BOOK A DOCTOR ONLINE

1.Introduction:

1.1 Overview

At present, the students and staff are facing many consequences due to emergency health issues and issues are being faced in consulting a doctor. Because, when they are trying to consult the doctor, the doctor may not be available at that time. Due to this, the students and the staff time will be wasted. So, to prevent these consequences we have come up with a solution to create a website where the students and the staff can see the availability of the doctor and slots based on their schedule.

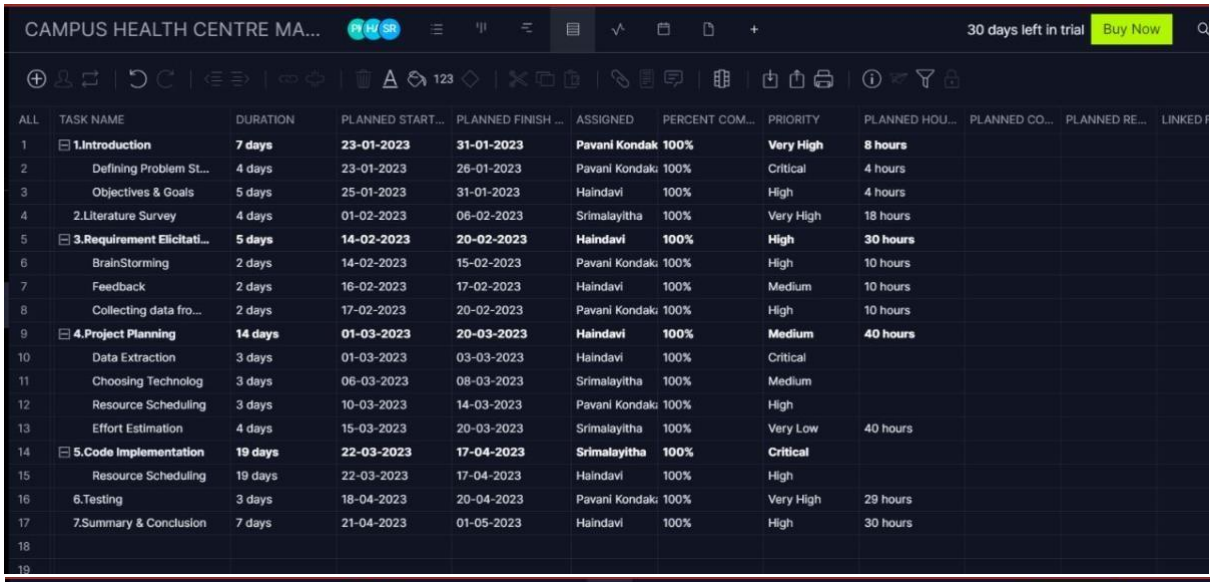
Campus health center management is an interface for the students to book appointments online for consulting a doctor to avoid sudden consultations. Without wasting their time, the students can know the availability of doctors and free slots to consult, through this website. It is easy for the students and the staff to book appointments on this website. This website keeps updating each minute and services will be available 24/7. This way the students and the staff can effectively manage their class timings and could balance the consultations. They can confirm or cancel the appointment requests or even reschedule upcoming appointments based on their schedule and free time.

1.2 Purpose

- **Improve access to healthcare:** Campus Health Centre Management System aims to provide students and staff with easy access to healthcare services, by allowing them to book appointments with doctors online.
- **Reduce waiting time**: By providing information about doctor availability and appointment slots, Campus Health Centre Management System can help reduce waiting time for students and staff.
- **Increase efficiency**: Campus Health Centre Management System can help streamline the process of booking appointments and managing

healthcare services on campus, which can improve the overall efficiency of the healthcare system.

- **Enhance communication:** Campus Health Centre Management System can serve as a platform for doctors and patients to communicate and share health-related information, which can improve the quality of care.
    - **Ensure patient satisfaction:** By providing a user-friendly platform for booking appointments and managing healthcare services, Campus Health Centre Management System can improve patient satisfaction with the healthcare services offered on campus.

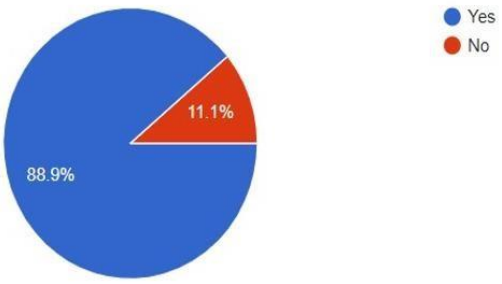


ALL	TASK NAME	DURATION	PLANNED START...	PLANNED FINISH ...	ASSIGNED	PERCENT COM...	PRIORITY	PLANNED HOU...	PLANNED CO...	PLANNED RE...	LINKED
1	**1.Introduction**	**7 days**	**23-01-2023**	**31-01-2023**	**Pavani Kondak**	**100%**	**Very High**	**8 hours**			
2	Defining Problem St...	4 days	23-01-2023	26-01-2023	Pavani Kondaki	100%	Critical	4 hours			
3	Objectives & Goals	5 days	25-01-2023	31-01-2023	Haindavi	100%	High	4 hours			
4	2.Literature Survey	4 days	01-02-2023	06-02-2023	Srimalayitha	100%	Very High	18 hours			
5	**3.Requirement Elicitati...**	**5 days**	**14-02-2023**	**20-02-2023**	**Haindavi**	**100%**	**High**	**30 hours**			
6	BrainStorming	2 days	14-02-2023	15-02-2023	Pavani Kondaki	100%	High	10 hours			
7	Feedback	2 days	16-02-2023	17-02-2023	Haindavi	100%	Medium	10 hours			
8	Collecting data fro...	2 days	17-02-2023	20-02-2023	Pavani Kondaki	100%	High	10 hours			
9	**4.Project Planning**	**14 days**	**01-03-2023**	**20-03-2023**	**Haindavi**	**100%**	**Medium**	**40 hours**			
10	Data Extraction	3 days	01-03-2023	03-03-2023	Haindavi	100%	Critical				
11	Choosing Technolog	3 days	06-03-2023	08-03-2023	Srimalayitha	100%	Medium				
12	Resource Scheduling	3 days	10-03-2023	14-03-2023	Pavani Kondaki	100%	High				
13	Effort Estimation	4 days	15-03-2023	20-03-2023	Srimalayitha	100%	Very Low	40 hours			
14	**5.Code Implementation**	**19 days**	**22-03-2023**	**17-04-2023**	**Srimalayitha**	**100%**	**Critical**				
15	Resource Scheduling	19 days	22-03-2023	17-04-2023	Haindavi	100%	High				
16	6.Testing	3 days	18-04-2023	20-04-2023	Pavani Kondaki	100%	Very High	29 hours			
17	7.Summary & Conclusion	7 days	21-04-2023	01-05-2023	Haindavi	100%	High	30 hours			
18											
19											

2.Literature Survey

ELEMENT	DESCRIPTION
The Problem of…	Many students and staff are facing difficulty to meet the doctor as their schedules and the doctor availability timings are not matching.
Affects…	Students, Faculty, Research scholars
And Results in…	Waste of students and staff time.
Benefits of solution…	No time is wasted of both students, staff, and doctors. They can meet the doctor according to their appointments booked.

Campus health centre management system (CHCMS) is a software application that automates and manages the day-to-day operations of the campus health centre, including patient data management, appointment scheduling, billing, and number of patients data management. We have created a survey and here are the results for



Do you think it will be useful if a website is created where you can book your appointments online?

88.9% of the people felt that creating a website for booking appointments online would be useful and would save their time.

Majority of the people said that they were facing issues with the doctor availability timings and long wait for appointments, they mentioned that

adding online appointment booking in our website would help them and many others facing issues with timings and slots.

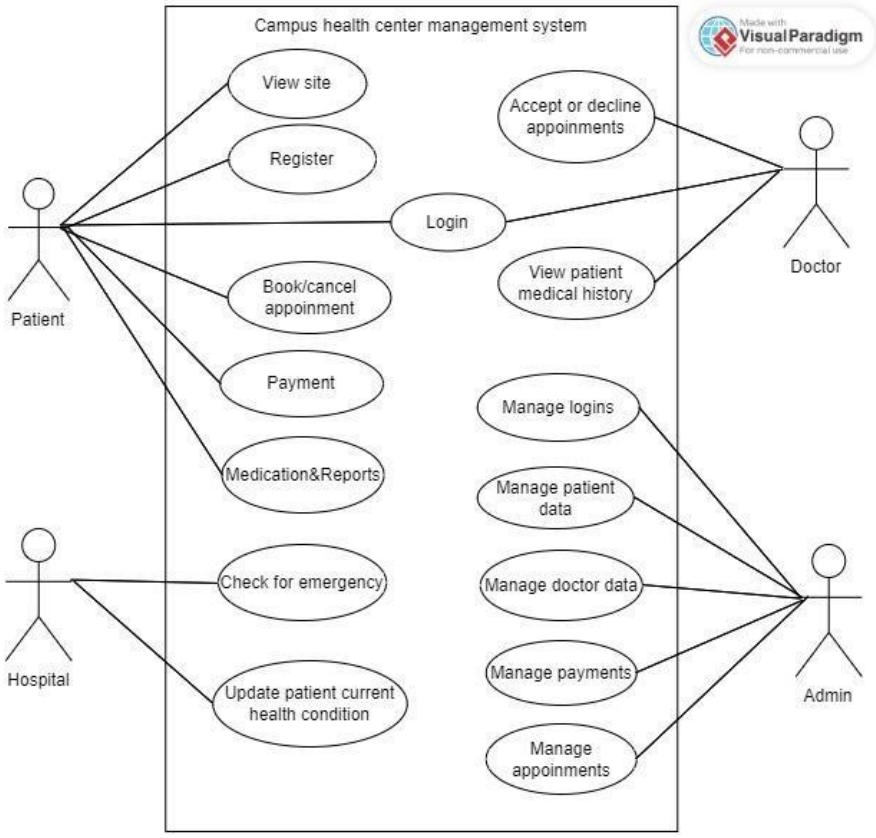
Some of them mentioned that doctor details are not available or known unless and until they don't go to the health centre, and they also mentioned that they are not having enough time to stand in those queues so they are expecting us to add the doctor specialization and details like experience so that they can accordingly book their appointment.

3.THEORITICAL ANALYSIS

3.1 Block diagram

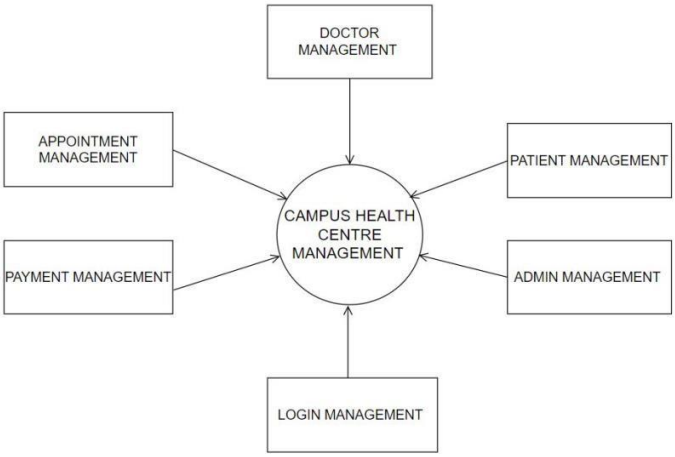
Diagrammatic overview of the project.

USECASE DIAGRAM:

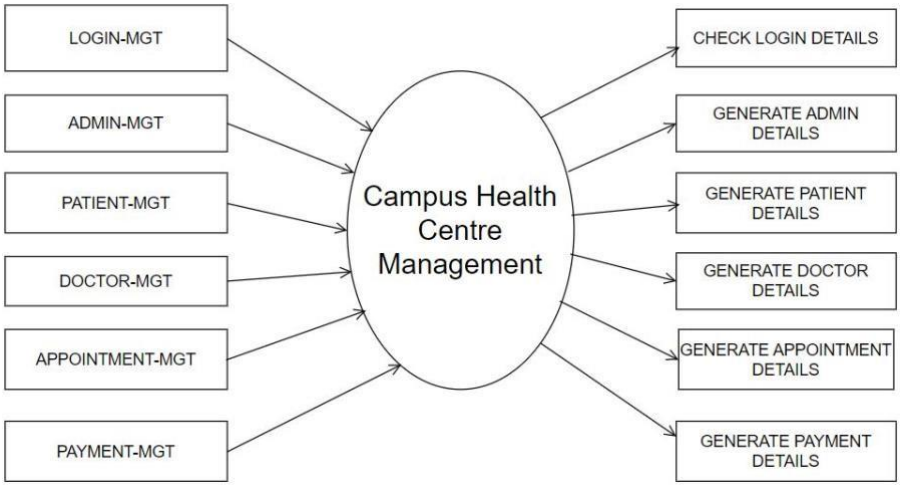


DFD DIAGRAMS:

0-LEVEL DIAGRAM:

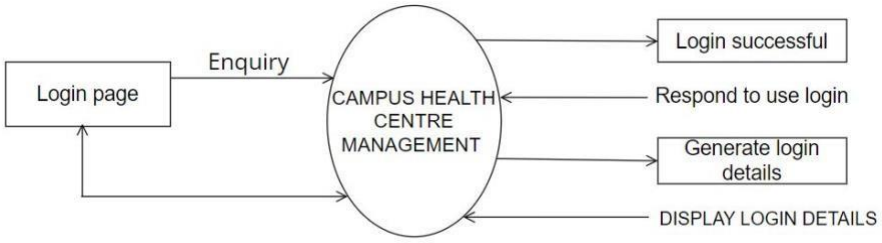


FIRST LEVEL DFD:

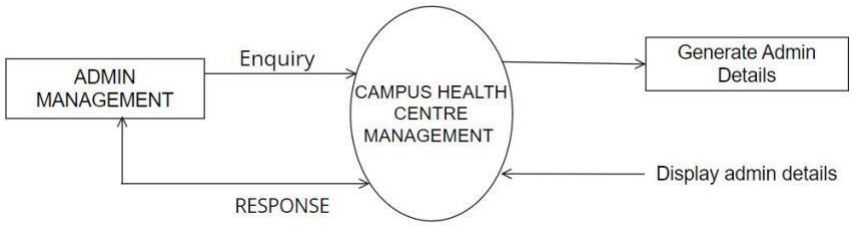


SECOND LEVEL DFD:

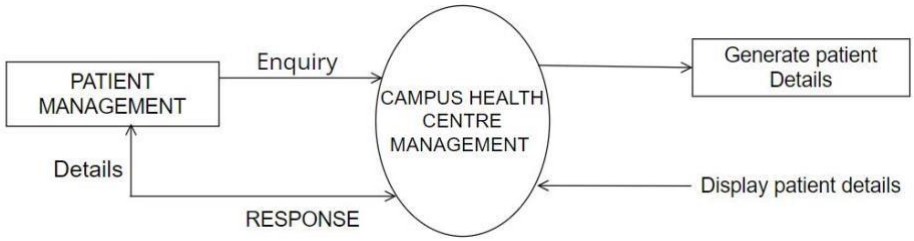
1.Login page:



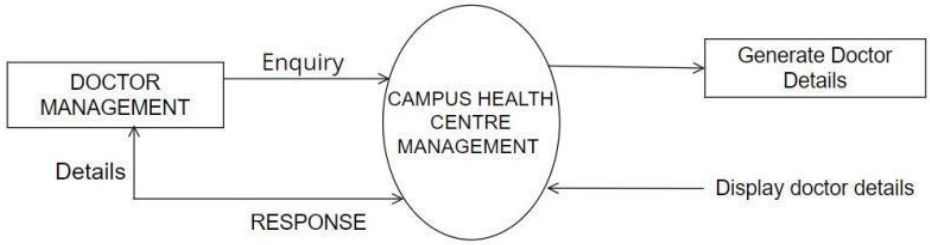
2.Admin Management



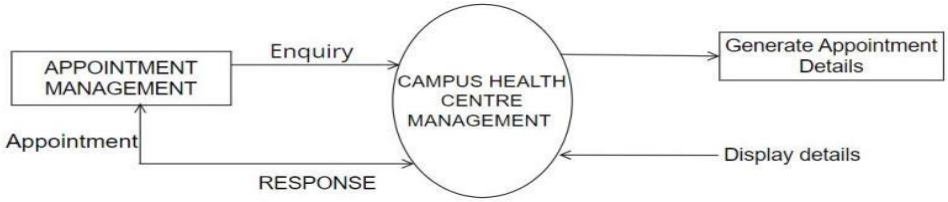
3. Patient Management



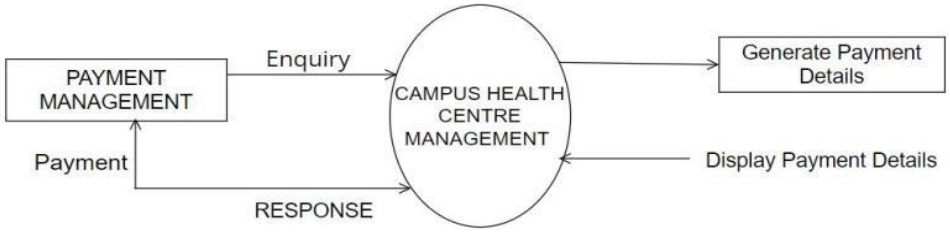
4. Doctor Management



5. Appointment Management



6. Payment Management



3.2 SOFTWARE TOOLS

Tools and Technologies

- Spring Boot
- MVC Architecture
- Thymeleaf templating
- JPA
- MySQL database
- CRUD operations

Requirements:

- Maven
- Java

4.EXPERIMENTAL INVESTIGATIONS

Analysis or the investigation made while working on the solution.

For Students:

- Have you used the campus health centre before?
- What were your experiences with scheduling appointments and seeing a doctor?
- Have you ever had difficulty seeing a doctor when you needed to?
- Would you use an online system to schedule appointments and check doctor availability?
- What features would you want in an online system for scheduling appointments with doctors?

For Staff:

- Have you used the campus health centre before?
- What were your experiences with scheduling appointments and seeing a doctor?

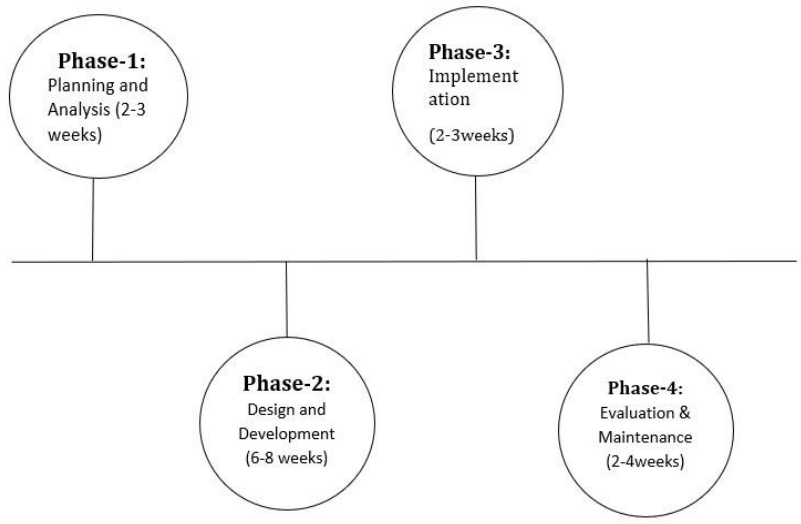
- Would you use an online system to schedule appointments and check doctor availability?
- What features would you want in an online system for scheduling appointments with doctors?
- How do you think Campus Health Centre Management System could benefit the staff members?

For Doctors:

- How do you currently manage your schedule at the campus health centre?
- Have you ever had difficulty managing your schedule or seeing patients due to scheduling issues?
- What features would you want in an online system for scheduling appointments with patients?
- Would you be willing to use an online system for scheduling appointments and managing your schedule?

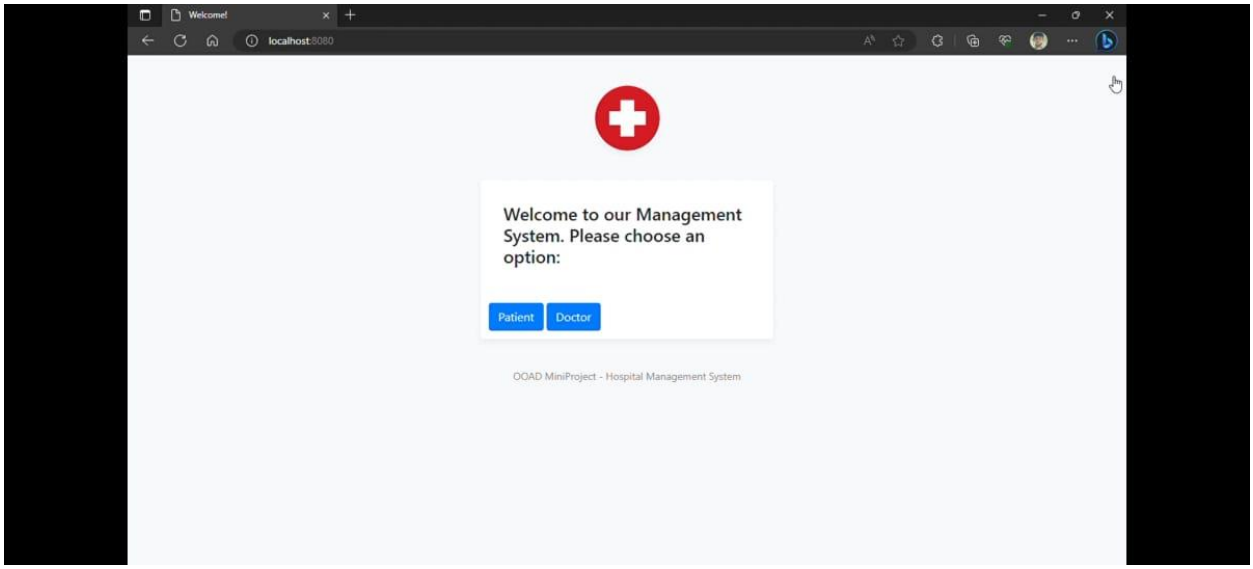
5.FLOWCHART

Diagram showing the control flow of the solution

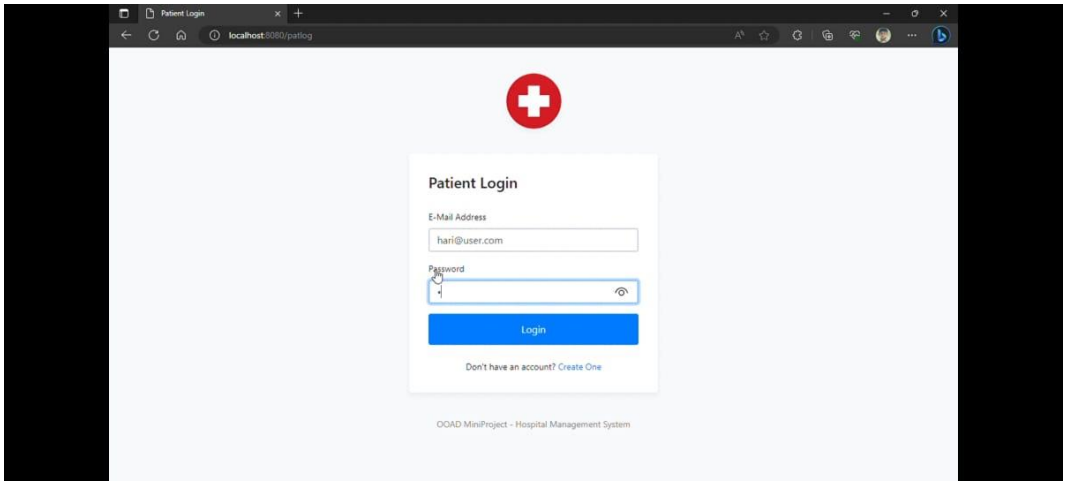


6.RESULTS

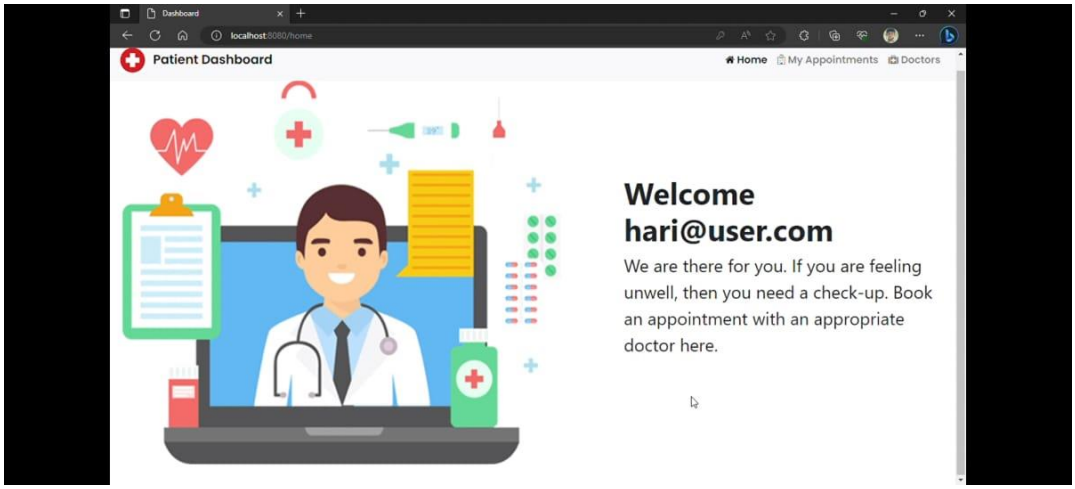
HOME PAGE



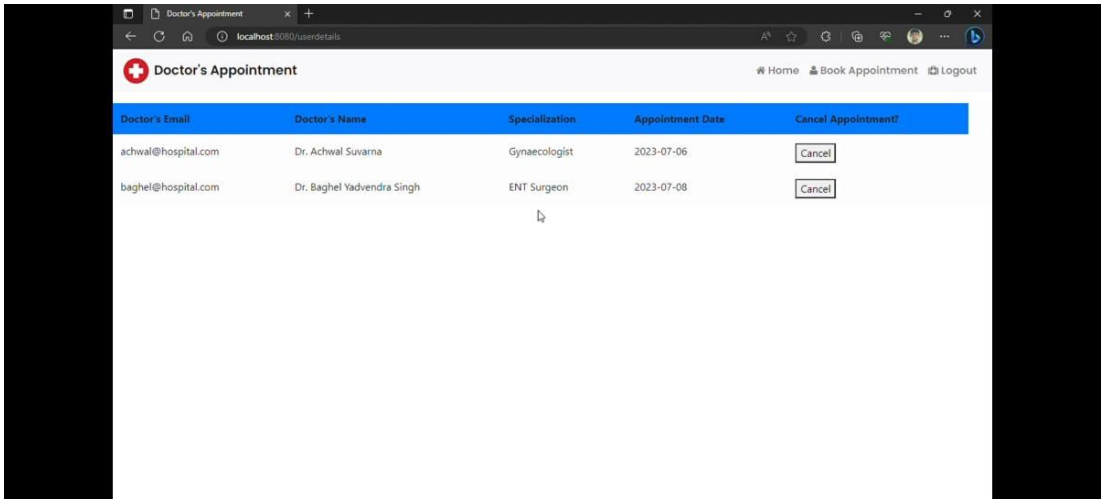
LOGIN PAGE



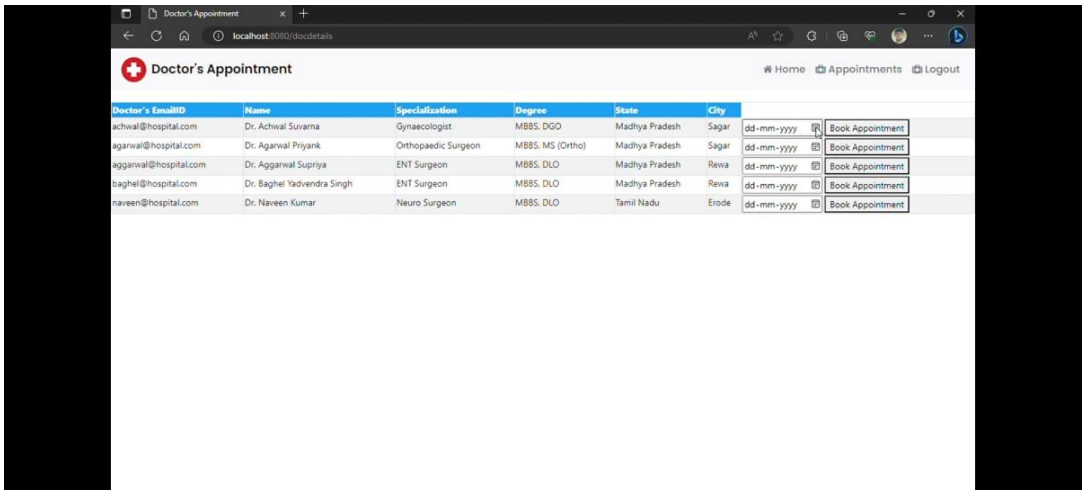
DASHBOARD



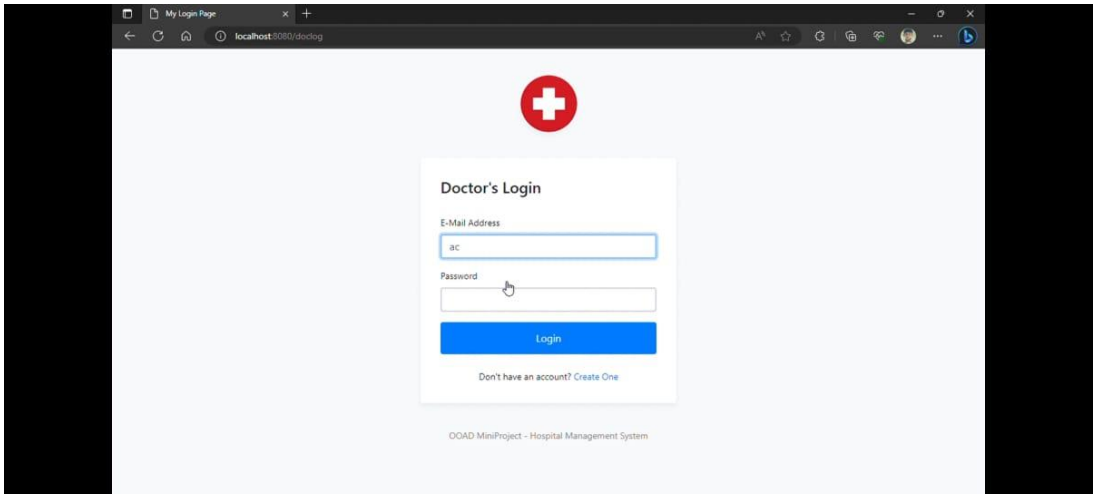
LIST OF APPOINTMENTS MADE BY PATIENT



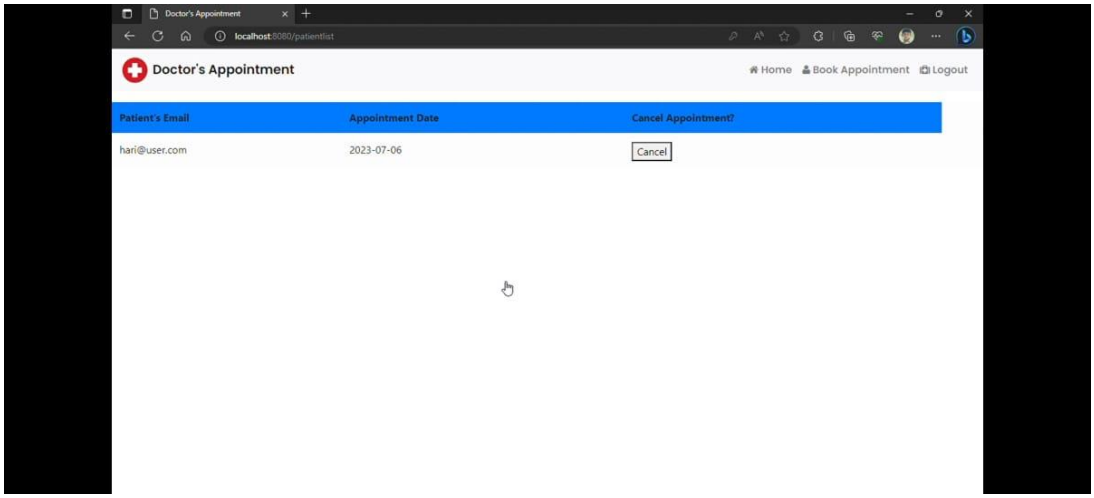
BOOKING AN APPOINTMENT



DOCTOR LOGIN PAGE



LIST OF APPOINTMENTS MADE TO THE DOCTOR



7.ADVANTAGES & DISADVANTAGES

Advantages:

1.Convenience: Booking a doctor through a web application allows you to do so from the comfort of your home or anywhere with an internet connection. You can easily browse available appointments, select a suitable time slot, and book without the need for phone calls or visiting a clinic.

2. Time-saving: By using a web application, you can avoid long waiting times at the clinic or on the phone. You can quickly check the doctor's availability, find a suitable appointment, and book it instantly. This can be especially beneficial for busy individuals or those with hectic schedules.

3. Access to information: Web applications often provide detailed information about doctors, including their qualifications, specialties, and patient reviews. This allows you to make an informed decision when selecting a doctor for your specific needs.

5. Flexibility: With a web application, you can access the booking system 24/7. You are not restricted by the clinic's working hours and can book appointments at any time that suits you.

Disadvantages:

1. Lack of personal interaction: Booking a doctor through a web application means you miss out on face-to-face interactions with the receptionist or healthcare professionals. Some people may prefer the human touch and reassurance that comes with in-person communication.

2. Technical issues: Web applications may occasionally encounter technical glitches, such as server downtime or connectivity problems. If the system fails, you may have difficulty booking or accessing your appointment information.

3. Limited availability: Depending on the web application and the healthcare providers it partners with; you may find limited options for doctors or clinics. This can be a disadvantage if you prefer a specific healthcare professional or need specialized care that is not available through the application.
4. Privacy and security concerns: When using a web application, you need to share personal information, including your health details. It is crucial to ensure that the application has robust security measures in place to protect your data from unauthorized access or breaches.
5. Dependency on technology: If you rely solely on a web application for booking doctors, you may encounter difficulties if you have limited access to the internet or if the application becomes unavailable. In such cases, it is essential to have alternative means for booking appointments.

8.APPLICATIONS

A web application can be applied in various areas, including:

- Primary care: Patients can use the web application to book appointments with general practitioners or family doctors for routine check-ups, minor illnesses, or preventive care.
- Specialized care: The application can be used to schedule appointments with specialists in various fields, such as cardiologists, dermatologists, gynaecologist's, orthopaedic surgeons, and more.
- Telemedicine: Some web applications enable patients to have virtual consultations with healthcare professionals through video calls or chat platforms. This allows for remote diagnosis, advice, and treatment without the need for an in-person visit.
- Mental health services: Online platforms can be used to book appointments with psychiatrists, psychologists, counsellors, or therapists for mental health support and therapy sessions.
- Dental care: Patients can utilize the web application to schedule appointments with dentists for regular check-ups, cleanings, or specific dental procedures.
- Diagnostic tests and imaging: The application can allow patients to book appointments for diagnostic tests, such as blood tests, X-rays, ultrasounds, or MRI scans, as well as follow-up consultations to discuss the results.
- Rehabilitation and physiotherapy: Patients in need of rehabilitation or physiotherapy sessions can use the web application to find and book appointments with qualified professionals.
- Wellness and alternative medicine: The application can offer booking options for wellness services like acupuncture, chiropractic treatments, massage therapy, nutrition consultations, and more.

9.CONCLUSION

In summary, can be an effective tool for managing patient records, appointment scheduling, billing, and prescription management for healthcare providers in a campus health centre. The system can be designed to cater to the needs of different stakeholders, including patients, doctors, and admins.

In conclusion, the system is a web-based platform that allows students and staff to book appointments with doctors at their convenience. The system

addresses the issue of wasted time and inconvenience caused by the unavailability of doctors during consultations and allows for effective scheduling and management of appointments.

The benefits of this system include improved access to healthcare, reduced waiting times, and increased convenience for students and staff. The system is designed to be user-friendly and available 24/7, ensuring that appointments can be made or rescheduled at any time.

the system is an essential tool that can greatly improve the healthcare experience of students and staff, providing them with the convenience and accessibility they need for their healthcare needs

10.FUTURE SCOPE

- Increased adoption: As technology becomes more ubiquitous and internet access improves globally, the adoption of online doctor appointment systems is likely to increase. More people will embrace the convenience and accessibility of booking appointments online.
- Artificial Intelligence (AI) integration: AI can play a significant role in enhancing online doctor appointment systems. Intelligent chatbots powered by AI can assist patients in finding suitable doctors, answer basic medical queries, and even provide initial diagnoses based on symptom descriptions. AI algorithms can also analyse user preferences and behaviour patterns to offer personalized recommendations for healthcare providers.
- Virtual reality (VR) and augmented reality (AR): VR and AR technologies have the potential to transform telemedicine and virtual consultations. Patients could use VR headsets to have immersive, virtual visits with doctors, creating a more engaging and interactive experience. AR can also assist doctors by overlaying patient information or medical images during virtual consultations.
- Integration with electronic health records (EHR): Seamless integration between online appointment systems and EHR platforms will streamline the sharing of patient information and medical history. This integration can provide doctors with a comprehensive view of a patient's health, facilitating more informed diagnoses and personalized treatment plans.
- Wearable technology integration: Integration with wearable devices, such as fitness trackers, smartwatches, or remote monitoring devices, can provide real-time health data to doctors. This data can aid in monitoring

patient health remotely, enabling timely interventions and more proactive care.

- Telemedicine expansion: Online doctor appointment systems will likely continue to support telemedicine services, allowing patients to have remote consultations with healthcare professionals. The expansion of telemedicine can enhance access to healthcare, especially for individuals in rural or underserved areas.
- Enhanced privacy and security measures: As online healthcare services expand, ensuring robust privacy and security measures will be crucial. Future systems should prioritize protecting patient data, complying with data protection regulations, and implementing advanced encryption and authentication protocols.
- Collaborative care platforms: Online appointment systems can evolve into collaborative care platforms that facilitate communication and coordination among healthcare professionals involved in a patient's care. This can improve care continuity, reduce duplication of tests, and enhance overall patient outcomes.
- Predictive analytics and preventive care: Online appointment systems can leverage predictive analytics to identify high-risk individuals and recommend preventive measures or screenings. By analysing patient data, lifestyle factors, and medical history, these systems can help identify potential health issues early and promote proactive care.