

# ONLINE DOCTOR APPOINTMENT SYSTEM

**Presented By**

TEAM ACS

# RESPONSIBILITIES OF TEAM MEMBERS

- NAVYA KOPPADA –Frontend Developer
- SHASHANK KESARI – Frontend + Algorithms
- SAI DIVYA SREE ARETI –Backend Developer
- VAMSI VURA –Database Management

# PROJECT OVERVIEW

- The Online Doctor Appointment System is a digital platform which empowers patients with the convenience of scheduling appointments in online with doctors efficiently. It serves as a comprehensive repository, maintaining records of patients, doctor details and availability, appointment schedules across all medical centers.
- This system enables the smooth registration of new patients, Through the patient user account, individuals can easily book appointments with their preferred doctors and access detailed information about the doctors, including their profiles and available appointment schedule.
- Doctor's can login into the application and can view the list of appointments. Doctor can view the patient's medical record and also can update the record after consultation. Doctors have the flexibility to adjust their working hours as per the number of scheduled patients for a given day.

- Admin can add a new doctor by registering them and admin can also handle the doctor's details by deleting or editing them. Admin can assign the alternative doctor to a patient if the doctor is unavailable.
- The core objective of this project is to develop an application that automates the management of appointment scheduling according to the availability of doctor based on patient requirement. By utilizing this system, manual workload associated with overseeing patient details, appointment bookings, and adjusting the doctor schedules and the waiting time of the patients is significantly reduced ,offering a centralized platform to monitor and track these essential aspects of healthcare management.

# IMPLEMENTATIONS AFTER MID-TERM

- Implemented user bookings page.
- Created specialist table.
- Implemented appointment list in Doctors page.
- Created Admin Dashboard.
- Doctor viewing patients/user details.

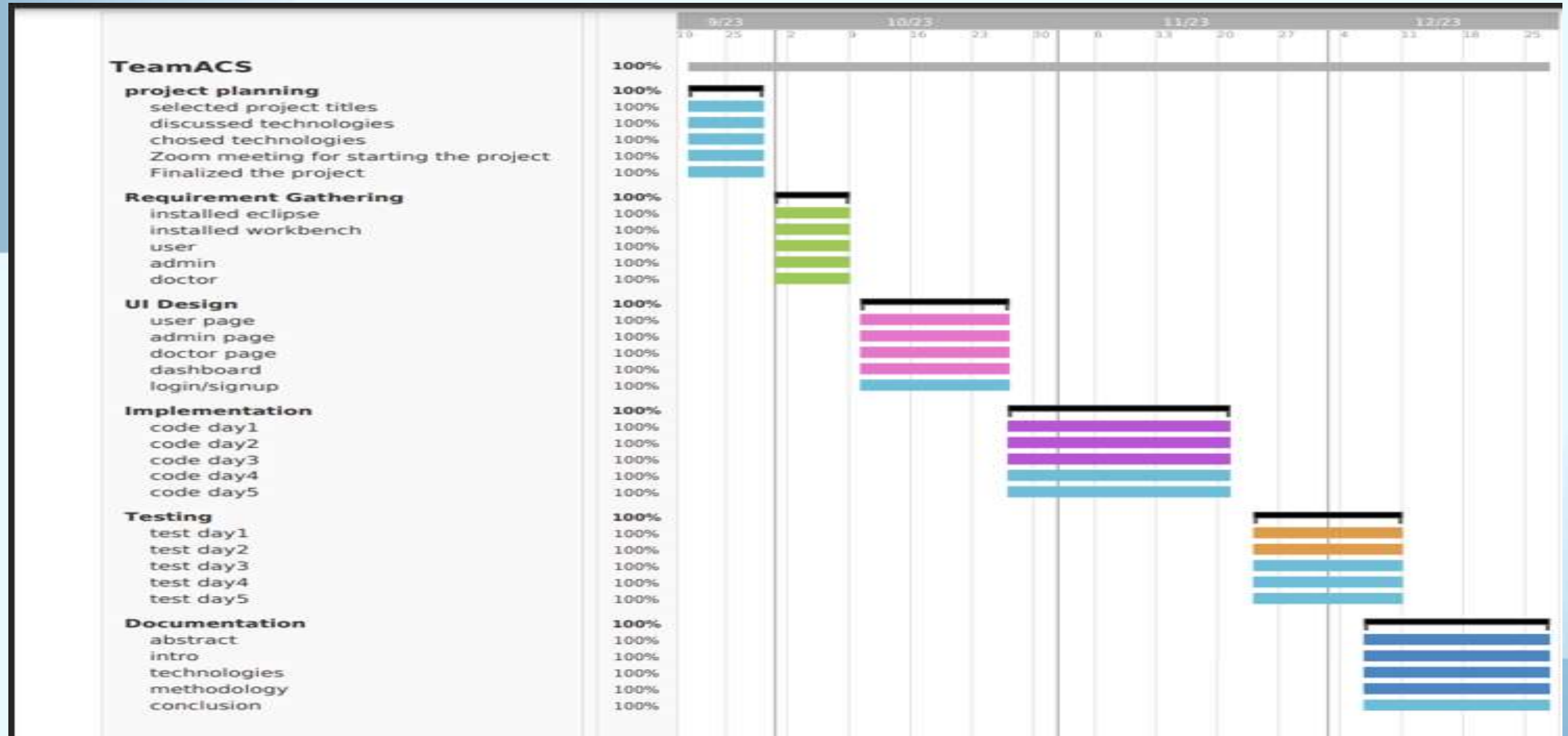
# TECHNOLOGIES USED

- JAVA: We have used Java Servlets for implementing the backend.
- MySQL: MYSQL database is used to store the data of patients, doctors and appointments.
- HTML : We have HTML for designing the UI Screens
- Tomcat Server

# TECHNICAL COMPONENTS

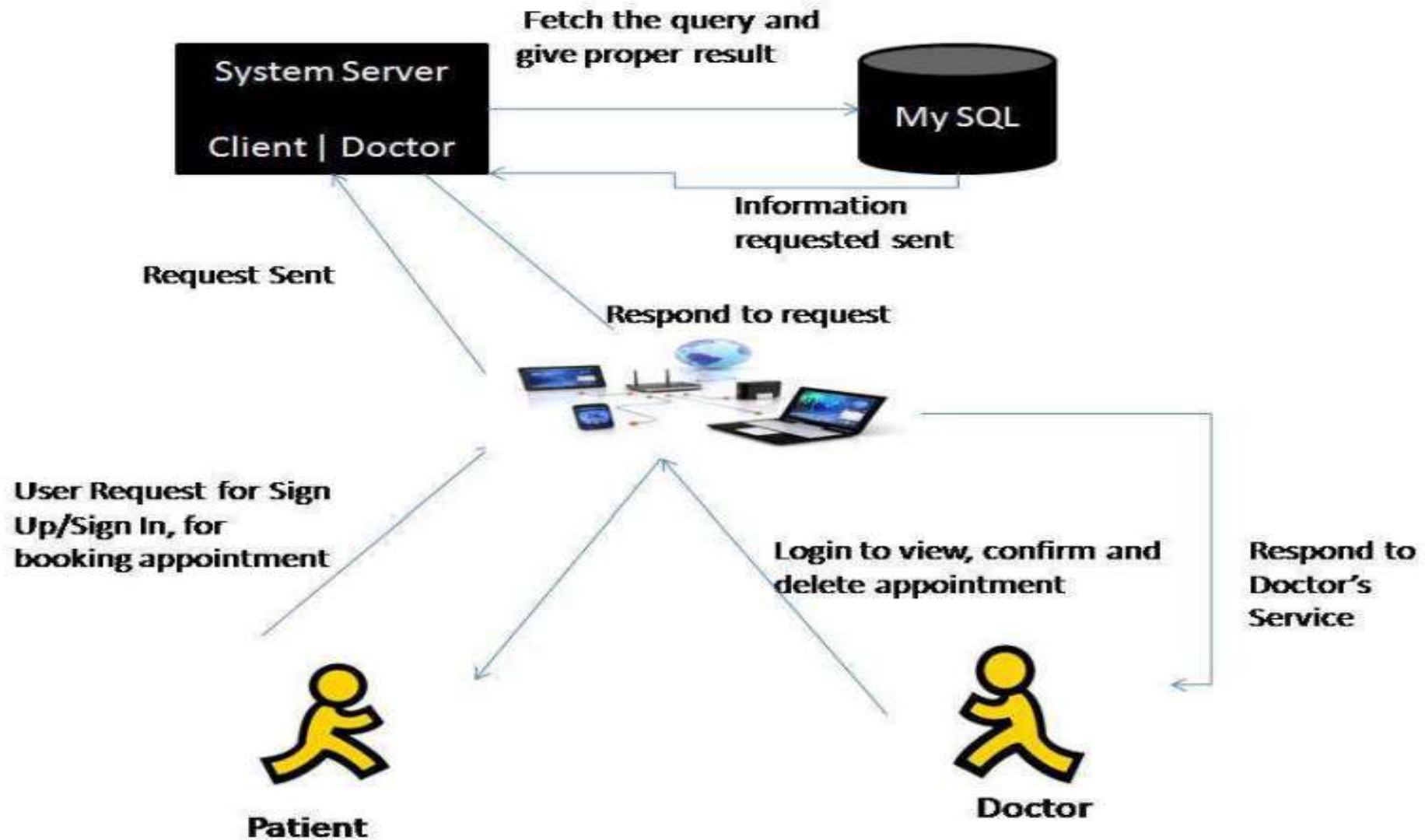
- User Interface (UI)
- Database Management System (DBMS)
- Authentication and Authorization
- Appointment Scheduling Algorithm
- Search Functionality
- Scalability and Performance Optimization

# GANTT CHART





# DATA MODELLING



# COMPARISON OF VIEWS

## **Patient**

- Registration & login
- Select Doctors
- Book Appointment
- Attend Appointment
- View list of previous Appointment

## **Doctor**

- Login into the application
- View the patient records
- Attend the appointment
- Update the Patient Record

# NAVIGATION

## 1. User Registration and Login:

1. User enters their credentials (username and password) on the login page.
2. The system uses an authentication algorithm to verify the user's identity by comparing the entered credentials with the stored user data.
3. If the credentials are valid, the user is granted access to their account.

### User Register

Full Name

Email address

Password

Register

### User Login

Email address

Password

Login

Don't have an account? [create one](#)

## **2.Browse Doctors:**

1. The logging into the application the user is directed to the main dashboard.
2. The system presents a search interface with filtering options based on specialties, locations, availability, and other criteria.
3. The search and filtering algorithm processes the user's criteria and returns a list of matching doctors.

### **3.Selecting a Doctor:**

Algorithm: Patient-Doctor Matching

1. The user reviews the list of doctors and selects one based on their preferences and needs.
2. The system uses a patient-doctor matching algorithm to determine the best available time slots for the selected doctor and the user's preferences.

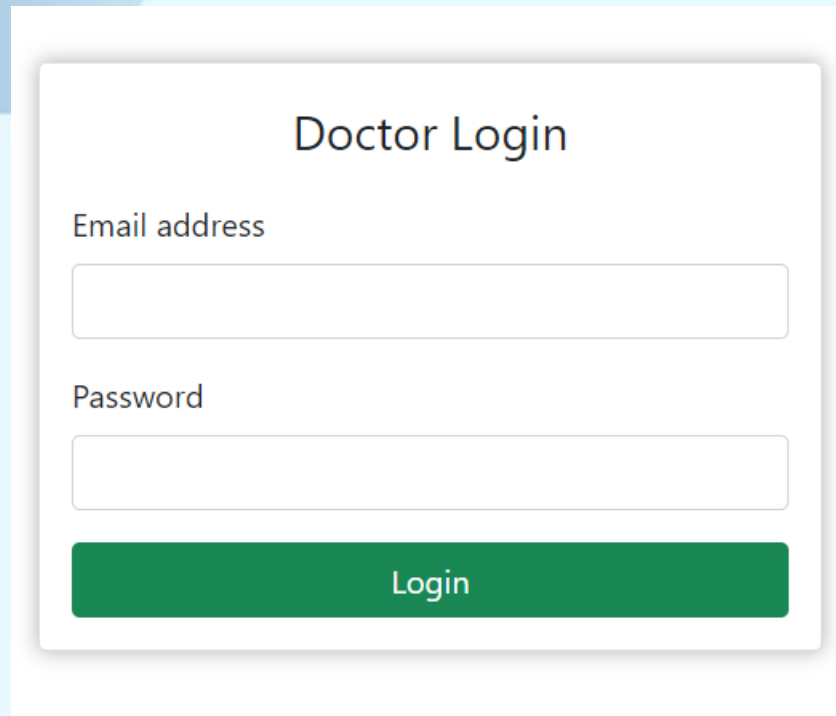
### **4.Appointment Scheduling:**

Algorithm: Appointment Scheduling

1. The user selects an available slot for the chosen doctor.
2. The system checks the availability of the doctor during the chosen date and confirms the appointment if it's available.
3. If the slot is unavailable, the system might suggest alternative slots or allow the user to choose another doctor.

# SCREENS

## Doctor Login



A mockup of a Doctor Login screen. It features a white rectangular box with a subtle drop shadow. Inside the box, the title "Doctor Login" is centered at the top. Below the title, there are two input fields: "Email address" and "Password". Each field has a light gray border and a small gray icon on the left side. At the bottom of the box is a green rectangular button with the text "Login" in white.

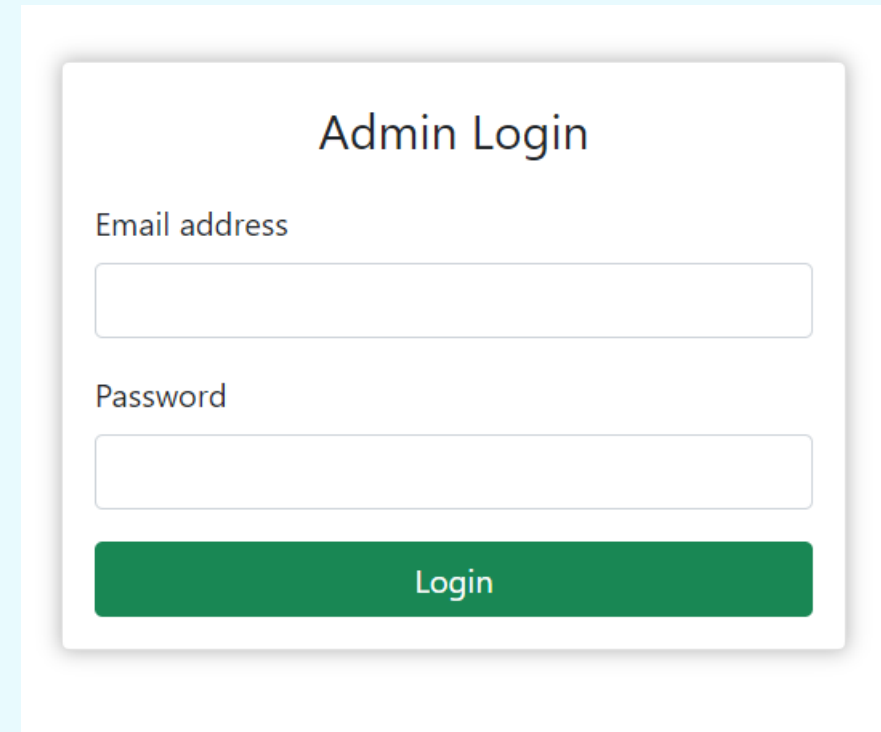
Doctor Login

Email address

Password

Login

## Admin Login



A mockup of an Admin Login screen. It features a white rectangular box with a subtle drop shadow. Inside the box, the title "Admin Login" is centered at the top. Below the title, there are two input fields: "Email address" and "Password". Each field has a light gray border and a small gray icon on the left side. At the bottom of the box is a green rectangular button with the text "Login" in white.

Admin Login

Email address

Password

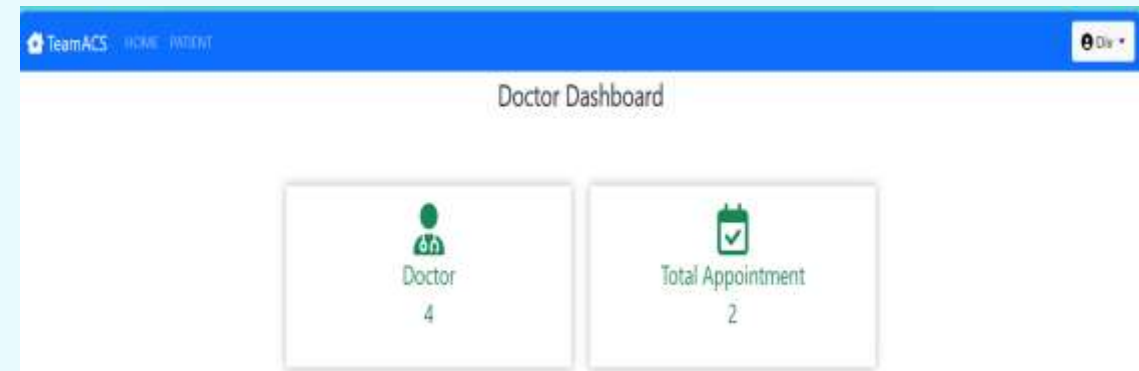
Login

# DASHBOARDS

## Admin Dashboard

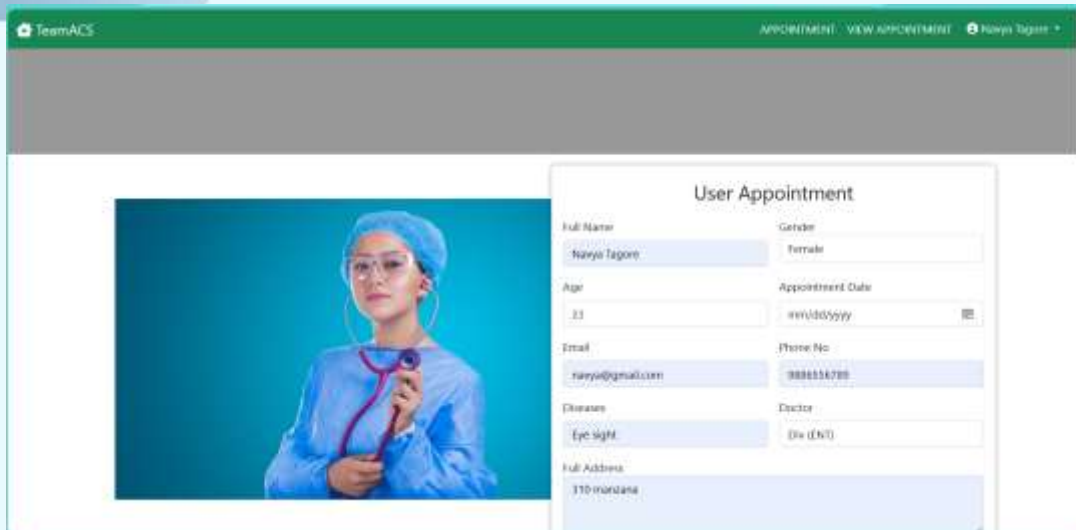


## Doctor Dashboard



# SCREENS

## Book Appointment



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APPOINTMENT · VIEW APPOINTMENT · Nareya Tagore

**User Appointment**

Full Name	Gender
Nareya Tagore	Female
Age	Appointment Date
23	mm/dd/yyyy
Email	Phone No
nareya@gmail.com	9888556788
Diseases	Doctor
Eye sight	Dia (Hb1)
Full Address	
310 marzana	

## Authorization

invalid email & password

Email address

Password

Login

Don't have an account? [create one](#)




# PATIENT APPOINT LIST AND PATIENT DETAILS SCREEN IN DOCTOR PROFILE

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APPOINTMENT VIEW APPOINTMENT Navya Tagore

### Appointment List

Full Name	Gender	Age	Appointment Date	Diseases	Doctor Name	Status
Navya Tagore	Female	23	2023-12-08	Headache	G. Praveen	Pending
Navya Tagore	male	23	2023-12-22	Eye sight	Dhy	Don't use system regularly
Nithya Tagore	male	12	2023-12-21	Muscle Pain	Vani	Pending
Deepika Areti	Female	12	2023-12-08	Head Pain	DV	Pending



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LOGOUT PATIENT

Div

### Patient Details

Comment Updated

Full Name	Gender	Age	Appointment Date	Email	Mob No	Diseases	Status	Action
Navya Tagore	male	23	2023-12-22	navya@gmail.com	9886556789	Eye sight	Don't use system regularly	<button>Comment</button>
Deepika Areti	Female	12	2023-12-08	deepika@gmail.com	9886556789	Head Pain	Decrease screen time.	<button>Comment</button>

# ADD DOCTOR AND VIEW DOCTOR DETAILS SCREENS IN ADMIN

TeamACS HOME DOCTOR VIEW DOCTOR PATIENT Admin

### Doctor Details

Full Name	DOB	Qualification	Specialist	Email	Mob No	Action
Nar	0.000210021621315857	MBS	ENT	nar@gmail.com	8766483956	<a href="#">Edit</a> <a href="#">Delete</a>
Vin	0.000833750208104052	MBS	Muscle	vin@gmail.com	936783956	<a href="#">Edit</a> <a href="#">Delete</a>
Dia	0.000230884672835418	MBS	ENT	din@gmail.com	8766483956	<a href="#">Edit</a> <a href="#">Delete</a>
G Praveen	2000-06-07	Mbbs	Orthopedic	praveen@gmail.com	1234567890	<a href="#">Edit</a> <a href="#">Delete</a>

TeamACS HOME DOCTOR VIEW DOCTOR PATIENT Admin

### Add Doctor

Full Name:

DOB:

Qualification:

Specialist:

Email:

Mob No:

Password:

# CONCLUSION

The Online Doctor Appointment System revolutionizes healthcare access, providing a seamless experience for patients and optimizing doctor-patient interactions. Users can view the information based upon their privilege. We have developed a web based software and will be accessible on any browser. The main motto of the project is to reduce the workload of the healthcare organizations by automation of the appointment booking system.

# FUTURE ENHANCEMENTS

- Make the system fully automated.
- Implement Notification system to give the alerts regarding the appointments to both patients and doctors
- Make the system more flexible for payment different payment methods.
- Develop a mobile application.

# REFERENCES

- <https://www.sciencedirect.com/science/article/pii/S1877050923004076>
- <https://link.springer.com/article/10.1007/s10729-018-9459-1>
- [https://scholar.google.com/scholar\\_lookup?title=Appointment%20Scheduling%20Problem%20in%20Complexity%20Systems%20of%20the%20Healthcare%20Services%3A%20A%20Comprehensive%20Review&publication\\_year=2022&author=A.%20Ala&author=F.%20Chen](https://scholar.google.com/scholar_lookup?title=Appointment%20Scheduling%20Problem%20in%20Complexity%20Systems%20of%20the%20Healthcare%20Services%3A%20A%20Comprehensive%20Review&publication_year=2022&author=A.%20Ala&author=F.%20Chen)

*Thank  
You!*