Software Requirements Specification (SRS)

# Project Name:

Clinic Management System

# Aim:

The Clinic Management System is designed to automate and streamline the daily operations of a clinic. The system will enable efficient management of patient records, doctor appointments, medical prescriptions, billing, pharmacy inventory, lab test management, and staff activities, while providing real-time tracking of clinic operations and reports for administrators, doctors, receptionists, pharmacists, and lab technicians.

# Story Board:

## Landing Page

* Navbar: Home, Login/Sign Up, About Us, Contact Us
* Welcome Section: Brief description of clinic services and key features
* User Action: Navigate to Login/Sign-Up

## Login/Sign-Up Page

* Login Fields: Email/Phone, Password
* Sign-Up Fields: Name, Email, Phone, Age, Gender, Role (Patient/Doctor/Receptionist/Pharmacist/Lab Technician)
* Admin Login: Predefined credentials
* Action: Redirect to appropriate Dashboard upon successful login

## Patient Dashboard

* Navbar: Home, Book Appointment, My Appointments, Medical History, Profile, Logout
* Features:
* - View available doctors and specialties
* - Book appointments
* - View past appointments, prescriptions, lab test results
* - Update personal profile details
* - Notifications for upcoming appointments

## Doctor Dashboard

* Navbar: Home, Today's Appointments, Patient History, Prescriptions, Select Lab Tests, Profile, Logout
* Features:
* - View list of scheduled appointments
* - Access patient medical history and receptionist-submitted details
* - Create and manage prescriptions
* - View available lab tests added by Lab Technician
* - Select lab tests for patients as needed
* - Notifications about new patients and lab test results

## Receptionist Dashboard

* Navbar: Home, New Patient Entry, Appointments, Forward to Doctor, Profile, Logout
* Features:
* - New Patient Entry: Collect patient details (Name, Age, Gender, Contact Information, Symptoms, Medical History); Save patient data
* - Appointment Scheduling: Check doctor availability; Schedule appointment
* - Forward Patient Details to Doctor: Forward information and notify doctor
* - Profile Management: Edit receptionist profile information

## Pharmacist Dashboard

* Navbar: Home, Update Medicines, View Prescriptions, Dispense Medicine, Profile, Logout
* Features:
* - Update medicine inventory (Add/Edit/Delete medicines)
* - View doctor-issued prescriptions
* - Record dispensing of medicines to patients
* - Manage medicine stock levels and alerts for low stock

## Lab Technician Dashboard

* Navbar: Home, Add Available Tests, View Test Requests, Upload Test Results, Profile, Logout
* Features:
* - Add and manage available lab tests (Name, Description, Cost)
* - View lab test requests from doctors
* - Upload test results for completed tests
* - Maintain test records linked to patient profiles

## Admin Dashboard

* Tabs: Patient Management, Doctor Management, Appointment Management, Receptionist Management, Pharmacist Management, Lab Technician Management, Reports
* Overview: Total patients, doctors, receptionists, pharmacists, lab technicians, and appointments statistics; Generate reports
* Actions: Add/Edit/Delete patient, doctor, receptionist, pharmacist, and lab technician records; Approve or cancel appointment requests; View financial reports and statistics

## Appointment Booking Flow

* Patient Action: Select specialization → Choose Doctor → Select Date & Time → Confirm Appointment; Notification sent to doctor and patient
* Receptionist Action: Collect patient details → Select Doctor and Time Slot → Confirm Appointment → Forward Details

## Medical History, Prescription, and Lab Test Management

* Doctors: View patient history and receptionist-submitted details; Add new diagnosis and prescriptions; Select required lab tests from those available (added by Lab Technician); Generate printable reports
* Pharmacists: View prescriptions; Dispense medicines and manage inventory; Update stock levels
* Lab Technicians: Add available lab tests; Process test requests by doctors; Upload test results linked to patients

## Billing Management

* Generate bills based on consultations, medicines, and lab tests
* Payment status tracking (Paid/Pending)
* Generate printable receipts

## Notifications

* Trigger: Appointment reminders, new patient forwarded, prescriptions ready, lab test requests completed, pending bills
* Format: Pop-up, email, or SMS
* Action: Patients, doctors, pharmacists, lab technicians, and receptionists receive timely alerts

## Logout Confirmation

* Pop-up: 'Are you sure you want to log out?' with Yes/No buttons
* Action: Redirect to Landing Page after logout

# Technical Flow

* Login/Sign-Up Process: Input credentials → Validate → Redirect to the correct dashboard
* Appointment Booking: Patient or Receptionist selects Doctor → Check availability → Confirm appointment → Notify Doctor and Patient
* Patient Data Entry by Receptionist: Input patient personal details and symptoms → Save to database → Forward to doctor
* Prescription Management: Doctor adds prescription → Saved in system → Pharmacist views and dispenses → Patient can view/download prescription
* Lab Test Management: Lab Technician adds tests → Doctor selects tests for patients → Technician uploads test results → Linked to patient records
* Medicine Inventory Management: Pharmacist updates medicines (Add/Edit/Delete) → Track stock levels and alerts
* Billing Process: Generate bill → Payment status updated → Receipt generated
* Admin Actions: Manage Patients, Doctors, Receptionists, Pharmacists, and Lab Technicians (Add/Edit/Delete) → Update records → Generate Reports

# External Interface Requirements

* Integration with email/SMS services for notifications
* Responsive UI for mobile and desktop use
* Secure authentication (e.g., OAuth2)
* Database for storing patients, doctors, receptionists, pharmacists, lab technicians, appointments, prescriptions, medicines, tests, and billing records