

Sysadmin Adds Internal Users

Functionality: Add new users to the system (doctors, pharmacists, receptionists, lab workers).

Constraints: Role-based access control, validate unique identifiers, enforce secure password policies.

Sysadmin Removes Internal Users

Functionality: Remove existing users from the system.

Constraints: Ensure no active tasks are assigned to the user, log all deletions.

Sysadmin Modifies Internal User Data

Functionality: Update internal user information.

Constraints: Maintain audit logs, validate data integrity.

Sysadmin Removes Patients

Functionality: Remove patient records from the system.

Constraints: Ensure compliance with data retention policies, maintain audit logs.

Sysadmin Manages Medicine Types

Functionality: Add, update, or delete medicine types in the system.

Constraints: Ensure medicine data integrity, update inventory systems accordingly.

Sysadmin Views Internal User Data

Functionality: View information of internal users.

Constraints: Cannot view associated patient medical history or report data, maintain audit logs.

Sysadmin Views Logs

Functionality: Access system logs for monitoring and auditing purposes.

Constraints: Ensure logs are read-only, implement proper search and filter capabilities.

Patient Signs on with NIC or Guardian's NIC

Functionality: Register an account using their National Identity Card (NIC) or guardian's NIC if a minor.

Constraints: Validate NIC, ensure guardian consent for minors, secure data storage.

Patient Signs In with NIC

Functionality: Authenticate using their NIC.

Constraints: Implement secure authentication mechanisms, session management.

Patient Views Patients Associated with NIC

Functionality: View other patients (e.g., minors) linked to their NIC.

Constraints: Ensure proper authorization, comply with privacy regulations.

Patient Views Medical Reports

Functionality: Access their medical reports.

Constraints: Secure data access, ensure data accuracy, comply with HIPAA or relevant regulations.

Patient Views Medical History Data

Functionality: View their medical history.

Constraints: Secure data access, ensure data accuracy, comply with HIPAA or relevant regulations.

Patient Views Appointment History

Functionality: View their past appointments.

Constraints: Secure data access, maintain accurate records.

Patient Views Prescriptions

Functionality: Access their prescriptions.

Constraints: Secure data access, ensure prescriptions are up to date.

Patient Views Billing History

Functionality: View their billing and payment history.

Constraints: Secure data access, ensure accurate billing records.

Patient Books an Appointment

Functionality: Schedule a new appointment with a doctor.

Constraints: Check doctor availability, prevent double bookings, send notifications.

Patient Cancels an Appointment

Functionality: Cancel an existing appointment.

Constraints: Implement cancellation policy, notify doctor.

Patient Changes Information

Functionality: Update their personal information.

Constraints: Validate data integrity, maintain audit logs.

Patient Deletes Account

Functionality: Remove their account from the system.

Constraints: Ensure compliance with data retention policies, maintain audit logs.

Patient Sends Query to Sys Admins

Functionality: Submit queries or issues to system administrators.

Constraints: Implement secure messaging, maintain response logs.

Doctor Schedules a Time Slot

Functionality: Set available time slots for appointments.

Constraints: Ensure no overlapping schedules, update availability in real-time.

Doctor Removes a Scheduled Time Slot

Functionality: Remove previously set available time slots.

Constraints: Notify affected patients, update availability in real-time.

Doctor Attends to Patients

Functionality: Mark appointments as attended.

Constraints: Real-time status updates, ensure accurate record-keeping.

Doctor Updates Patient Appointment

Functionality: Update the status or details of patient appointments.

Constraints: Notify patients of changes, maintain accurate records.

Doctor Issues Lab Diagnostic Request

Functionality: Request lab diagnostics for patients.

Constraints: Ensure proper authorization, notify lab workers.

Doctor Views Patient Medical History

Functionality: Access patient medical history.

Constraints: Secure data access, comply with privacy regulations.

Doctor Updates Patient Medical History Data

Functionality: Update medical history records for patients.

Constraints: Ensure data accuracy, maintain audit logs.

Doctor Views Patient Lab Reports

Functionality: Access lab reports of patients.

Constraints: Secure data access, ensure timely updates.

Doctor Accepts or Rejects Report

Functionality: Review and accept or reject lab reports.

Constraints: Notify lab workers, maintain accurate records.

Doctor Provides New Prescription

Functionality: Issue new prescriptions for patients.

Constraints: Ensure prescription legality, notify pharmacists.

Doctor Renews Prescription

Functionality: Renew existing prescriptions.

Constraints: Check patient medical history, ensure no conflicts with current medications.

Doctor Modifies Existing Prescription

Functionality: Update details of existing prescriptions.

Constraints: Notify patients and pharmacists, maintain accurate records.

Doctor Removes Prescription

Functionality: Delete an existing prescription.

Constraints: Notify patients and pharmacists, maintain audit logs.

Doctor Sends Query to Sys Admins

Functionality: Submit queries or issues to system administrators.

Constraints: Implement secure messaging, maintain response logs.

Pharmacist Accepts Prescription

Functionality: Verify and accept prescriptions from doctors.

Constraints: Check prescription validity, update status.

Pharmacist Issues Medicine

Functionality: Dispense prescribed medications to patients.

Constraints: Ensure accurate records, comply with pharmacy regulations.

Pharmacist Issues Bill

Functionality: Generate and issue bills for dispensed medications.

Constraints: Ensure accurate billing, update patient billing records.

Pharmacist Rejects Prescription and Leaves Comment to Doctor

Functionality: Reject a prescription with a reason and notify the doctor.

Constraints: Ensure clear communication, maintain audit logs.

Pharmacist Accepts New Inventories

Functionality: Receive and log new inventory items.

Constraints: Update inventory records, ensure proper storage.

Pharmacist **Marks Items to Dispose**

Functionality: Identify and mark expired or damaged items for disposal.

Constraints: Follow disposal regulations, update inventory records.

Pharmacist **Sends Query to Sys Admins**

Functionality: Submit queries or issues to system administrators.

Constraints: Implement secure messaging, maintain response logs.

Lab Worker **Issues Report**

Functionality: Generate and update lab test reports for patients.

Constraints: Ensure data accuracy, notify relevant doctors.

Lab Worker **Updates Patient Billing Information**

Functionality: Update billing details for lab services.

Constraints: Ensure accurate billing records, notify patients.

Lab Worker **Sends Query to Sys Admin**

Functionality: Submit queries or issues to system administrators.

Constraints: Implement secure messaging, maintain response logs.

Receptionist **Marks Patients as Arrived**

Functionality: Check in patients for their appointments.

Constraints: Real-time status updates, verify patient identity.

Receptionist **Collects Payments**

Functionality: Process payments for services.

Constraints: Secure handling of payment information, update billing records.

Receptionist **Updates Patient Billing Information**

Functionality: Modify patient billing details.

Constraints: Ensure accurate records, notify patients.

Receptionist **Marks Patient as Served**

Functionality: Update status to indicate patient has been served.

Constraints: Real-time status updates, maintain accurate records.

Receptionist **Sends Query to Sys Admins**

Functionality: Submit queries or issues to system administrators.

Constraints: Implement secure messaging, maintain response logs.