



## Clinic Management System

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### ABSTRACT:

The purpose of the Clinic management system is to maintain the records of the patient including patient medical reports, appointment booking and cancellation, generating prescription, and send an alert to patient as well as doctor about appointments. The system can maintain patient personal details, analysis of patient before and after treatment, create prescription, keeps a record of planned and completed procedures. The task sometime become very tedious for the doctor himself in manually allotting appointments for the users as per their availability. Hence this project offers an effective solution where user can view various booking slots available select the preferred date and time. This system also allows users to cancel their booking anytime

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### Introduction:

- The main aim of the project is to develop an exclusive clinic website for patients who are can book appointments from home itself to save their time.
- Clinic is an organization that is responsible in providing a health medication and treatment for all types of peoples. Surely, everyday there are people that need to use the clinic services. But how can clinic provide a faster and efficient services if they are still using the traditional method on their daily operation? The traditional method means the customers need to fill in their detail in registration form manually and the information will only keep in files. After the registration, the files will be place in the rack and this will cause problems like taking a longer time to retrieve the information, make mistakes during writing or misplaced the files.
- Due to a significant increase in patient volume, our dedicated physician is currently struggling to provide comprehensive care within the limited time available. This results in potential delays in appointments, reduced patient satisfaction, and challenges in managing the growing patient load. To address this issue and ensure every patient receives the attention they deserve, we require an effective clinic website that can optimize appointment scheduling, streamline patient communication, and enhance the overall patient experience.
- A clinic website helps a lot of people. It's useful for patients because they can easily find out about services and make online appointments. Doctor is benefit too, as they can manage appointments and communicate better. It also makes things smoother for the people who handle the paperwork. Plus, having a website means the clinic can reach more people and maybe get new patients

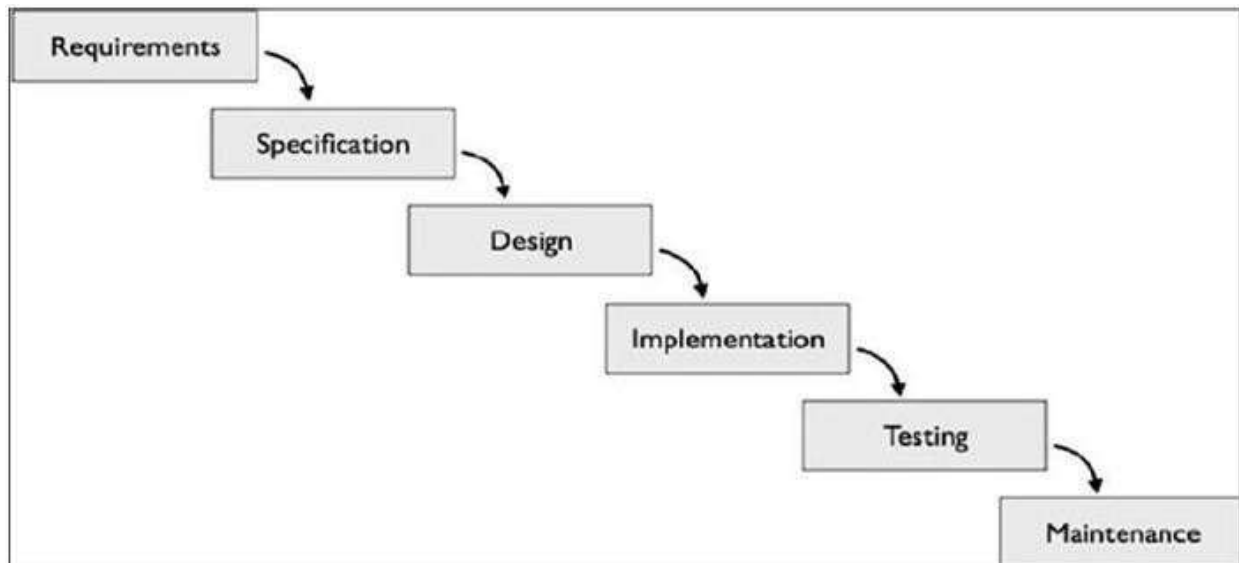
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### Methodology:

We have chosen the Waterfall Model for the development of our project.

#### Waterfall Model:

The waterfall model is a breakdown of project activities into linear sequential phases, where each phase depends on the deliverables of the previous one and corresponds to a specialization of tasks. This approach is typical for certain areas of engineering design. In software development, it tends to be among the less iterative and flexible approaches, as progress flows in largely one direction ("downwards" like a waterfall) through the phases of conception, initiation, analysis, design, construction, testing, deployment and maintenance.



**Fig 1.1 Waterfall Model.**

Following is a detailed phase-wise explanation of how waterfall model was used in developing the project:

- **Requirement and Specification Gathering:** In this phase, the requirements and specifications for the clinic website were collected and analyzed meticulously. This was primarily achieved through discussions with the sponsoring clinic and by reviewing any provided documentation outlining their needs. It involved understanding the clinic's objectives, identifying the necessary features and functionalities required, and defining the project scope. This phase was crucial as it established the groundwork for the entire development process.
- **System Design:** Based on the requirements gathered in the previous phase, the design of the clinic website was developed. This encompassed creating a user-friendly interface, designing the system architecture, and structuring the database. The aim was to ensure that the website design aligned with the clinic's goals, could cater to its target audience effectively, and could be completed within the allocated time and budget.
- **Implementation:** The actual development of the clinic website commenced in this phase. The development team translated the design specifications and requirements into code, focusing on building the website's functionality. This phase also involved integrating any necessary third-party software for tasks such as appointment scheduling and patient management, as well as rigorous testing to validate the website's functionality.
- **Integration and Testing:** In this phase, the clinic website underwent comprehensive testing to ensure it met the specified requirements and was free of any defects or issues. This included various types of testing such as unit testing, integration testing, system testing, and user acceptance testing. The testing phase was crucial to guaranteeing the website's readiness for deployment.
- **Handover and Deployment:** Once the clinic website was deemed ready for deployment, it was handed over to the sponsoring clinic. This involved delivering the website along with all necessary documentation, instructions, and support. The handover phase ensured that the clinic had everything required to deploy the website and make it accessible to its patients. Additionally, guidance and support were provided to the clinic to ensure they could operate and maintain the website effectively.
- **Maintenance:** After launching, the clinic website moved into maintenance mode. The sponsoring clinic took charge of ongoing support, fixing any issues, and making updates to keep the website running smoothly. This included addressing bugs, adding new features, and staying up-to-date with technology and user needs.

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### Objective:

- Facilitate easy appointment booking.
- Simplify patient registration process.
- Send automated confirmation emails.
- Provide reminder notifications.
- Display real-time doctor availability.
- Enable feedback and reviews.
- Integrate with Google Maps for directions.

- Offer online cancellation facility.
- Securely manage patient records.

### Advantages:

- **Improved Patient Experience** - The website can enhance the overall patient experience by providing convenient appointment booking, reducing waiting times, and offering easy access to information.
- **Convenience** - Patients can access information, book appointments, and check directions to the clinic at their convenience, making healthcare services more accessible. Clinics are often conveniently located in local communities, making healthcare services more accessible to a broader range of patients.
- **Shorter Wait Times** - Appointments in clinics generally have shorter wait times than in hospitals, leading to quicker diagnoses and treatments.
- **Results:**

This Clinic website will optimize the patient experience by streamlining processes, enhancing satisfaction, and improving operational efficiency.

### OUTPUTS:

(Patients Dashboard)

Sign Up:

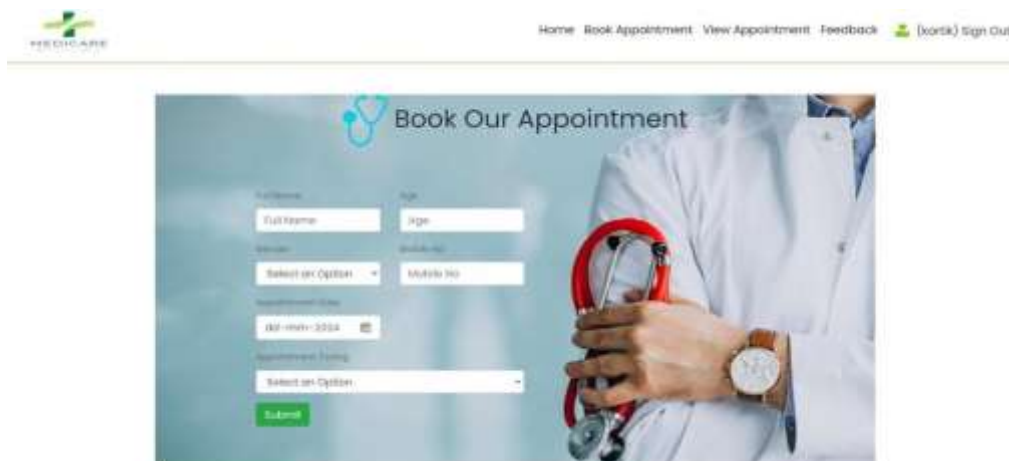
Sign In:



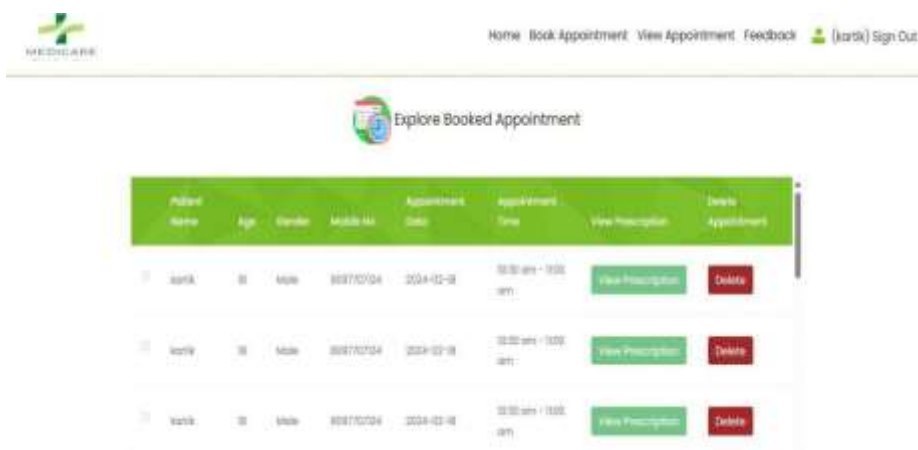
**Main Page:**



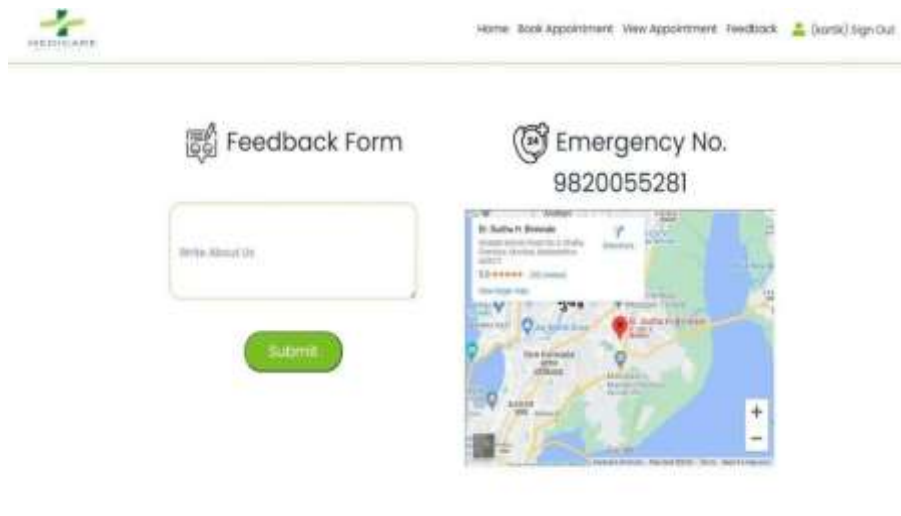
**Book Appointment:**



**View Appointment:**



**Feedback:**

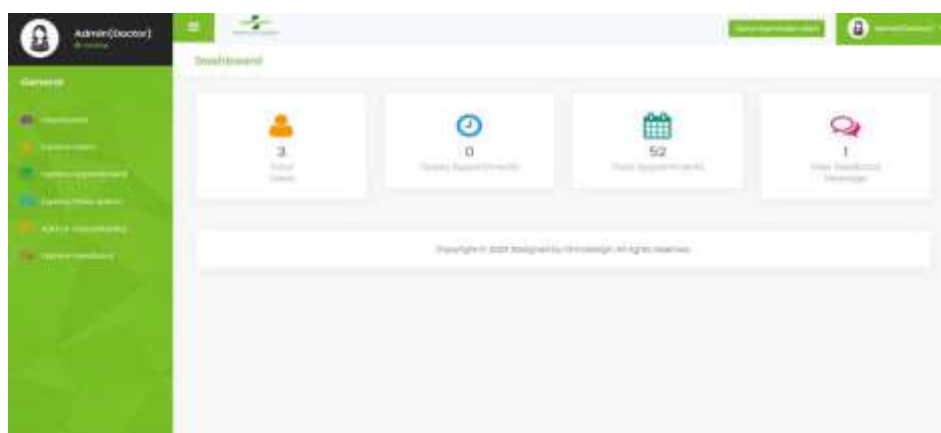


*(Doctor Dashboard)*

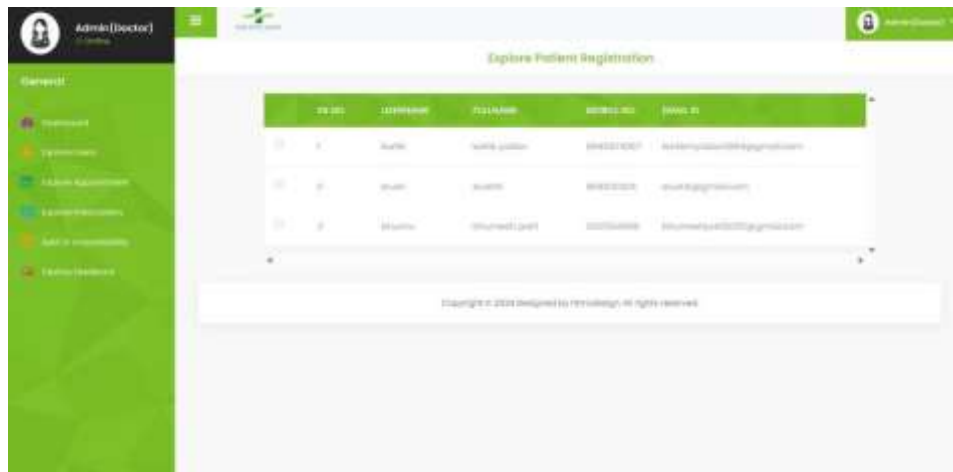
**Admin Sign In:**



**Home Page Of Admin:**



**Explore Users Registration:**



**Explore Appointment:**



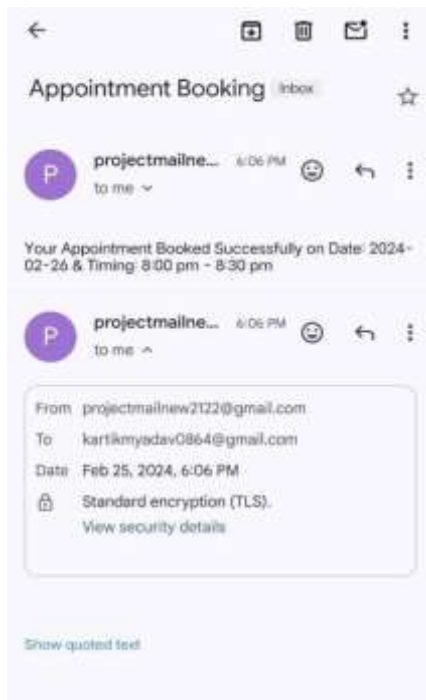
**Explore Prescription:**

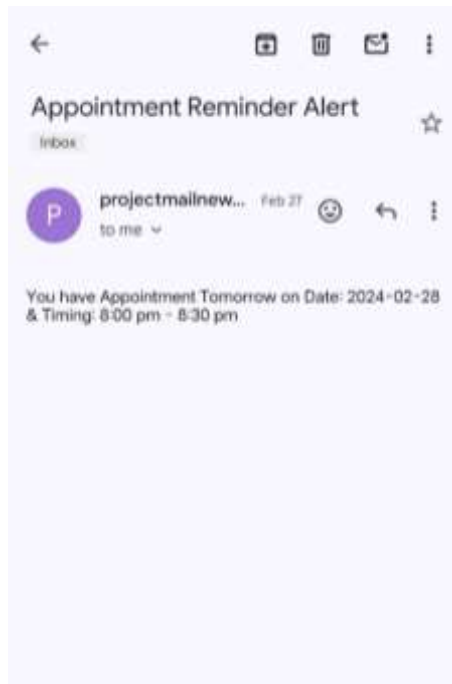


**Add Doctor Unavailability:**



**Appointment Booking Mail:**



**Reminder Mail:****References**

1. <https://www.canva.com/>
2. <https://api.jquery.com/>
3. <https://icons8.com/icons/set/favicon>
4. <https://www.youtube.com/watch?v=hzHUMwGO0Pw&pp=ygUgY2xpbnljiHdlYnNpdGUgcHJvamVjdCBpbjBweXRob24%3D>
5. <https://www.youtube.com/watch?v=HCiitB8SuFc&pp=ygUgY2xpbnljiHdlYnNpdGUgcHJvamVjdCBpbjBweXRob24%3D>
6. [https://www.youtube.com/watch?v=CxK\\_klzNbBM&pp=ygUaY2xpbnljiHdlYnNpdGUgZXhwbGFuYXRpb24%3D](https://www.youtube.com/watch?v=CxK_klzNbBM&pp=ygUaY2xpbnljiHdlYnNpdGUgZXhwbGFuYXRpb24%3D)
7. <https://www.youtube.com/watch?v=KIC0OK9nKXY&pp=ygUbY2xpbnljiHdlYnNpdGUgbWFWIGRpZWNoaW9u>