

Medicare - Doctor Appointment System

A Web-Based Healthcare Appointment Platform

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March 2026

Project Overview

The Medicare - Doctor Appointment System is a comprehensive web-based healthcare solution designed to simplify the process of booking doctor appointments online. This system allows patients to easily search for doctors based on specialization, view availability, and schedule appointments in a user-friendly interface. It eliminates traditional manual booking problems such as long waiting times, lack of information, and inefficiency. In addition to patient functionality, the system also includes a dedicated doctor panel where doctors can manage their appointments, approve or reject booking requests, and monitor patient interactions. Furthermore, an admin panel is integrated to oversee the entire system, including user management, appointment tracking, and analytics. Overall, this project demonstrates a complete full-stack web application that integrates frontend design, backend logic, and database management to deliver a real-world healthcare solution.

Technology Used

Frontend: HTML, CSS, JavaScript

Backend: Lovable Platform

Database: MySQL

Objectives

- i. Build an efficient and user-friendly appointment booking system
- ii. Ensure secure authentication and data handling
- iii. Provide multi-role access (Patient, Doctor, Admin)
- iv. Enable online payment and receipt generation
- v. Improve user experience with a clean and responsive interface
- vi. Ensure efficient appointment scheduling and management
- vii. Provide real-time updates for appointments and payment status

Features

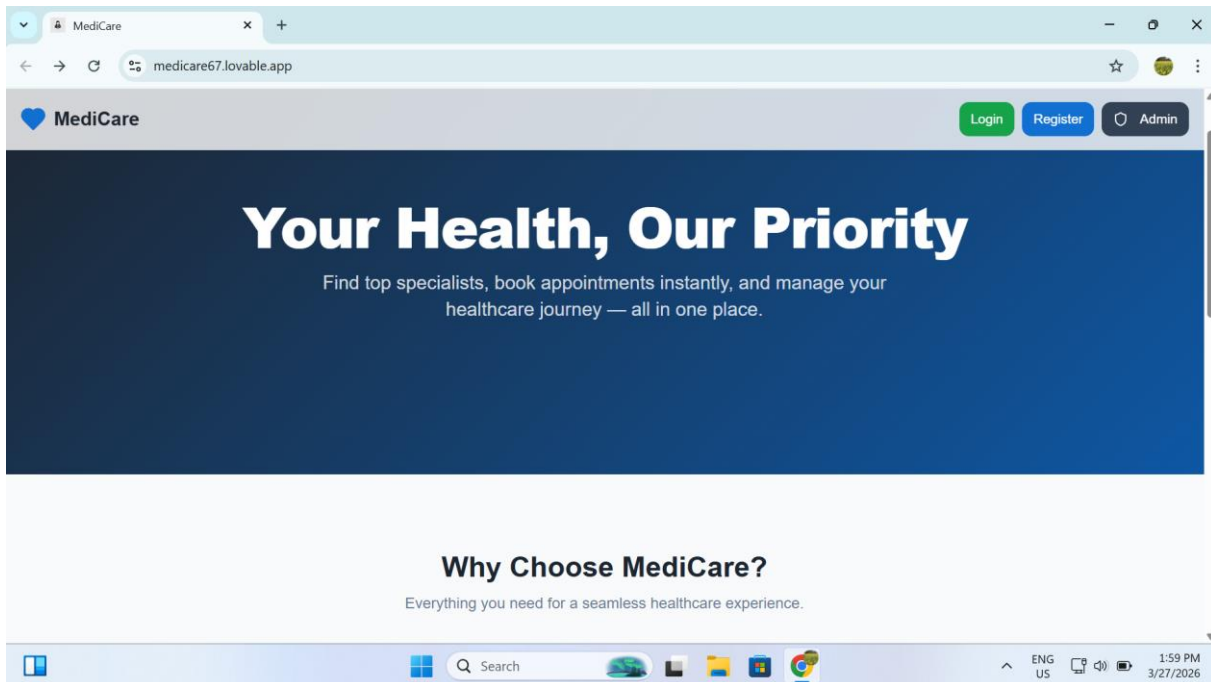
- i. User Registration & Login system
- ii. Doctor Search and Filtering
- iii. Appointment Booking with date & time
- iv. Online Payment (bKash/Nagad)
- v. Receipt PDF generation
- vi. Doctor Dashboard management
- vii. Admin Dashboard & Analytics

System Flow

User → Register/Login → Dashboard → Find Doctor → Book Appointment → Payment → Confirmation → Receipt → Admin Monitoring

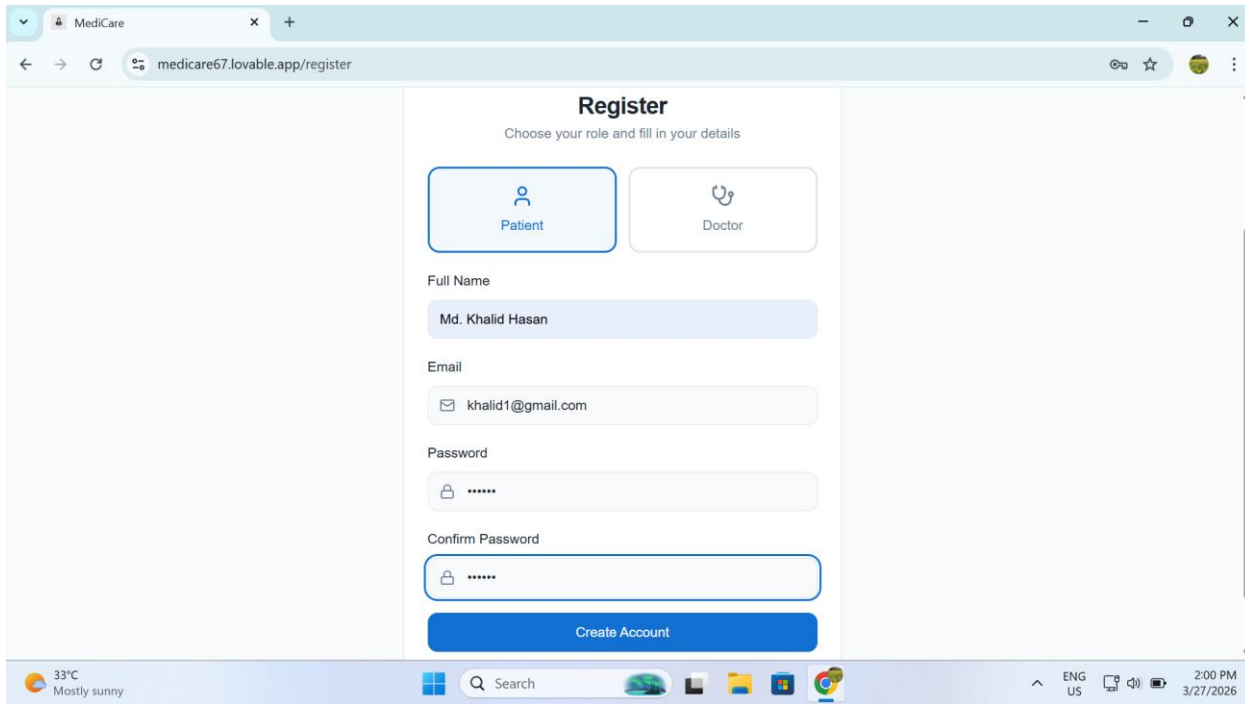
System Screenshots with Explanation

Figure 1: Home Page



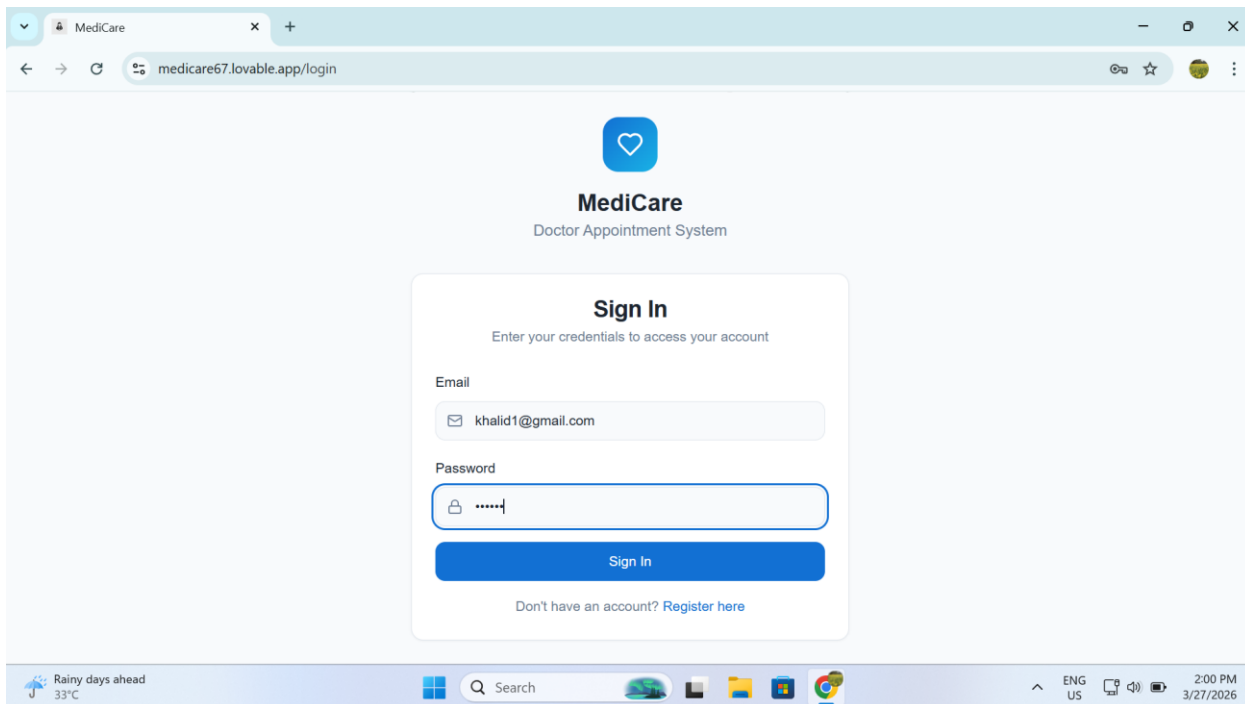
This is the landing page of the system. Users can navigate to login, register, or admin panel. It provides a clear overview of the platform.

Figure 2: User Register Page



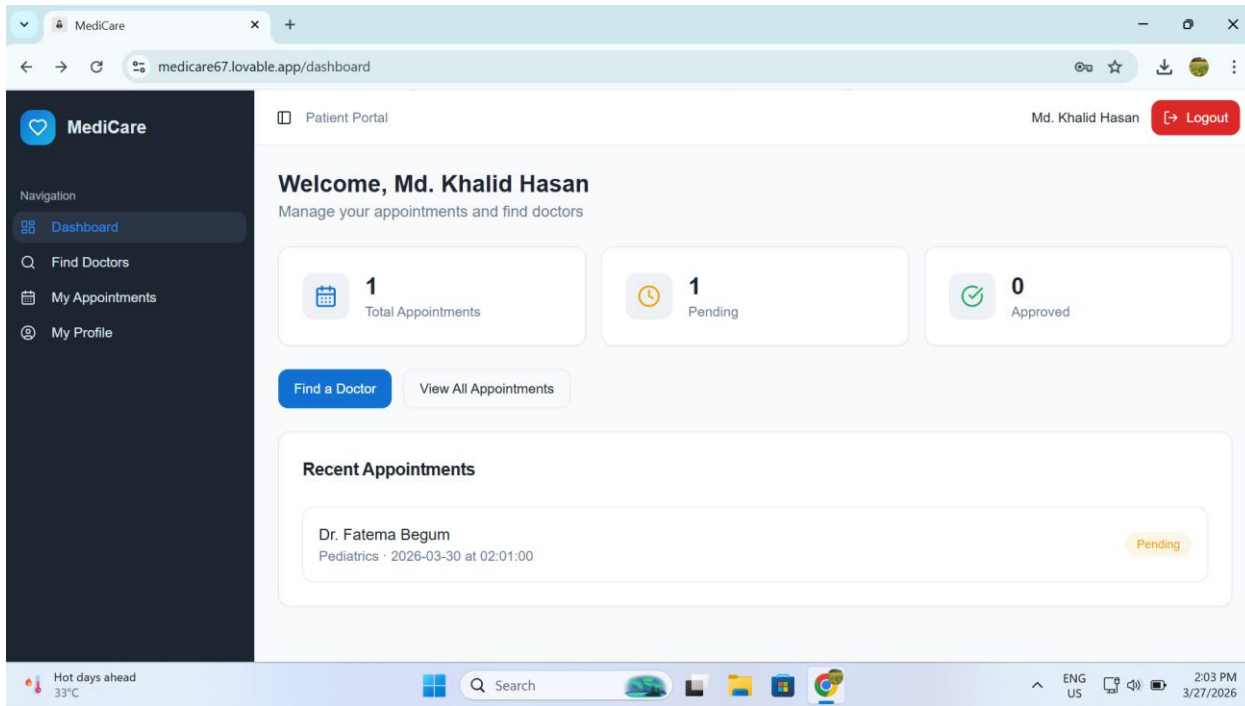
New users can create an account by providing basic information like name, email, and password.

Figure 3: User Login Page



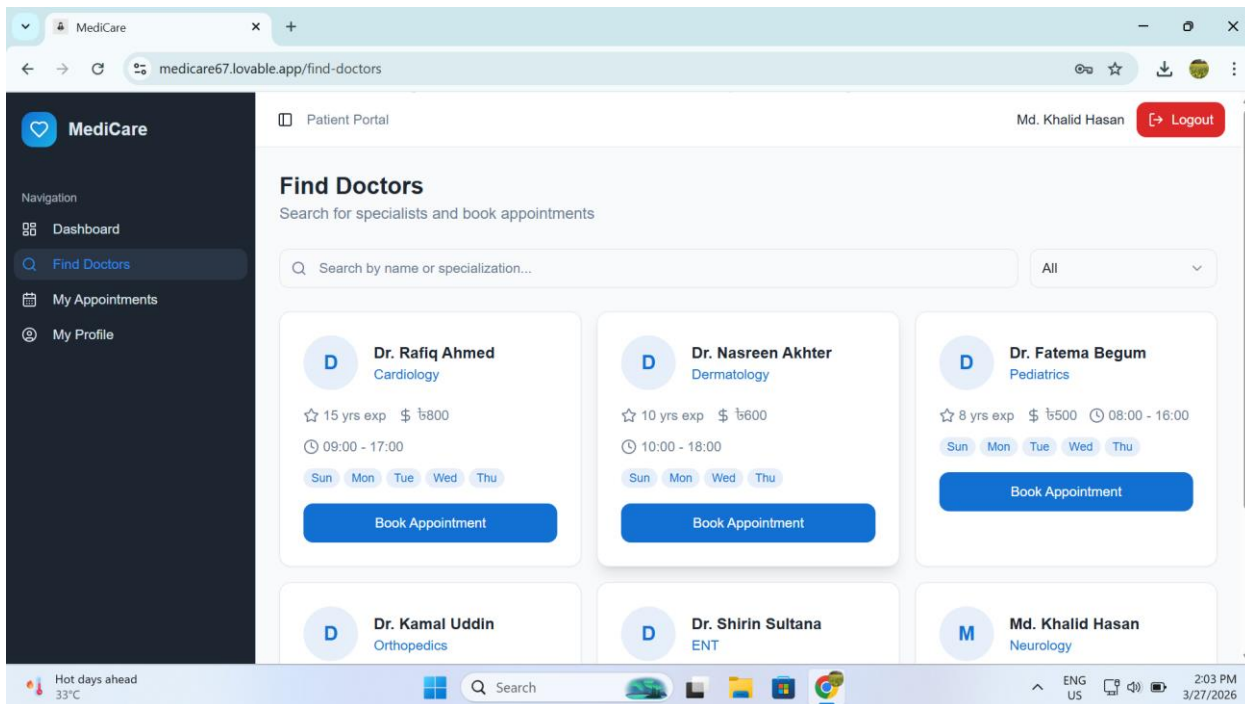
Users enter email and password to access their account securely. Validation ensures proper authentication.

Figure 4: User Dashboard Page



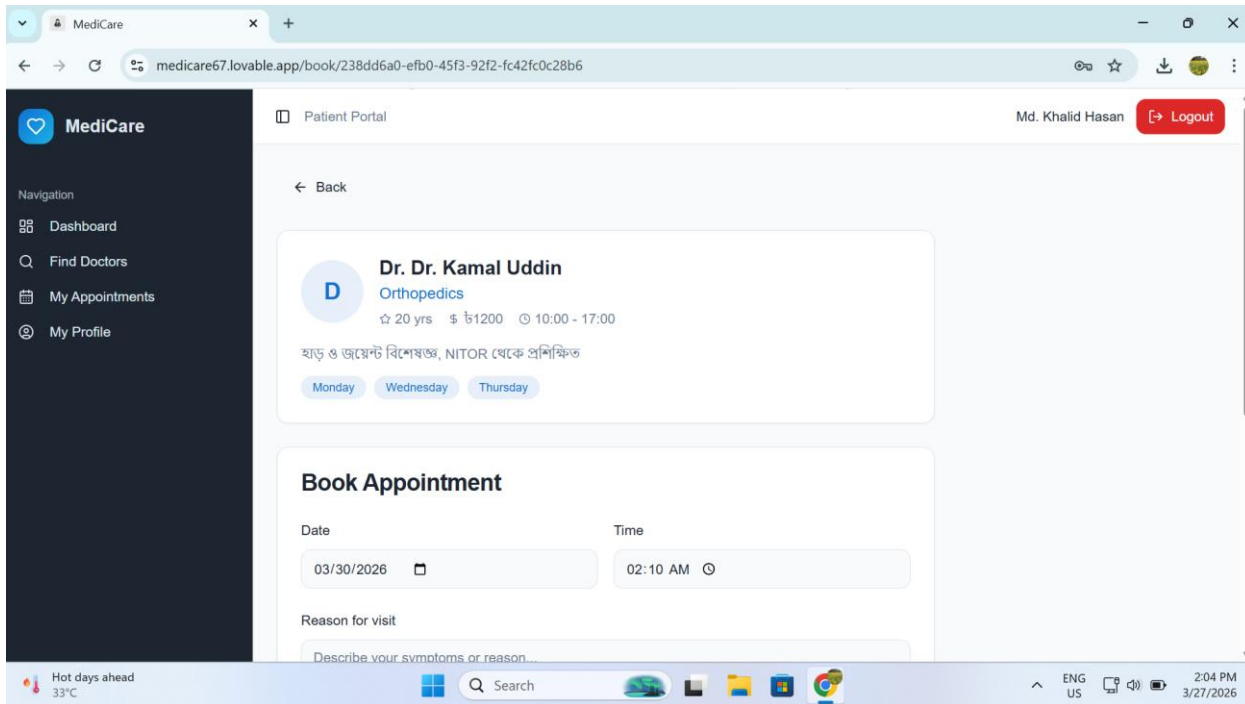
After login, users can view appointment summary, recent bookings, and quick actions like finding doctors.

Figure 5: Find Doctors



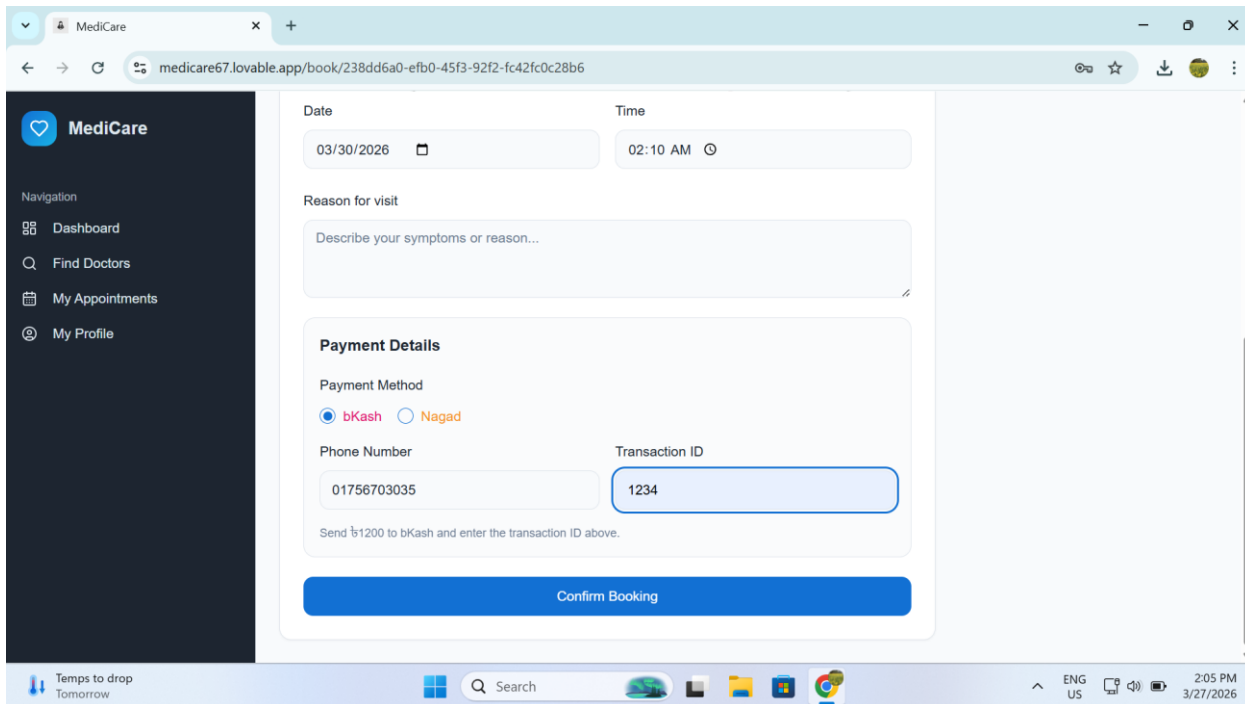
Users can search doctors by specialization and view details like experience, fees, and available days.

Figure 6: Booking Page



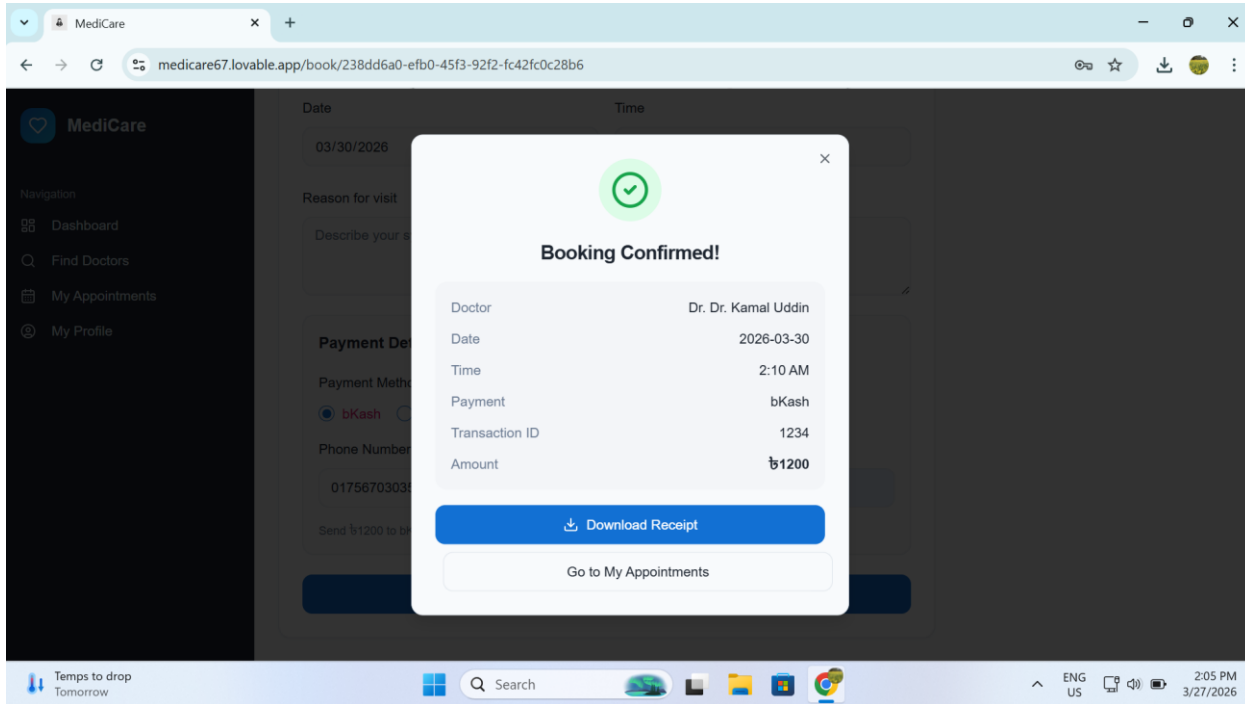
Users select doctor, date, and time. They also describe symptoms before confirming appointment.

Figure 7: Payment Page



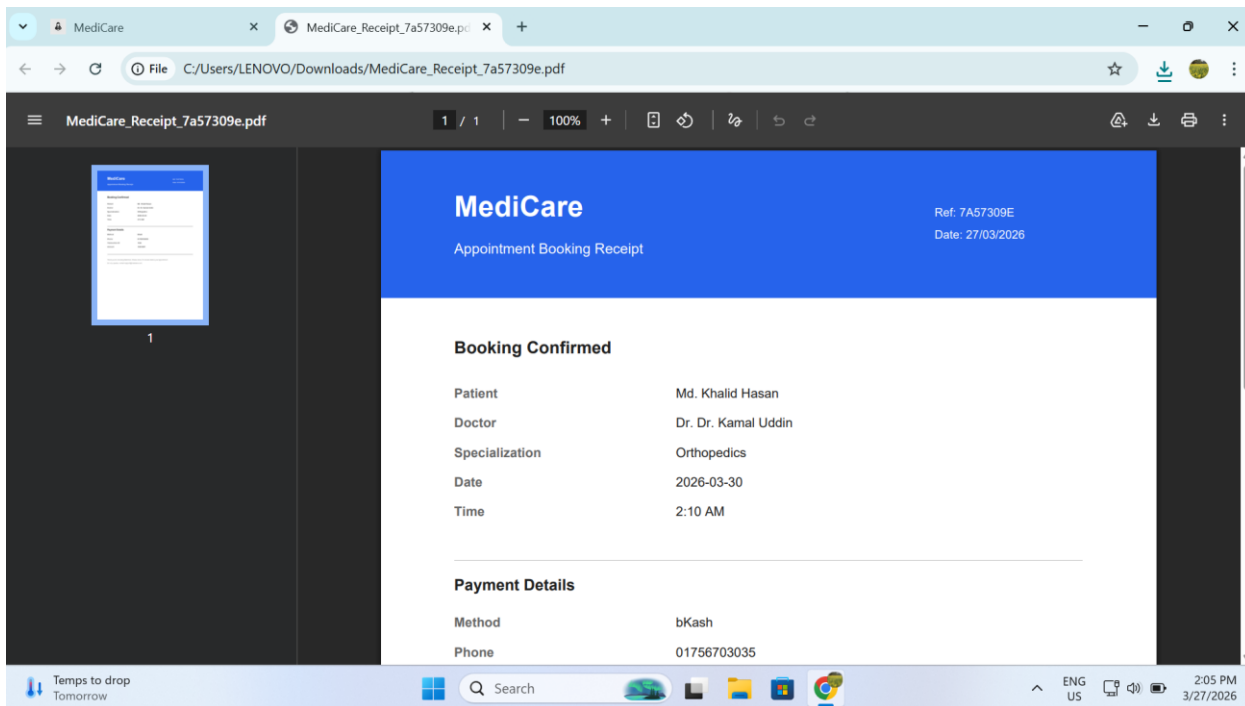
Users choose payment method (bKash/Nagad), enter phone and transaction ID to complete booking.

Figure 8: Booking Confirmation



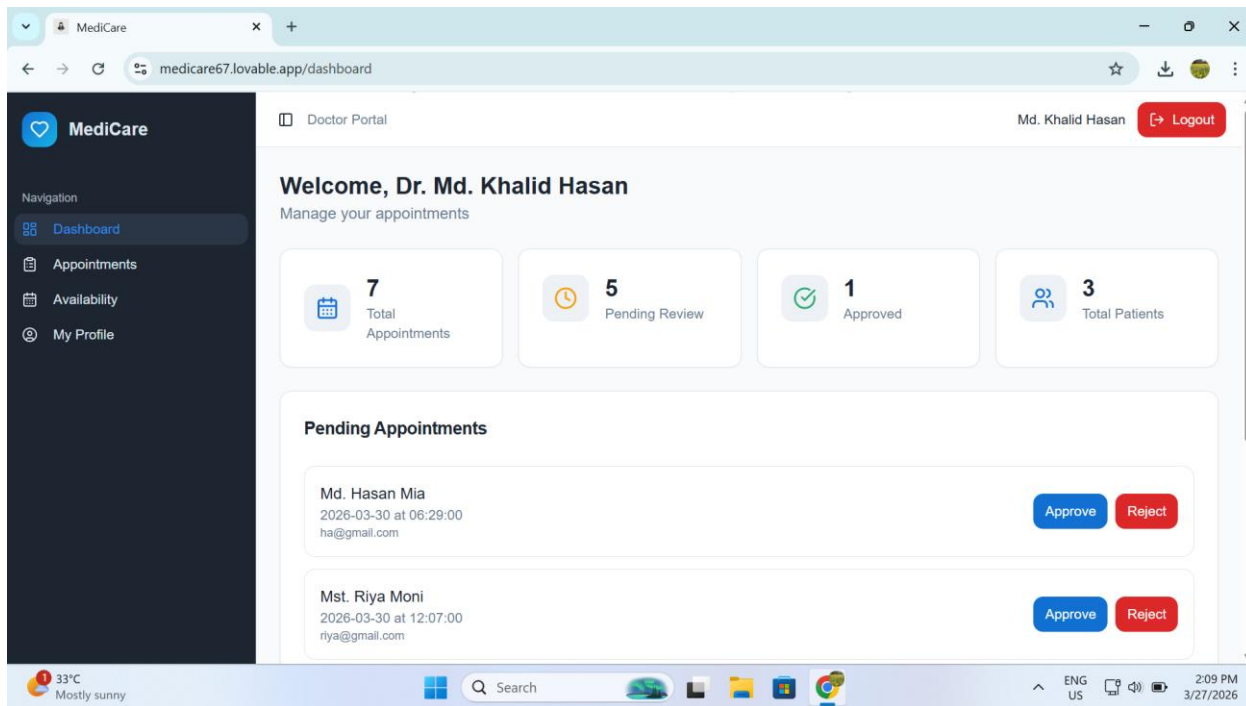
System confirms booking with details like doctor, time, and payment status

Figure 9: Receipt PDF



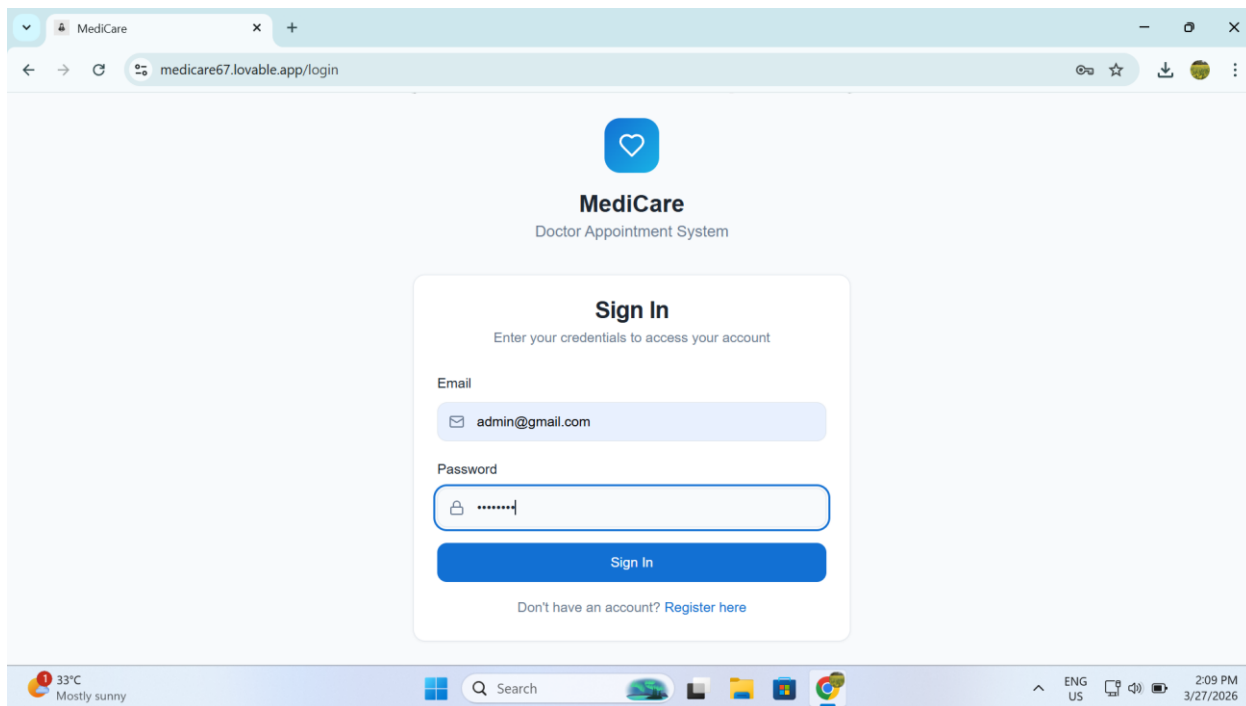
A downloadable receipt is generated showing booking details and payment confirmation.

Figure 10: Doctor Dashboard



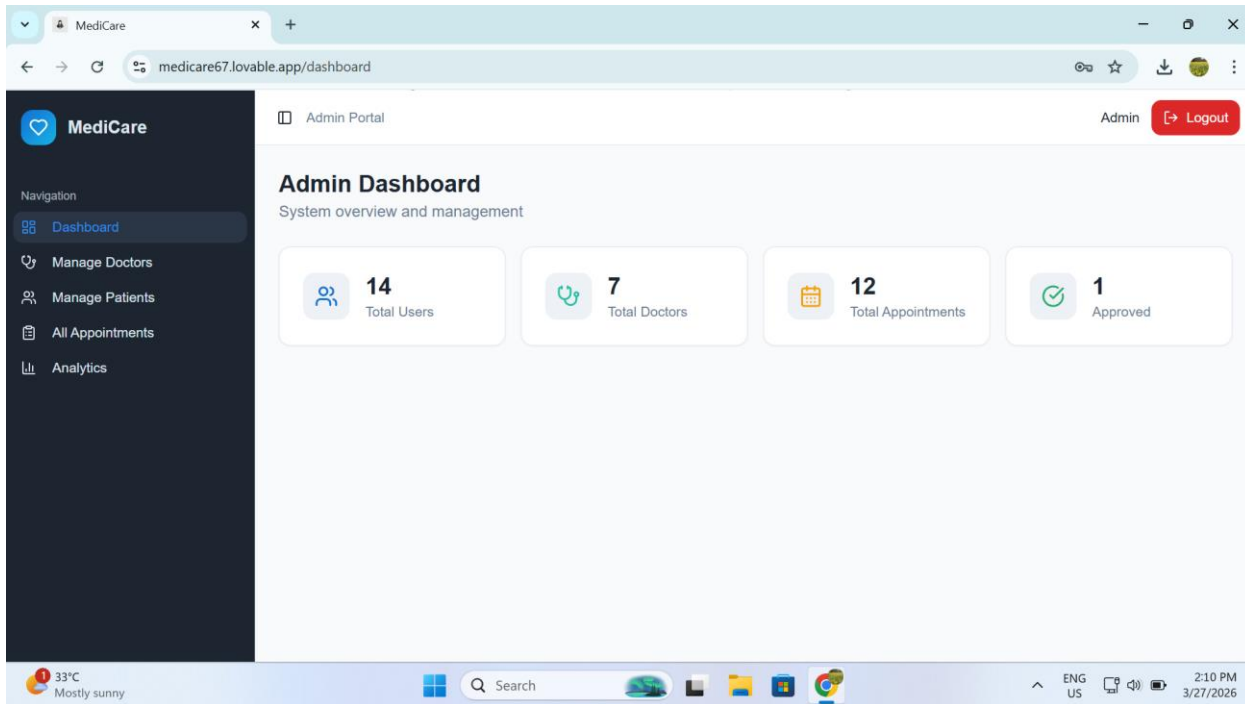
Doctors can view pending appointments, approve or reject requests, and manage schedule.

Figure 11: Admin Login Page



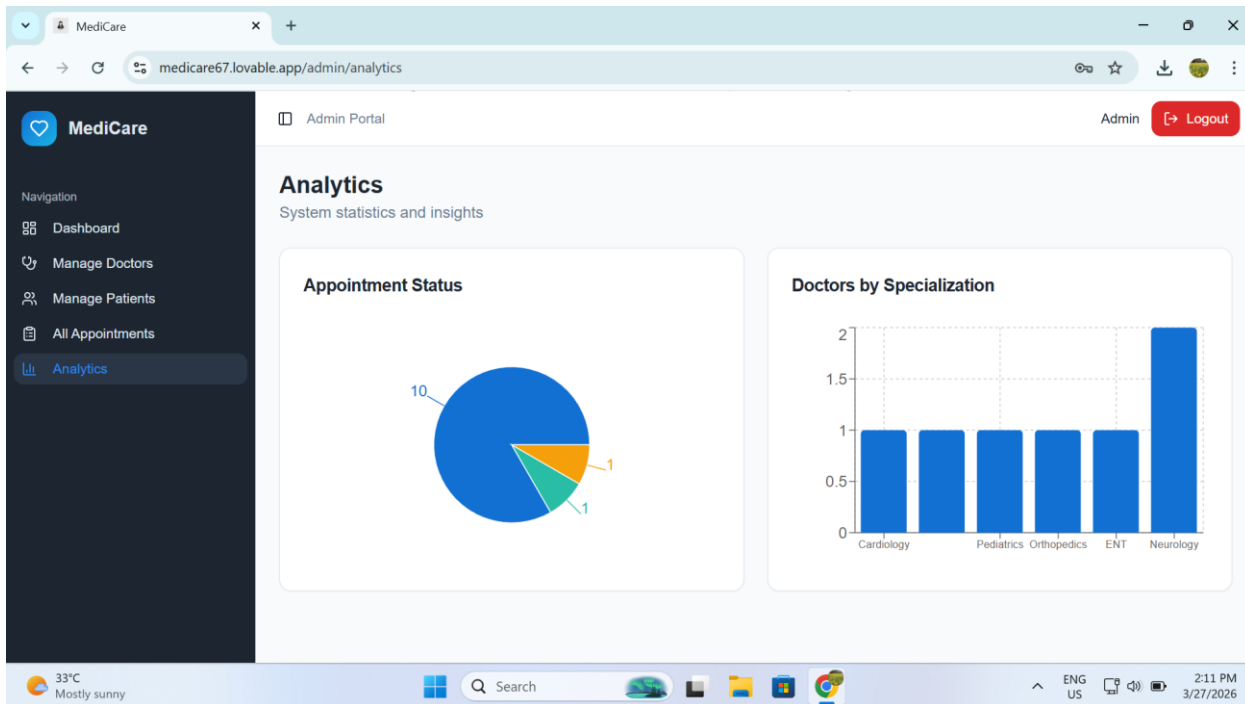
Admin can login using secure credentials to access the admin panel and manage system data.

Figure 12: Admin Dashboard



Admin can monitor total users, doctors, appointments, and system activity overview.

Figure 13: Admin Analytics



Analytics dashboard shows appointment statistics and doctor specialization distribution using charts.

Conclusion

The Medicare - Doctor Appointment System successfully demonstrates the implementation of a modern, efficient, and user-friendly healthcare solution. Through this project, users can seamlessly interact with the system to find doctors, book appointments, and complete payments without any physical hassle.

The integration of multiple user roles such as patients, doctors, and administrators ensures a complete ecosystem where each stakeholder can perform their required tasks efficiently. The admin analytics further enhance the system by providing valuable insights into system performance and usage patterns.

This project highlights strong concepts of full-stack development, including UI/UX design, backend logic, database management, and real-world problem solving. It can be further extended into a production-level system by integrating real payment gateways, mobile applications, and advanced notification systems.

Overall, this system reflects a practical and scalable solution for digital healthcare services and showcases the developer's capability to build complete end-to-end web applications.

Project Links:

Live Demo : <https://medicare67.lovable.app/>