

Hospital System

Objective

The development of the hospital management system offers a comprehensive account of its inception, design, execution, and future directions. At its core, the system seeks to address the complex operational needs of the hospital while enhancing the overall patient experience. To achieve this, a multi-faceted approach integrating various technologies was adopted.

The system's architecture was carefully crafted to leverage the strengths of different technologies.

Front-end development utilized JSP, HTML, CSS, and JavaScript to create an intuitive and visually appealing user interface. Meanwhile, the back-end logic was implemented in Java, providing robust functionality and seamless integration with the MySQL database for efficient data storage and retrieval.

Understanding the diverse needs of stakeholders was paramount. Extensive consultations with administrators, medical staff, receptionists, and patients were conducted to ascertain their specific requirements. This process informed the development of a feature-rich system that caters to the unique workflows and responsibilities of each user role.

Key features of the system were meticulously designed to address critical pain points and streamline hospital operations. User authentication mechanisms were implemented to ensure secure access to sensitive information, with different levels of access granted based on user roles. Admin management functionalities empowered administrators to efficiently manage personnel and resources, while online appointment booking capabilities simplified the process for patients and staff alike.

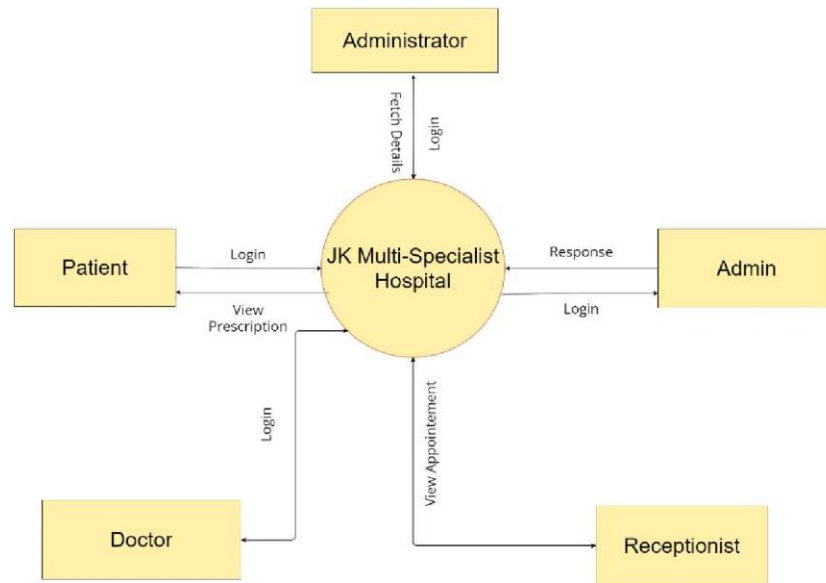
Additionally, the system incorporated features such as contact hospital functionality for seamless communication, dynamic doctor management for flexible staffing, and a patient portal for enhanced engagement and transparency. Robust testing procedures were employed throughout the development process to validate the system's functionality, usability, and security.

Results and evaluation highlighted the system's success in meeting predefined objectives, with feedback from stakeholders informing iterative improvements. Looking ahead, the report outlines potential enhancements and future directions, including the integration of additional healthcare systems and the implementation of advanced analytics capabilities to further optimize hospital operations and patient care.

In conclusion, the project report serves as a comprehensive documentation of the hospital management system's journey, from conception to implementation and beyond. It stands as a testament to the collaborative efforts of the development team and the unwavering commitment to excellence in healthcare delivery at JK Multi Specialist Hospital.

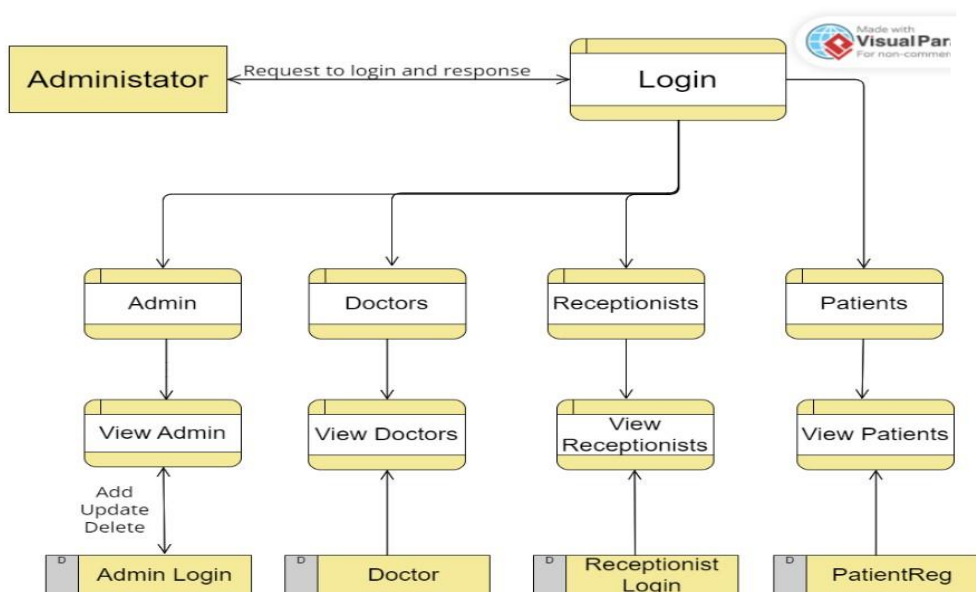
Data Flow Diagram

Level 0 DFD

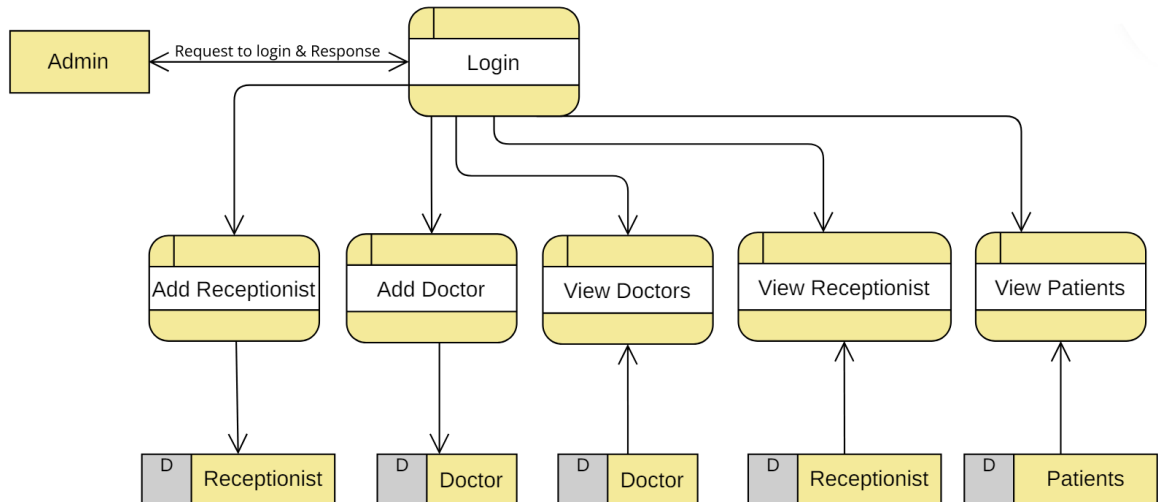


LEVEL 1

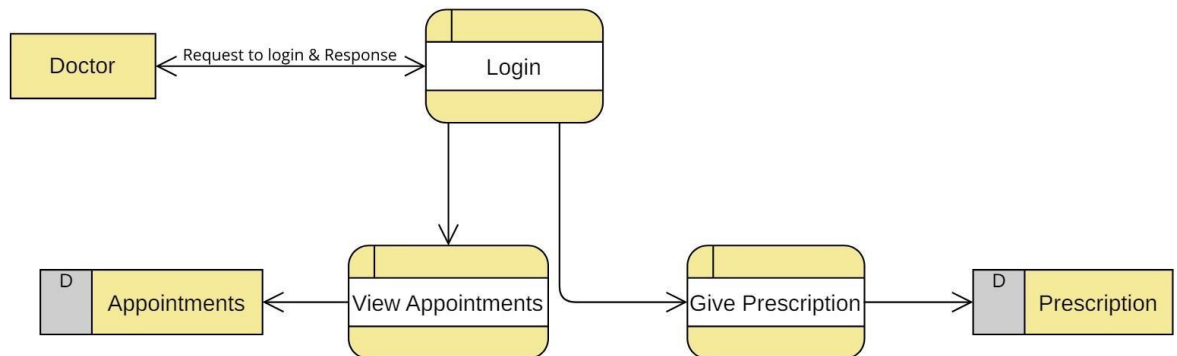
ADMINISTRATOR



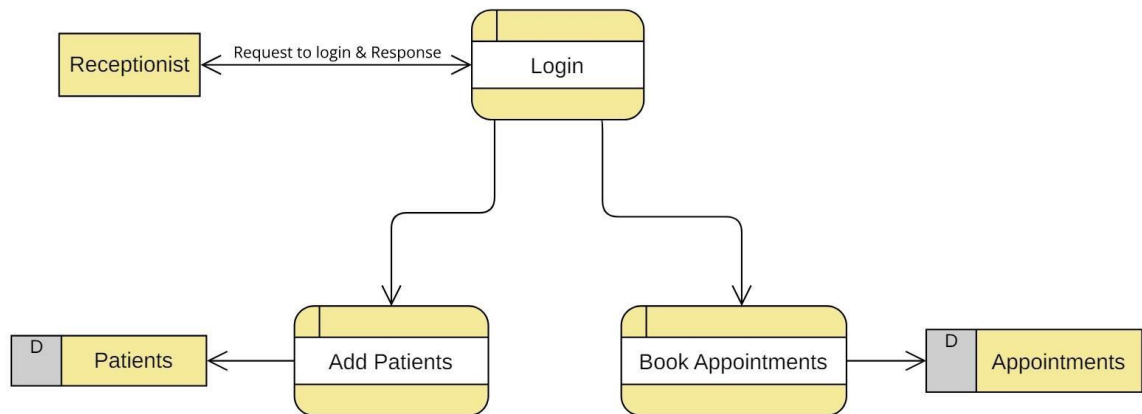
ADMIN



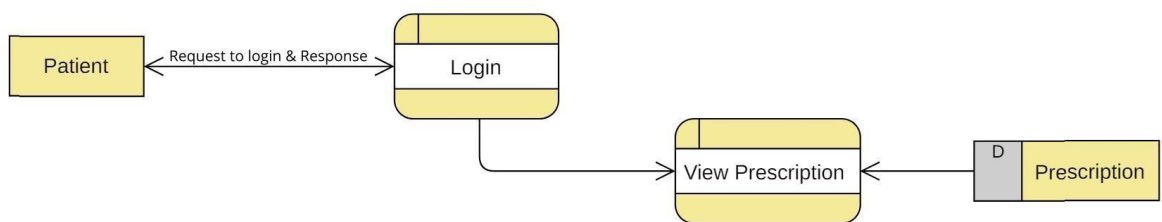
DOCTOR



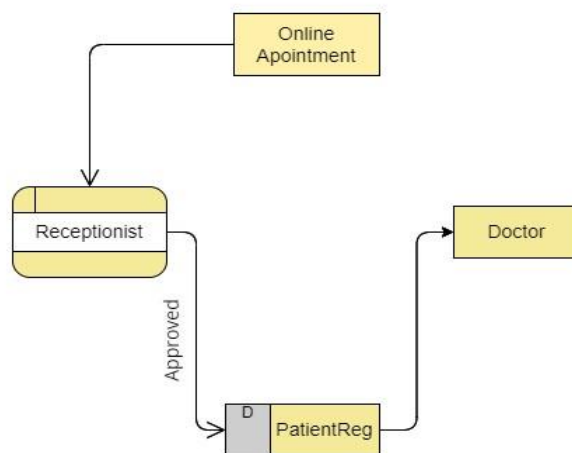
RECEPTIONIST



PATIENT

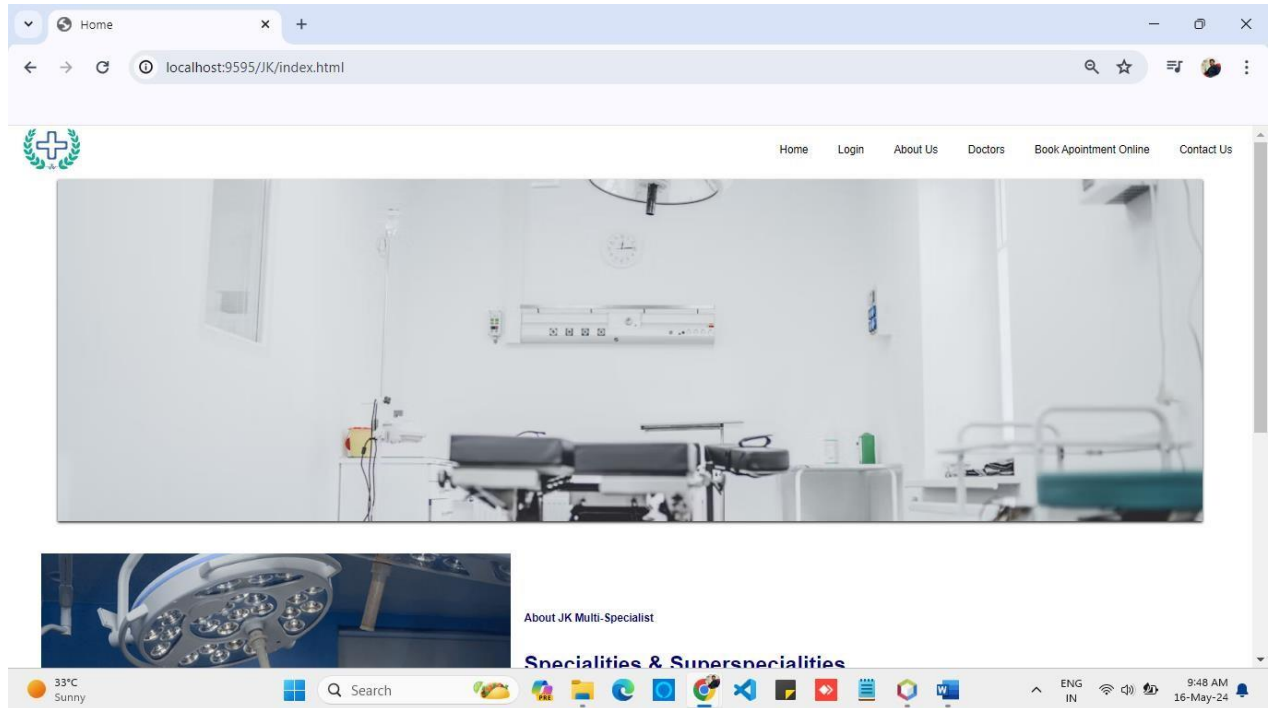


ONLINE APPOINTMENT



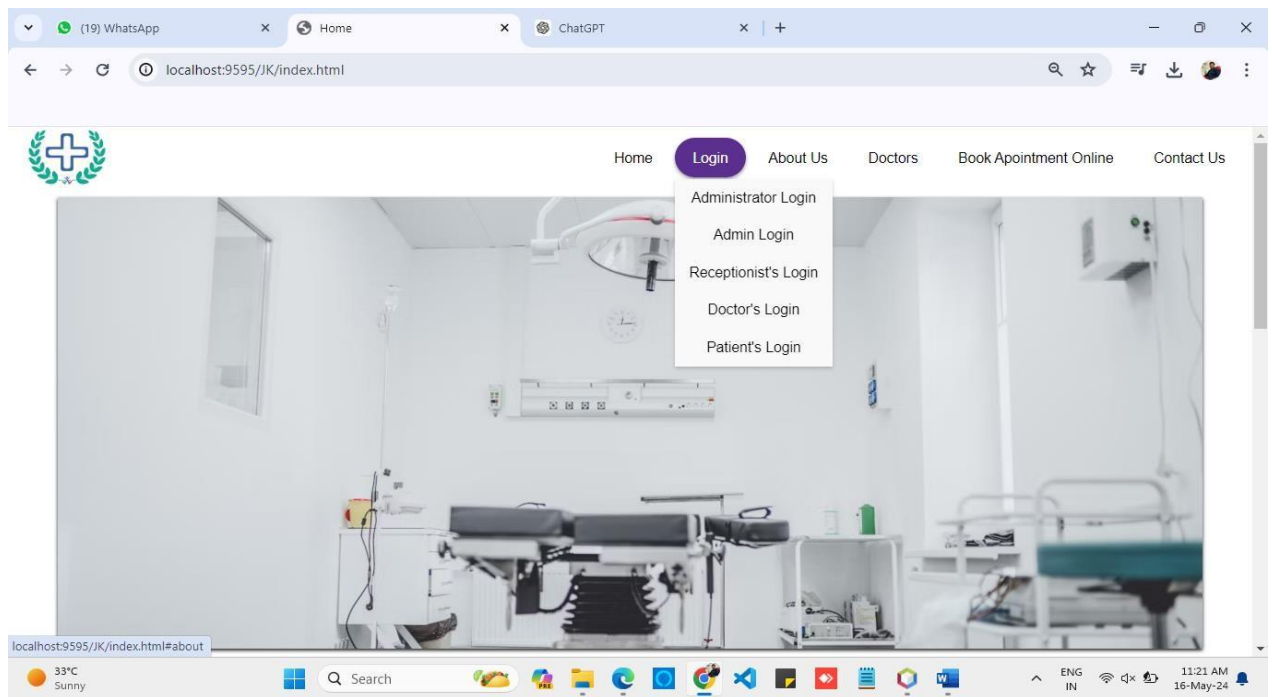
Project Screenshots

Home page

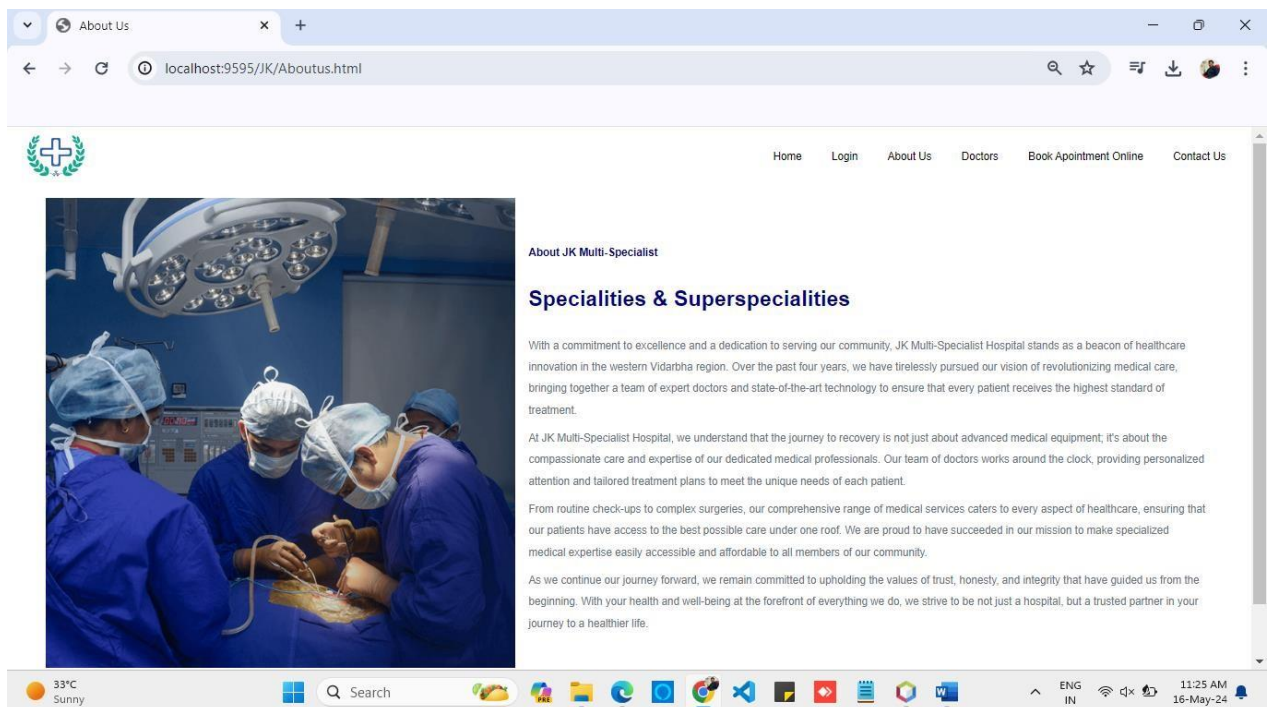


Page contains navbar having various below functionalities

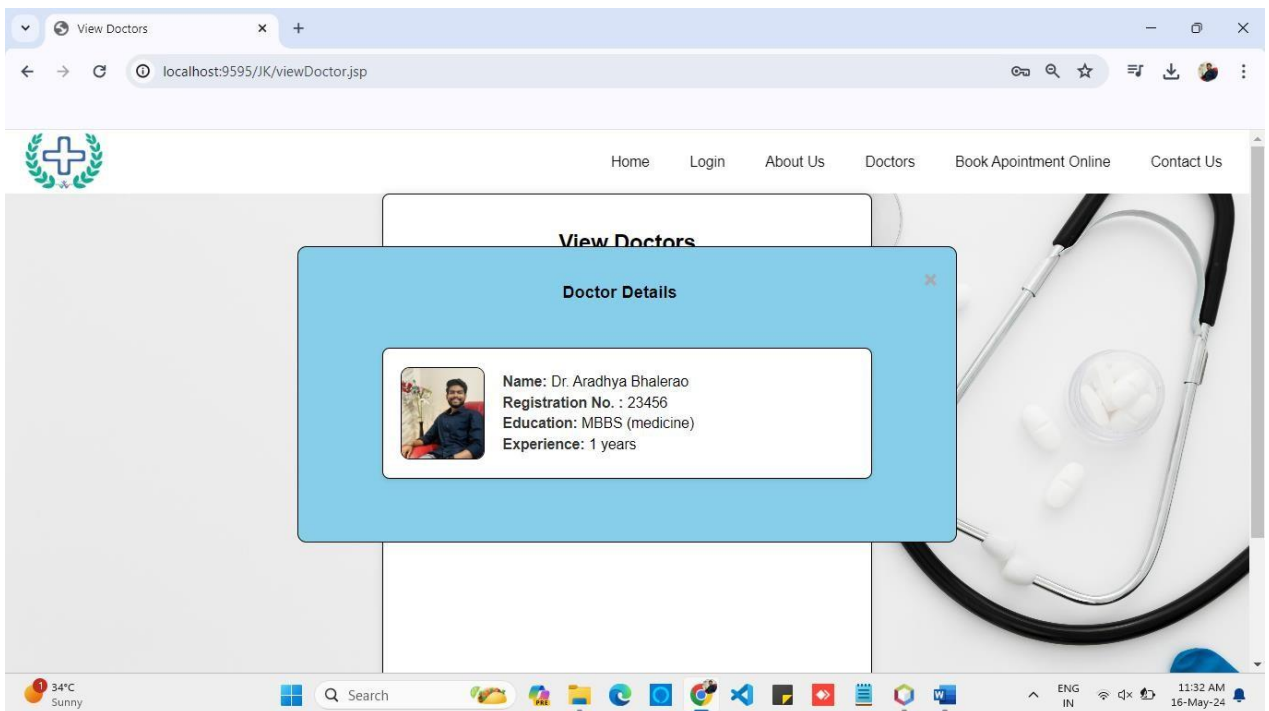
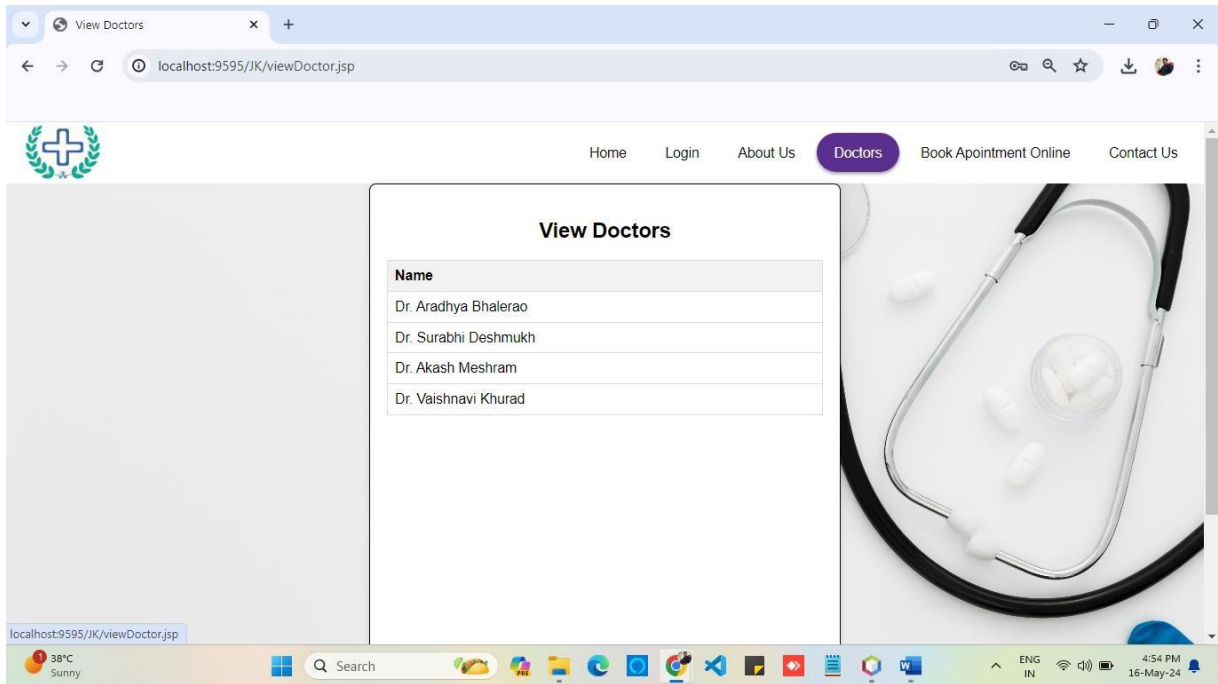
- Login – Having different login options
- About Us – Hospital information
- Doctors – Showing all doctor information
- Book Appointment Online – User able to book online appointment
- Contact Us – User able to contact hospital for any query



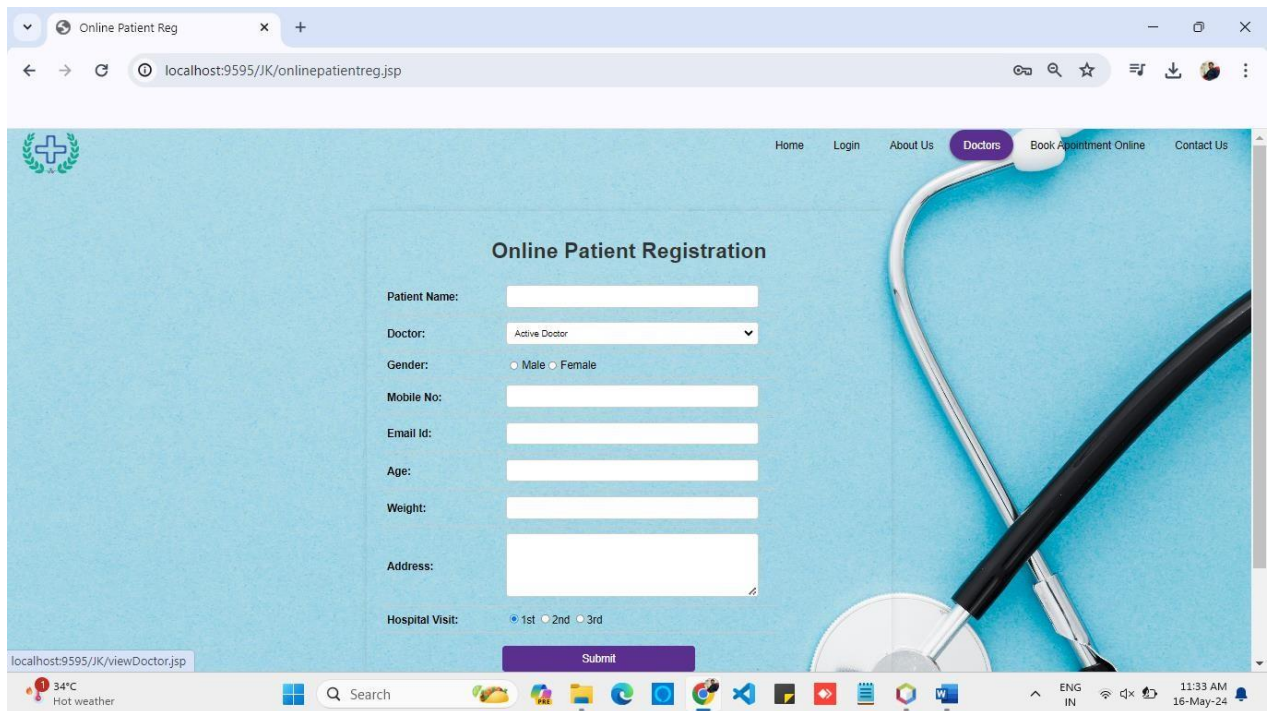
About us



Doctors



Book online appointment

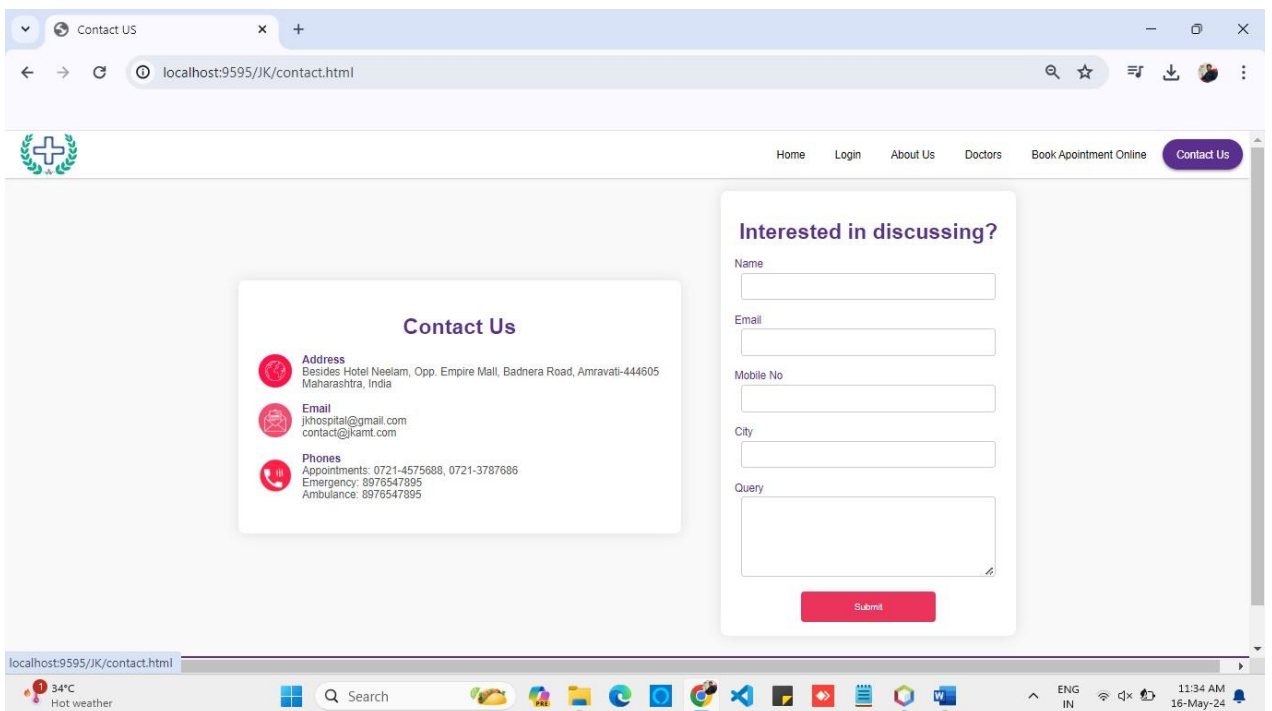


The screenshot shows a web browser window with the address bar displaying 'localhost:9595/JK/onlinepatientreg.jsp'. The page features a light blue background with a stethoscope graphic on the right. The navigation bar includes links for Home, Login, About Us, Doctors, Book Appointment Online, and Contact Us. The main content area is titled 'Online Patient Registration' and contains the following form fields:

- Patient Name:
- Doctor:
- Gender: ☐ Male ☐ Female
- Mobile No:
- Email Id:
- Age:
- Weight:
- Address:
- Hospital Visit: ☒ 1st ☐ 2nd ☐ 3rd

A purple 'Submit' button is located at the bottom of the form. The Windows taskbar at the bottom shows the system clock as 11:33 AM on 16-May-24.

Contact Us



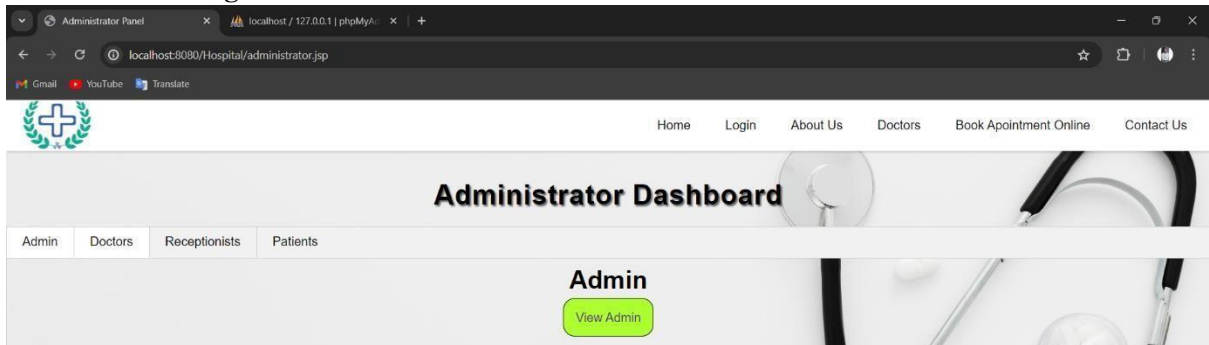
The screenshot shows a web browser window with the address bar displaying 'localhost:9595/JK/contact.html'. The page features a light gray background. The navigation bar includes links for Home, Login, About Us, Doctors, Book Appointment Online, and Contact Us. The main content area is divided into two sections:

- Contact Us**: A white box containing contact information:
 - Address**: Besides Hotel Neelam, Opp. Empire Mall, Badhera Road, Amravati-44605 Maharashtra, India
 - Email**: jkhospital@gmail.com, contact@kamt.com
 - Phones**: Appointments: 0721-4575688, 0721-3787686; Emergency: 8976547895; Ambulance: 8976547895
- Interested in discussing?**: A white box containing a form with the following fields:
 - Name:
 - Email:
 - Mobile No:
 - City:
 - Query:A red 'Submit' button is located at the bottom of this form.

The Windows taskbar at the bottom shows the system clock as 11:34 AM on 16-May-24.

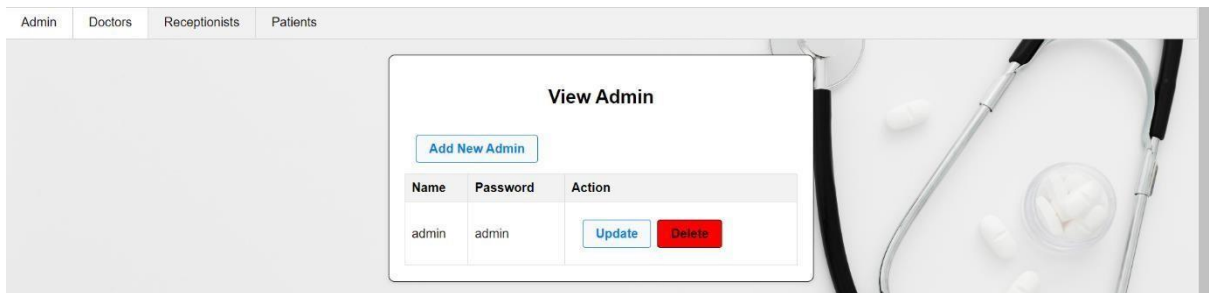
Login Section

1.Administrator Login



This is the landing page for the Administrator. The Administrator has a menu for editing the ID and password for admin users, as well as for viewing Admins, Doctors, Receptionists, and Patients.

- **View Admin**



The Administrator can view admins' usernames and passwords. Additionally, the Administrator can update the ID and password for an admin and can also delete an admin.

- **View Doctor**



The Administrator can view the doctors and their working status.

- **View Receptionist**

View Receptionist

Username	Password
recep	123

The Administrator can view the user IDs and passwords for receptionists. •

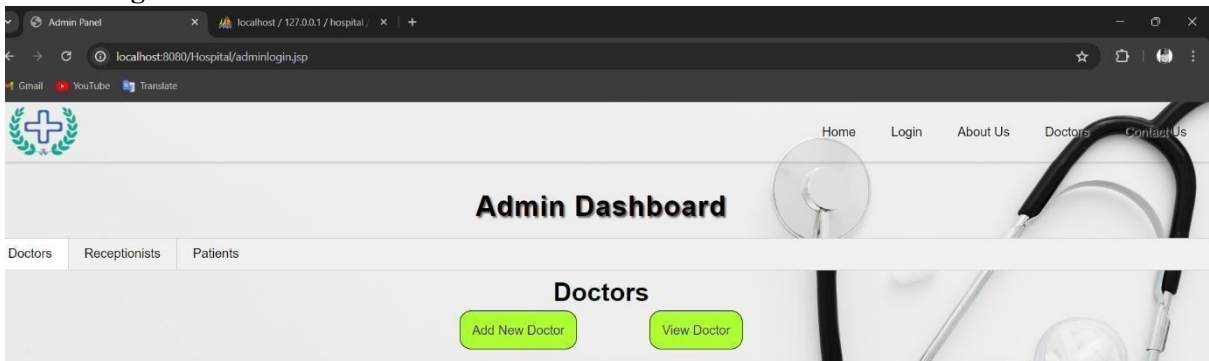
View Patients

View patient

Patient Name	Doctor	Gender	Mobile No	Email	Age	Weight	Address	Visit	Fees
Aakash Meshram	Dr.Vaishnavi Khurad	Male	8856821788	akashmeshram2486@gmail.com	22	72	Amravati	1st	700
Vaishnavi Khurad	Dr.Akash Meshram	Male	3693692365	akashmeshram88568@gmail.com	22	54	Gopal Nagar Amravati	1st	900
Surabhi Deshmukh	Dr.Akash Meshram	Male	7539876541	akashmeshram2486@gmail.com	22	72	jay colony	1st	900
Aradhya Bhalerao	Dr.Akash Meshram	Male	8859879870	akashmeshram8856@gmail.com	22	75	amt	1st	900

The Administrator can view all the details of the patients.

2.Admin Login



This is the landing page for the Administrator, where the admin can perform operations on doctors, receptionists, and patients,

- **Add New Doctor**

Add New Doctor

Photo: my.jpg

Name:

Registration Number:

Education:

Experience:

Doctor's Charges:

1st Visit:

2nd Visit:

3rd Visit:

Username:

Password:

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The Admin can register new doctor to the hospital.

- **View Doctor**

View Doctors

Name	Status	Update Password	Action
Dr.Vaishnavi Khurad	Active	<input type="button" value="Update"/>	<input type="button" value="Delete"/>
Dr.Akash Meshram	Active	<input type="button" value="Update"/>	<input type="button" value="Delete"/>
Dr.Aradhya Bhalerao	Active	<input type="button" value="Update"/>	<input type="button" value="Delete"/>
Dr.Surabhi Deshmukh	Active	<input type="button" value="Update"/>	<input type="button" value="Delete"/>

The admin can change a doctor's status to active or inactive, update the ID and password for doctors, and delete a doctor from the hospital.

- **Add New Receptionist**

The admin can add a new receptionist and update the user ID and password for receptionists. •

View Patients

Patient Name	Doctor
Aakash Meshram	Dr.Vaishnavi Khurad
Vaishnavi Khurad	Dr.Akash Meshram
Surabhi Deshmukh	Dr.Akash Meshram
Aradhya Bhalerao	Dr.Akash Meshram

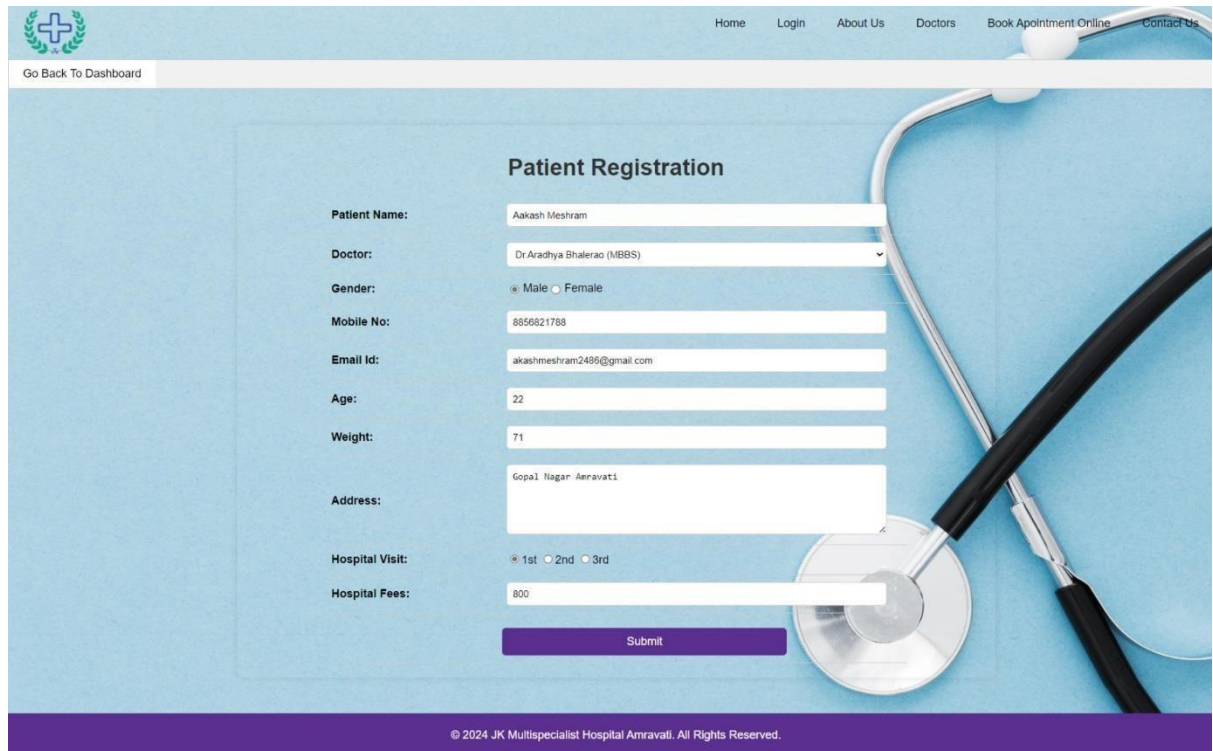
Admin can view Patients information except private information **3.Receptionist**

Login

This is the landing page for the receptionist, where they can book appointments for patients offline and for patients who have registered online for appointments.

Receptionist Login Details

Register Patient Offline



The screenshot shows a web application for a hospital. At the top, there is a navigation bar with links: Home, Login, About Us, Doctors, Book Appointment Online, and Contact Us. Below the navigation bar is a header with a logo on the left and a 'Go Back To Dashboard' button. The main content area is titled 'Patient Registration' and contains a form with the following fields:

- Patient Name: Aakash Meshram
- Doctor: Dr Aradhya Bhalerao (MBBS)
- Gender: ☒ Male ☐ Female
- Mobile No: 8856821788
- Email Id: akashmeshram2486@gmail.com
- Age: 22
- Weight: 71
- Address: Gopal Nagar, Amravati
- Hospital Visit: ☒ 1st ☐ 2nd ☐ 3rd
- Hospital Fees: 800

A 'Submit' button is located at the bottom of the form. The footer of the page contains the text: © 2024 JK Multispecialist Hospital Amravati. All Rights Reserved.

Here, the receptionist registers both online and individual patients.

• View Online Registered Patients

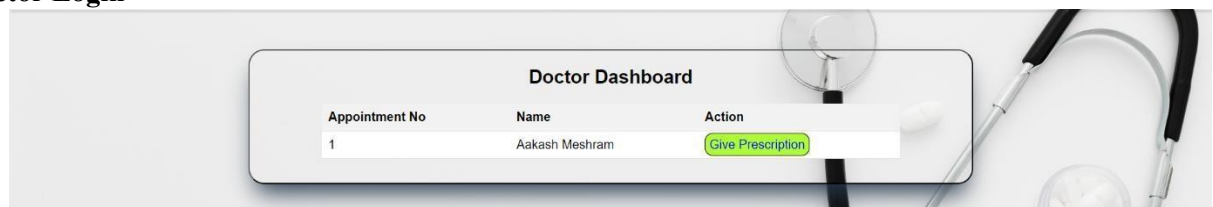


The screenshot shows the 'Receptionist Dashboard' with a table of online registered patients. The table has columns for 'Appointment No', 'Name', and 'Action'. There is one row of data for patient Aakash Meshram. Above the table are two buttons: 'Go Back To Dashboard' and 'Register Patient Offline'. Below the table is a 'Fill Details' button.

Appointment No	Name	Action
1	Aakash Meshram	Give Prescription

Here, the receptionist can view the online-registered patients and book their appointments after payment of fees.

4.Doctor Login



The screenshot shows the 'Doctor Dashboard' with a table of patients who have booked appointments. The table has columns for 'Appointment No', 'Name', and 'Action'. There is one row of data for patient Aakash Meshram. Above the table is a 'Give Prescription' button.

Appointment No	Name	Action
1	Aakash Meshram	Give Prescription

This is the landing page for the doctor, where the doctor can view patients who have booked appointments with them.

Doctors can login using username and password provided by admin.

+

JK

JK Multispecialist Hospital

Home

Login

About Us

Doctors

Book Appointment Online

Contact

Patient Diagnosis

Patient's Name

Aakash Meshram

Age

22

Weight

72

Medicine

New

Add New Medicine

Telvent 40

+

Dose

1

Timing

After Meal

Night

No of days

2

Add Medicine & Dose

Medicine	Dose	No of Days	Timing	After/Before Meal
Telvent 40	1	2	Night	After Meal

Next visit

16-06-2024

Prescription

Do Exercise Regularly

Submit

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- **Prescription**

This is the prescription page for the patient where they can view the details of prescribed medicines. Patients can also print the page, and a copy is sent via email associated with them.

4.Patient Login

JK Multi-Specialist Hospital							
Prescription							
Prescription ID	Patient Name	Age	Weight	Visit Date	Prescription	Patient ID	Doctor Name
51	Aakash Meshram	22	72	2024-06-16	Do Exrcise Regulary	8856821788	Dr.Aradhya Bhalerao
Medicine Details							
Medicine	Dose	Meal Timing		Timing	No of Days		
Telvent 40	1	After Meal		Night	30		

This is the patient login page where patients can log in with their mobile number and a randomly generated password, which is sent to their email. Patients can view their entire appointment history and records of prescription.