource Management System

Smart Display System for Wenlock Hospital

– Submission By Gauresh G Pai

Welcome to the presentation on the CPRM system. We will explore its key interfaces, focusing on secure access, dynamic display management, and comprehensive technician controls. This overview highlights the system's efficiency and user-centric design.

The Challenge: 73 Disconnected Displays

Fragmented Display Management

73 screens operate independently, causing inefficiency.

No Real-Time Synchronization

Departments lack live data sharing, delaying actions.

Emergency Alert Gaps

Delayed responses due to alert system failures.

Department Silos

Limited workflows hinder inter-department coordination.

Patient Privacy Concerns

Full names displayed, risking data protection compliance.

CPRM: Unifying Hospital Information Flow

Smart Display Management

Centralized control of all hospital screens.

Real-Time Data Sync

Ensures accurate, live information sharing.

Privacy-First Token System

Protects patient identity

while enhancing access.

Intelligent Emergency Broadcast

Rapid alerts to all locations.

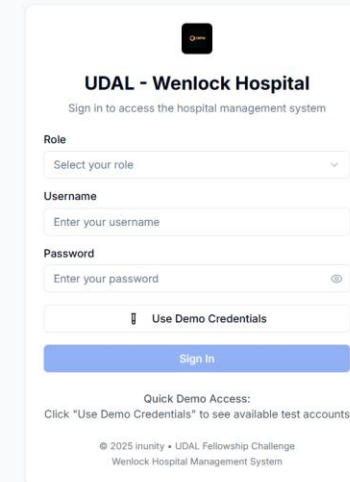
Department Integration

Seamless collaboration across units.

Secure Access: CPRM Login Interface

- Role-based authentication system for secure access
- Demo credential access for testing env
- Advanced security features and protocols
- Intuitive user experience considerations

<https://cprm-prototype.vercel.app/login>



The image shows a login interface for 'UDAL - Wenlock Hospital'. At the top, there is a logo and the title 'UDAL - Wenlock Hospital' with the subtitle 'Sign in to access the hospital management system'. Below this, there are three input fields: 'Role' with a dropdown menu labeled 'Select your role', 'Username' with a text input labeled 'Enter your username', and 'Password' with a text input labeled 'Enter your password' and an eye icon for toggling visibility. A button labeled 'Use Demo Credentials' is positioned below the password field. A large blue 'Sign In' button is at the bottom of the form. Below the 'Sign In' button, there is a section titled 'Quick Demo Access:' with the text 'Click "Use Demo Credentials" to see available test accounts'. At the very bottom, there is a copyright notice: '© 2025 inunity • UDAL Fellowship Challenge' and 'Wenlock Hospital Management System'.

Smart Display System: Personalized Information Delivery



Department-specific queues
Manage patient flow per department.



Real-time wait estimates
Provide accurate patient waiting times.

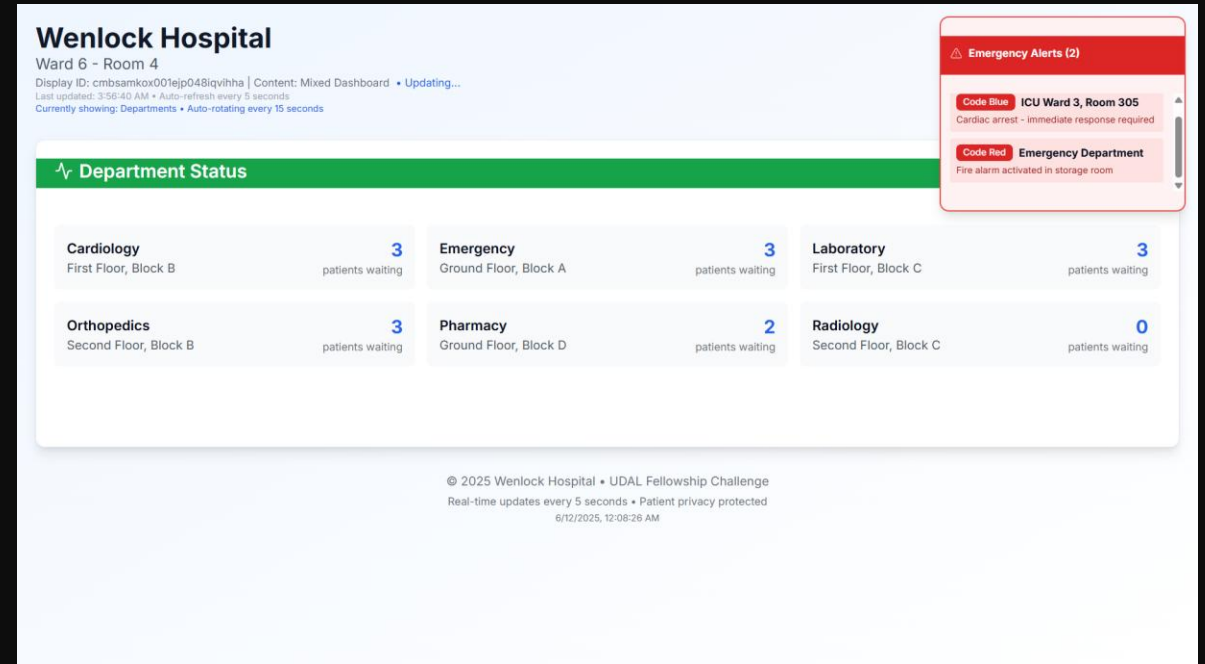


Automatic priority sorting
Organize queues by urgency.



Color-coded status
Visual indicators for quick assessment.

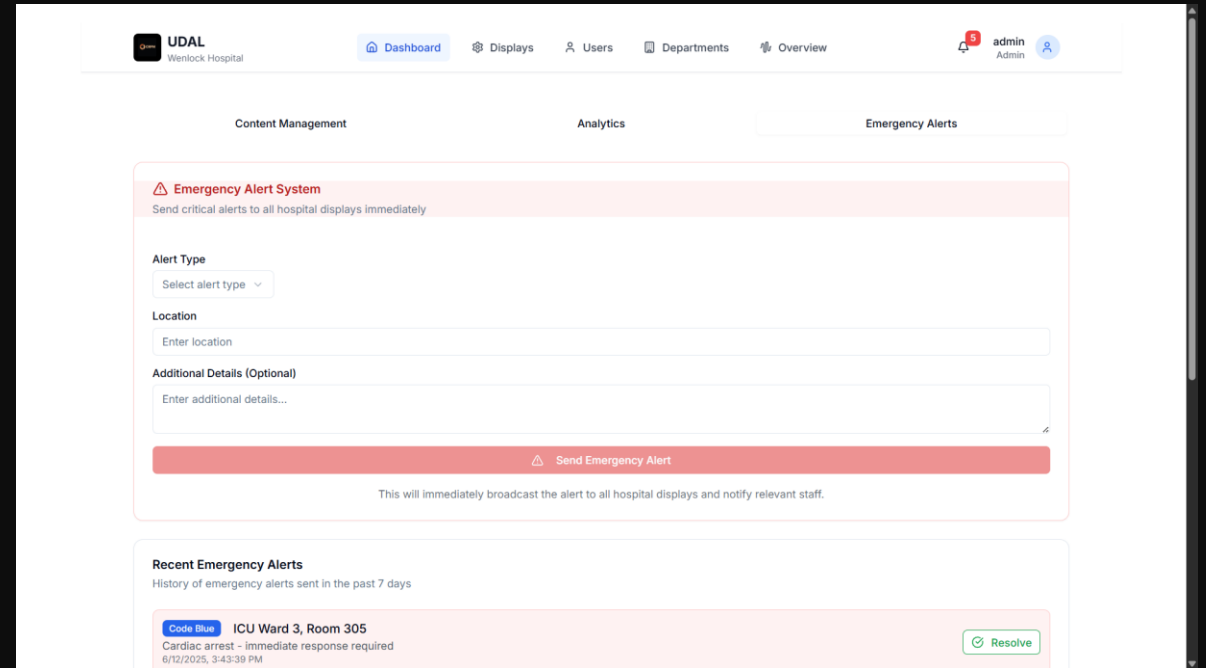
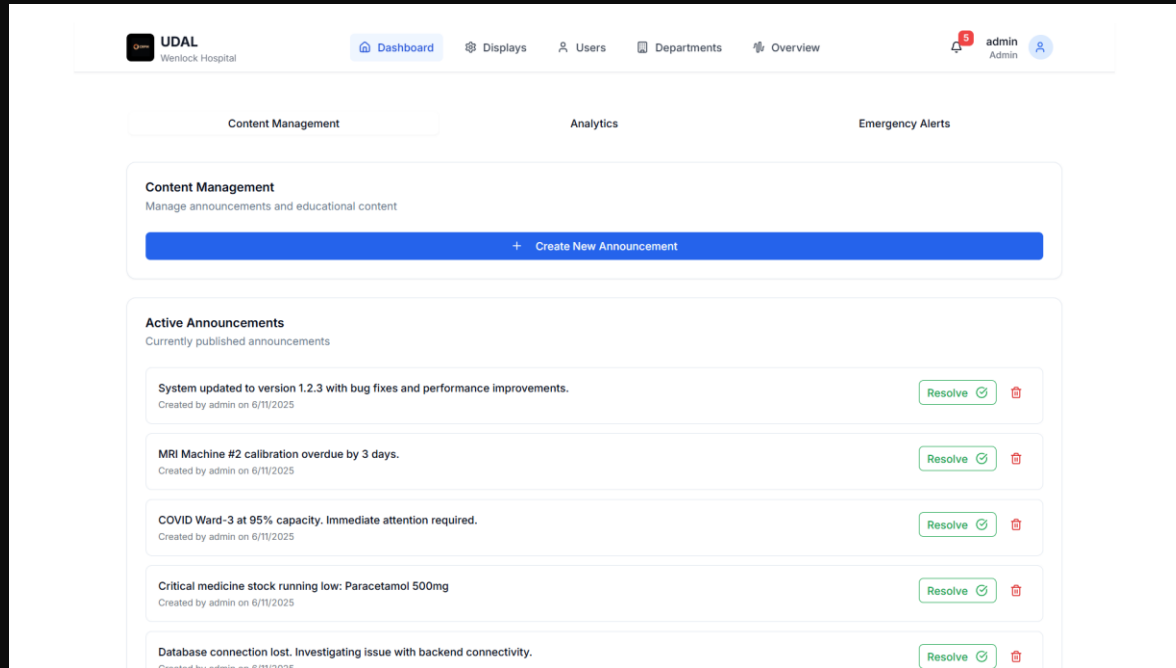
[https://cprm-prototype.vercel.app/display/\[id\]](https://cprm-prototype.vercel.app/display/[id])



The smart display system intelligently manages patient queues. It offers department-specific token systems, real-time wait estimates, and automatic priority sorting. Color-coded status indicators enhance clarity for both patients and staff.

Admin Dashboard: Complete System Control

<http://cprm-prototype.vercel.app/admin>



System-wide Analytics & Alerts

Monitor display status and emergency notifications.

Department & Display Configuration

Customize settings based on hospital needs.

Role-Based Access Control

Enhances security by defining user permissions.

User Management

Create, assign roles and access easily.

Admin Overview: Centralized Control

<https://cprm-prototype.vercel.app/admin/overview>



Universal Access Points

Links to all roles and every page are available here.



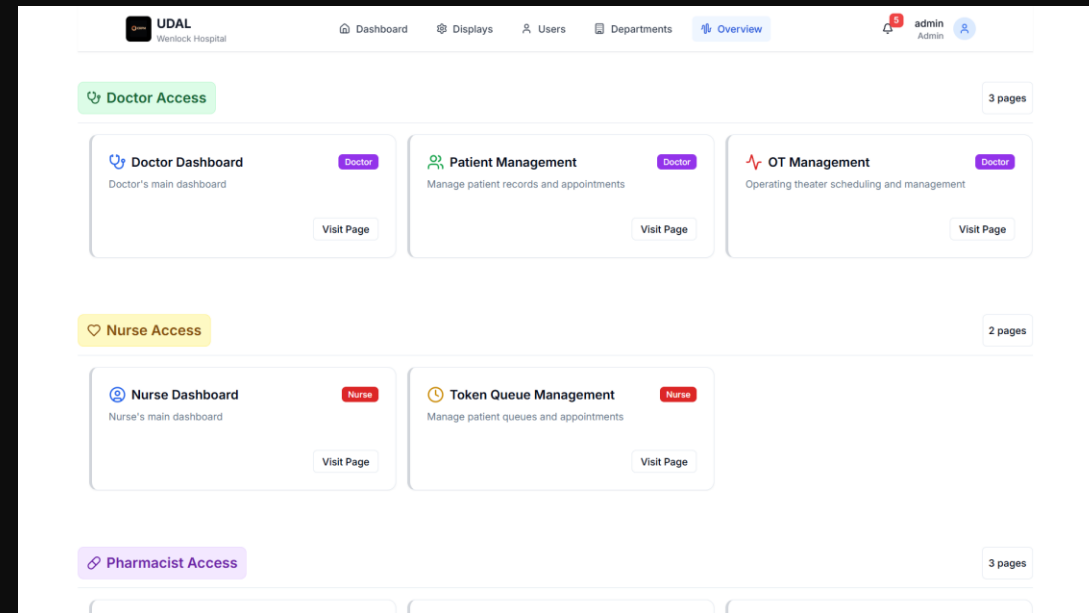
Role-Based Security

Ensuring appropriate access for each user type.



System Health Metrics

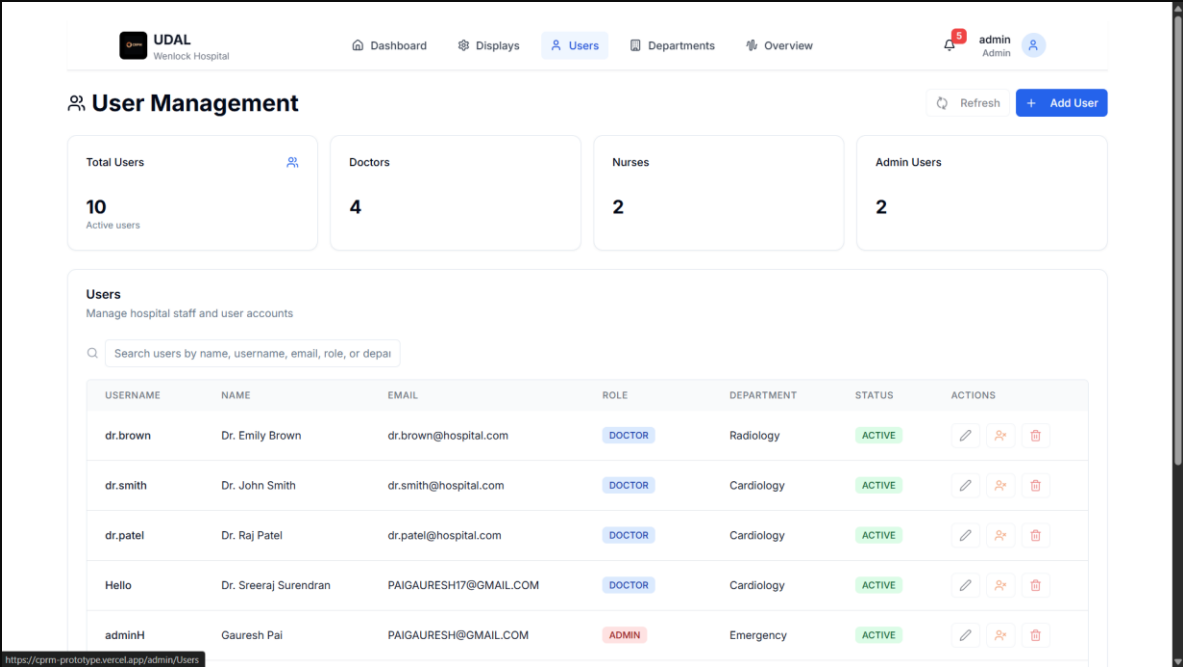
Monitoring overall system performance and status.



User Management: Role-Based Access Control

Staff Account Creation Admins, doctors, nurses setup	Role Assignment Admin, Doctor, Nurse roles	Department Assignment Associate staff to correct units
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<https://cprm-prototype.vercel.app/admin/Users>



Display Management: 73 Screens, 1 Control Center

1

Centralized Control

Manage all hospital displays from one interface.

2

Content Scheduling & Distribution

Plan messages and update screens in real-time.

3

Emergency Alert Broadcasting

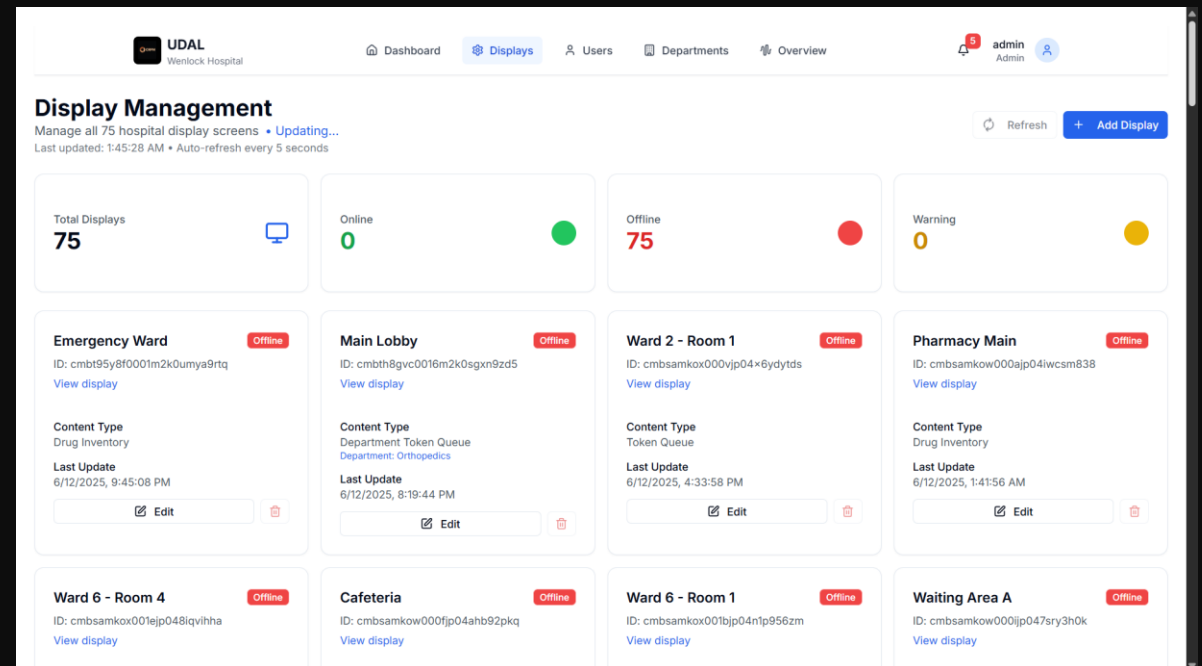
Instantly send critical alerts to all devices.

4

Display Health Monitoring

Track status and performance continuously.

<https://cprm-prototype.vercel.app/admin/displays>



Department Management: Organizational Structure

<https://cprm-prototype.vercel.app/admin/departments>



Department
Creation

Setup new hospital
units efficiently.



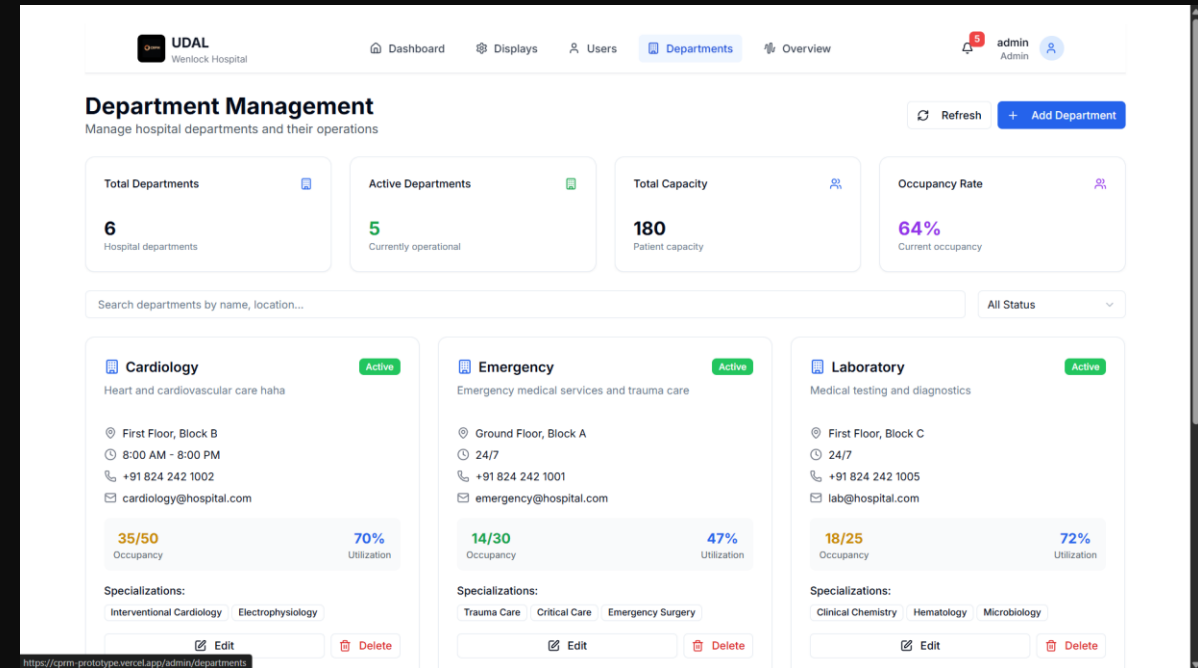
Resource
Allocation

Optimize equipment
and supplies
distribution.



Staff
Assignment

Allocate personnel to
departments precisely.



Doctor Dashboard: Patient-Centered Care

Patient & Appointment Management

Operating Theater Scheduling
Optimize surgical workflows and resource use.

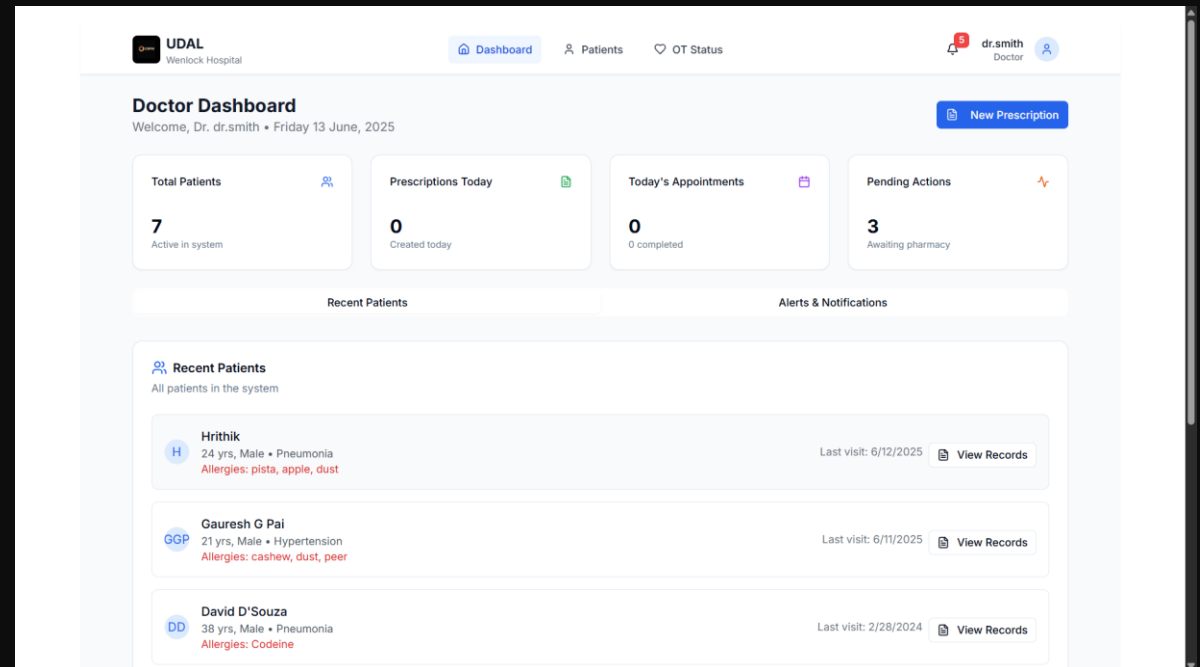
Medical Record Access

Quick retrieval of patient history and data.

Emergency Coordination

Efficient response enabled through integrated alerts.

<https://cprm-prototype.vercel.app/doctor>



Patient Management: Streamlined Care Coordination

Comprehensive Records

All patient data in one place

Appointment Scheduling

Easy booking and tracking

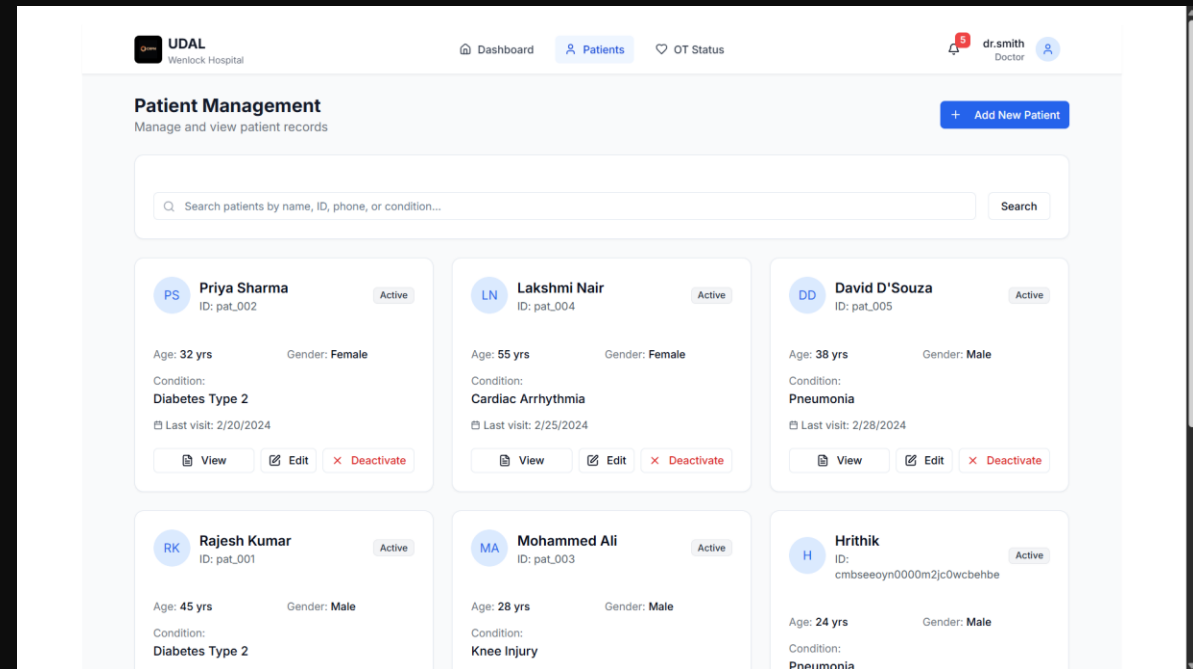
Medical History

Accessible treatment plans

Department Integration

Seamless cross-department flow

<https://cprm-prototype.vercel.app/doctor/patients>



OT Management: Streamlined Surgical Workflow

Efficient Scheduling

Surgery scheduling and resource allocation are optimized.

Real-Time Updates

Live status updates for all surgical procedures.

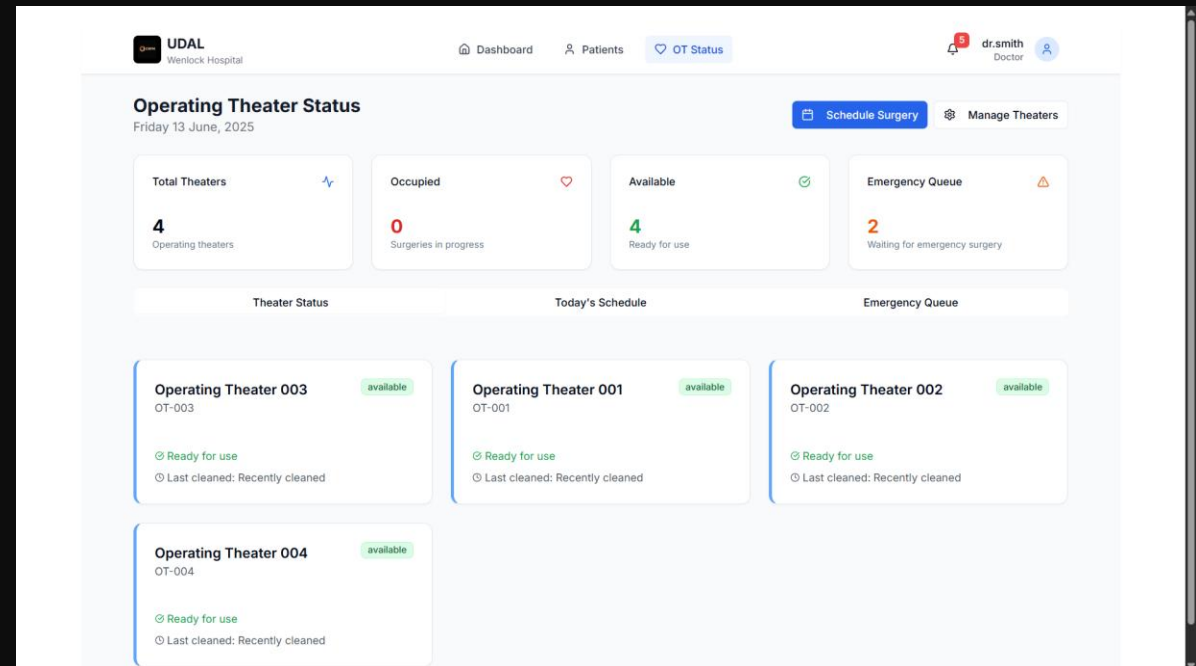
Pharmacy Integration

Seamless medication preparation with pharmacy.

Emergency Prioritization

Critical surgeries are automatically prioritized.

<https://cprm-prototype.vercel.app/doctor/ot>



Nurse Dashboard: Patient Flow Management

Patient Queue

Manages patient flow efficiently and effectively.

Vital Signs

Monitors crucial patient vital signs in real-time.

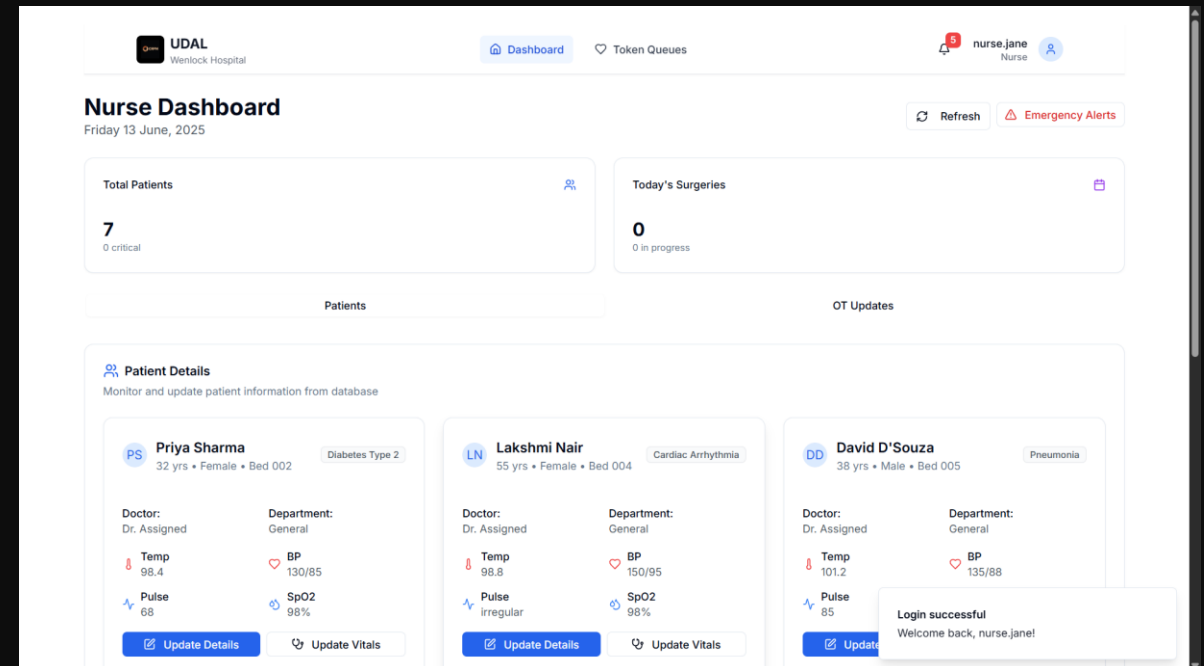
Task Assignment

Assigns and tracks all nursing tasks directly.

Communication Hub

Facilitates communication with doctors and pharmacy.

<https://cprm-prototype.vercel.app/nurse>



Token Queue: Privacy-First Patient Management



Token-Based ID

Patients identified by tokens (P001, P002).



Wait Time Estimates

Accurate wait time management and display.



Department Routing

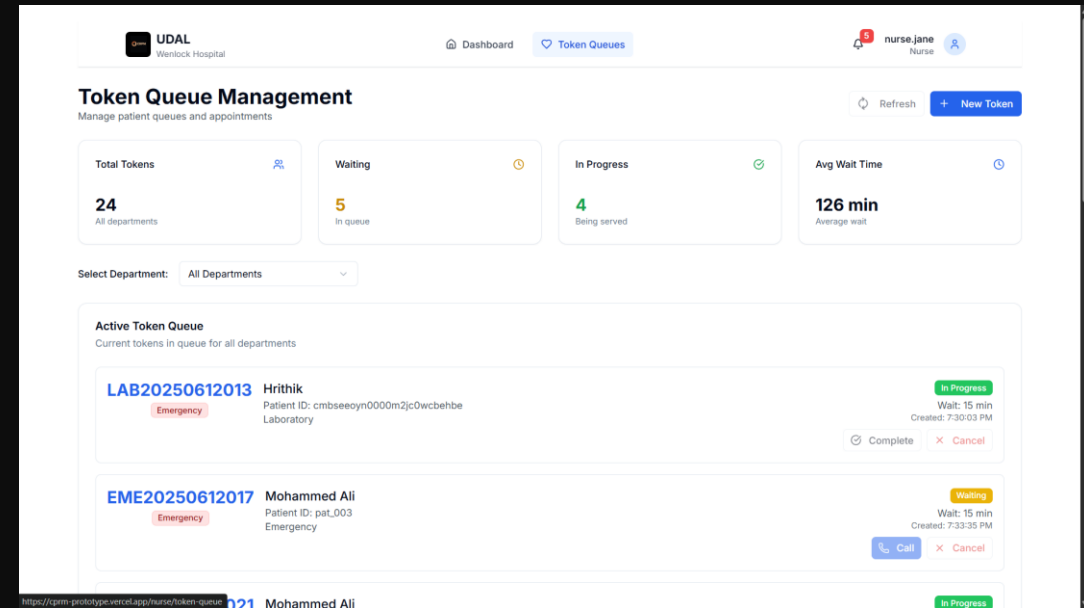
Coordinated patient routing to departments.



Privacy Protection

Ensures complete patient privacy and anonymity.

<https://cprm-prototype.vercel.app/nurse/token-queue>



Pharmacy Management: Medication Workflow

Inventory Control

Manages inventory and generates stock alerts.

Prescription Processing

Streamlines all prescription dispensing.

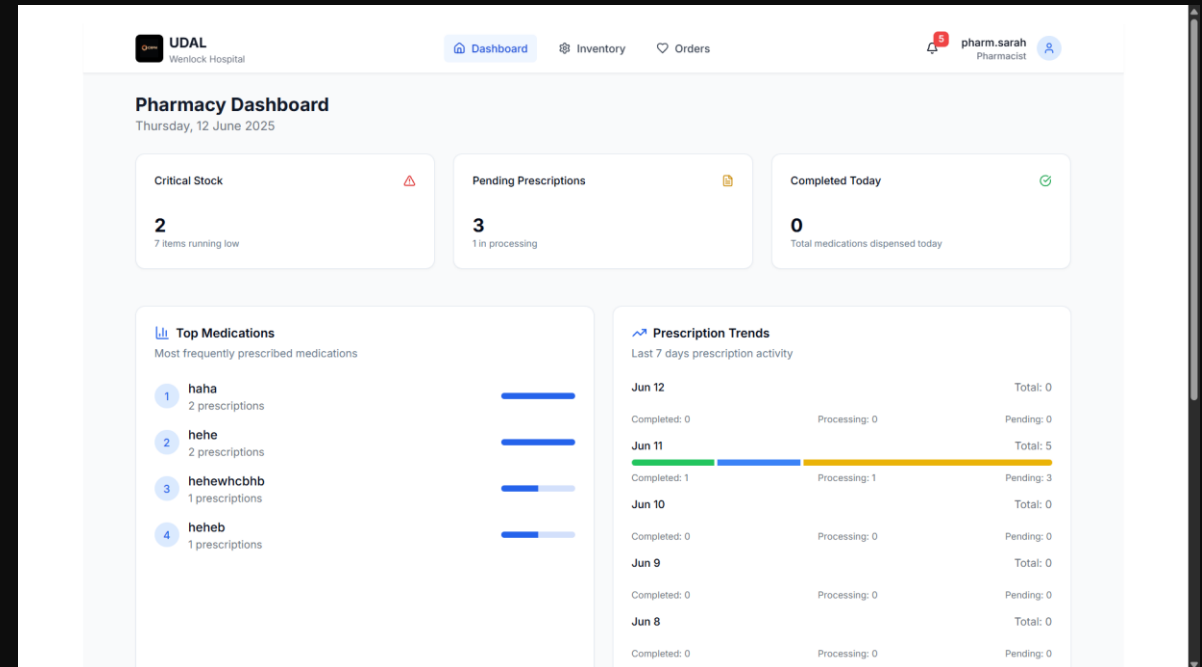
OT Integration

Coordinates with OT for surgery preparations.

Dispensing Tracking

Monitors all medication distribution.

<https://cprm-prototype.vercel.app/pharmacist>



Drug Inventory: Real-Time Stock Management

<https://cprm-prototype.vercel.app/pharmacist/inventory>

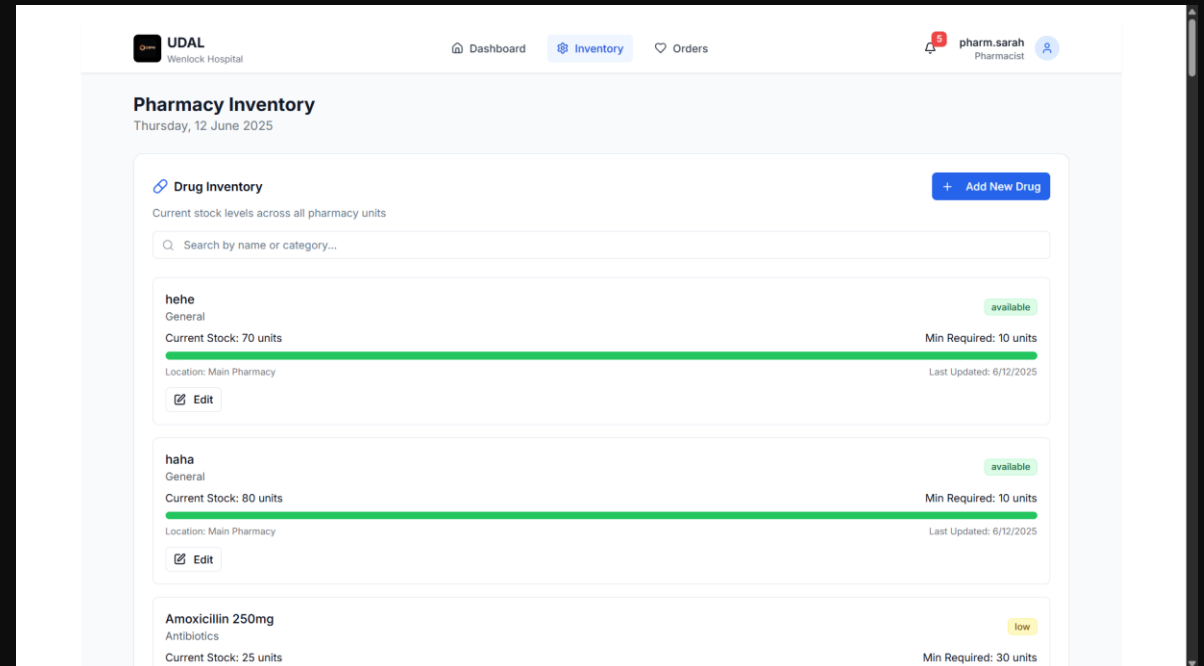
24/7

Real-time
Tracking

Always know stock
levels

95%

Low Stock Alerts
Critical and low status



Prescription Orders: Efficient Medication Workflow



Digital Processing

Paperless prescriptions



Medication Tracking

From order to dispense



Doctor-Pharmacy Link

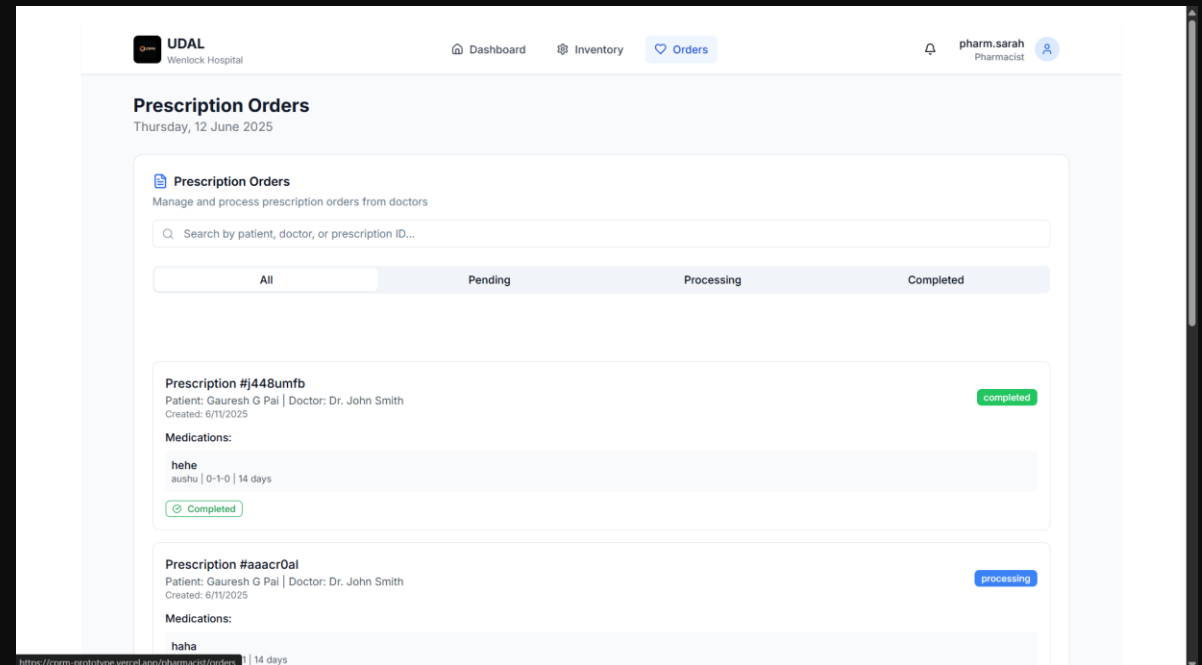
Clear communication



Patient Notifications

Pickup alerts

<https://cprm-prototype.vercel.app/pharmacist/orders>



System Control: Technician Interface

System Health Monitoring

Comprehensive overview
of system status

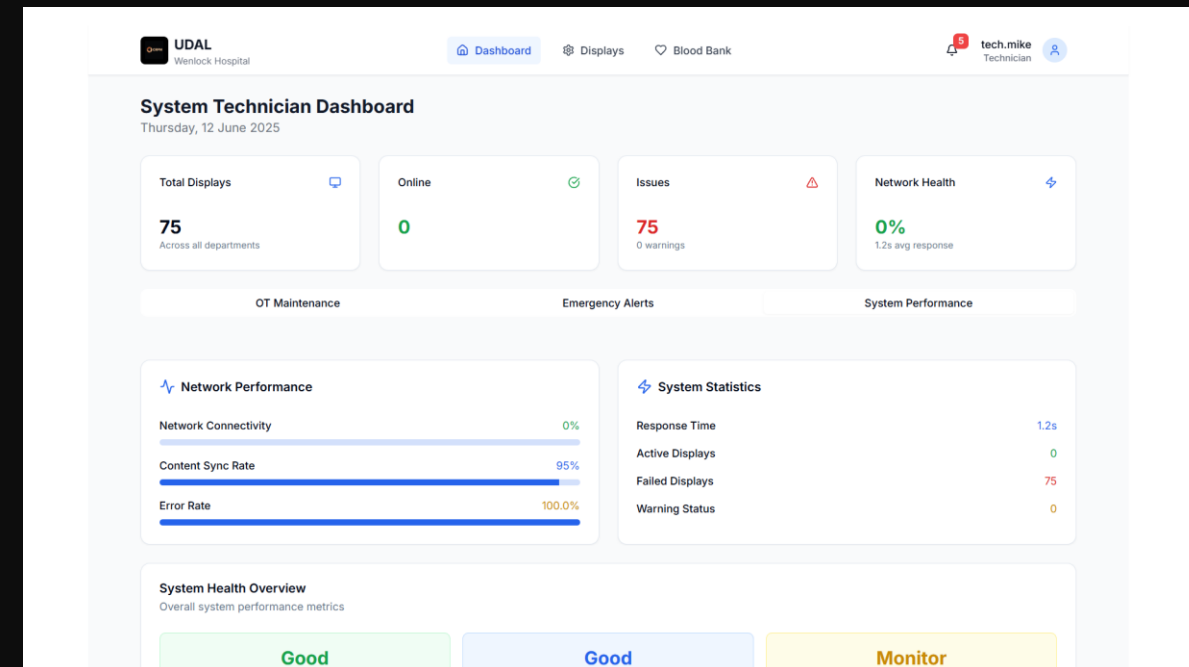
Operating Theater Tracking

Monitor maintenance
schedules effectively

Emergency Alert Management

Respond to critical alerts promptly

<https://cprm-prototype.vercel.app/technician/>



Display Maintenance: Centralized Screen Management



Monitor
Displays

Control all 73 screens



Schedule
Content

Targeted information



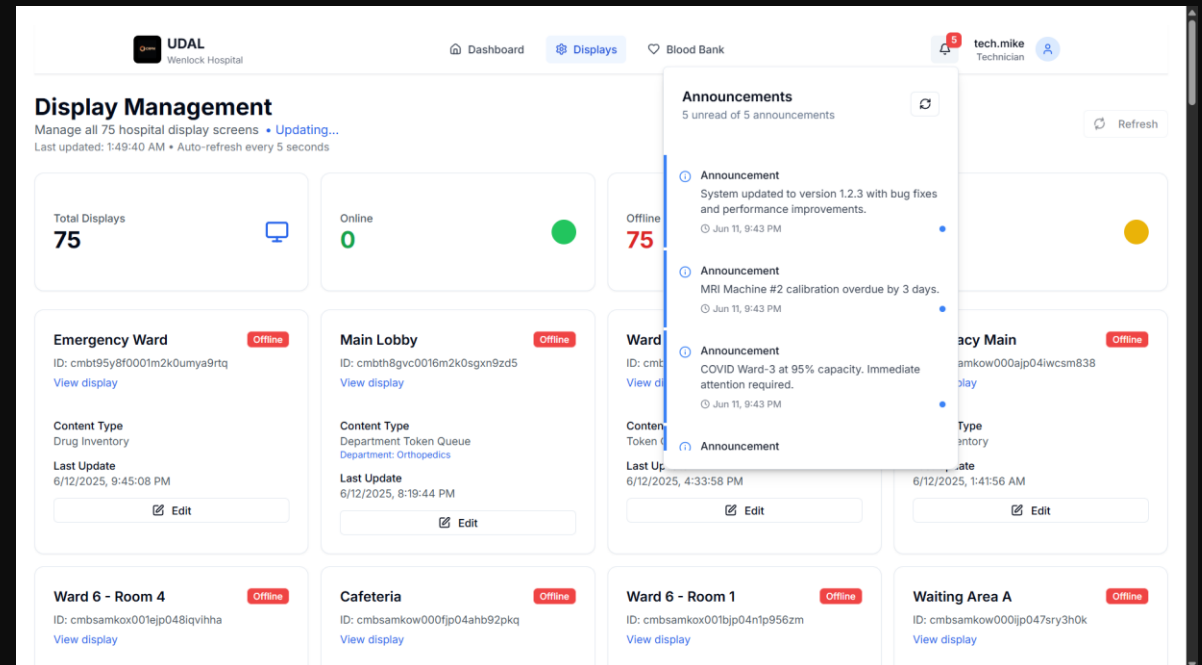
Track
Health

Proactive issue detection



Remote
Troubleshooting

<https://cprm-prototype.vercel.app/technician/displays>



Blood Bank: Life-Saving Resource Management

Inventory Tracking

Real-time blood inventory by type.

Donation Management

Efficiently manages all blood donations.

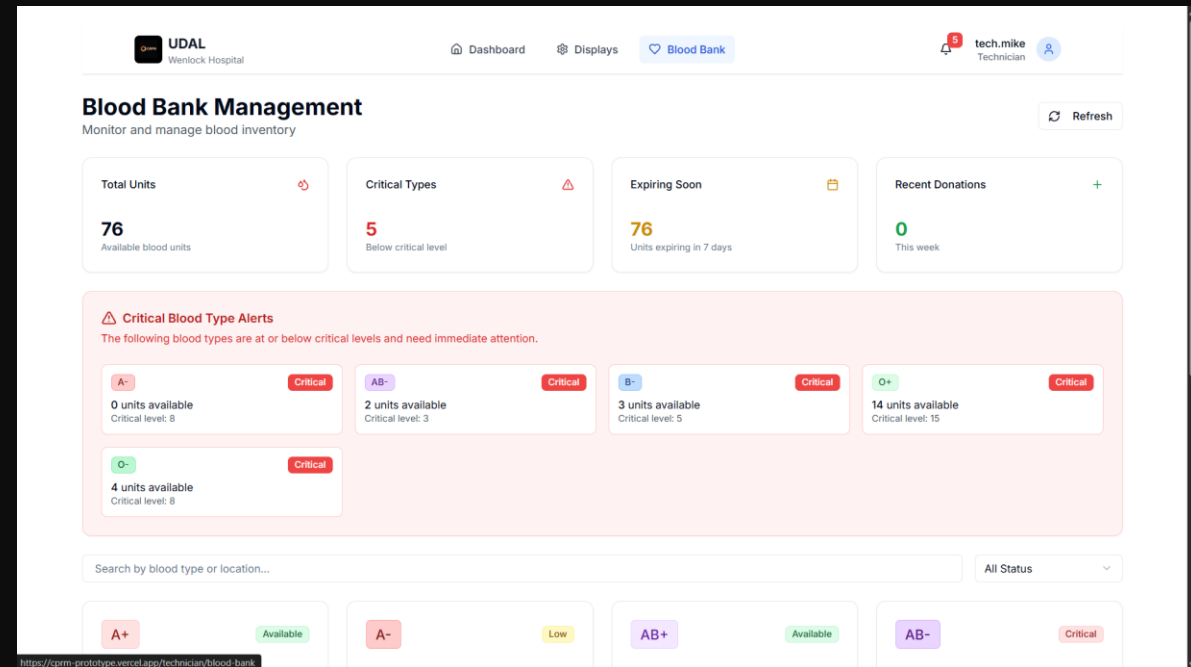
Emergency Allocation

Rapid allocation during critical emergencies.

Expiration Monitoring

Tracks blood product expiration dates.

<https://cprm-prototype.vercel.app/technician/blood-bank>



Profile Settings: Personalized User Experience

<https://cprm-prototype.vercel.app/profile-settings>

The screenshot displays the 'Profile Settings' page for a user named 'dr.smith' (Doctor) at 'UDAL Wenlock Hospital'. The page is titled 'Profile Settings' with a subtitle 'View your account information'. It contains a 'Personal Information' section with the following details:

Personal Information	
Your account details (read-only)	
Full Name	Email Address
dr.smith	dr.smith@wenlock.hospital
Department	User ID
Not assigned	dr.smith
Role	
Doctor	

A note at the bottom states: 'Note: To update your personal information, please contact your system administrator.'

Thank You

Contact Information

Email: paigauresh@gmail.com

Website: gauresh.vercel.app

Project Repository

<https://github.com/gaureshpai/cprm-prototype>

<https://cprm-prototype.vercel.app/>