Web Development Framework using Python

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HEALTHCARE APPOINTMENT BOOKING SYSTEM

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Team Members:-

Kashish	Kartik	Karmanya

• PURPOSE :

The purpose of a healthcare appointment booking system website is to streamline and simplify the process of scheduling medical appointments for patients, while also providing efficient management tools for healthcare providers.

Goal

The goal of a healthcare appointment booking system is to enhance the overall efficiency and accessibility of healthcare services for both patients and providers. It aims to provide patients with the convenience of booking, rescheduling, or canceling appointments at any time, from anywhere, without the need for phone calls or in-person visits. This reduces administrative workloads for healthcare staff and minimizes errors by automating scheduling processes. The system helps healthcare providers manage their time effectively, avoid overbooking, and improve patient flow. By offering automated reminders and notifications, the system reduces no-shows and enhances communication. Ultimately, it aims to improve patient satisfaction by providing a user-friendly experience, streamline operations, reduce wait times, and improve data management for better decision-making. The result is a more efficient, patient-centered healthcare environment that benefits both patients and providers.

Problem statement

The problem with current healthcare appointment systems is their inefficiency, reliance on manual processes, and lack of real-time availability, leading to long wait times, scheduling errors, and increased administrative workload. This results in poor patient satisfaction, missed appointments, and underutilized provider time. There is a need for an automated, streamlined solution to simplify booking, improve communication, and optimize scheduling for both patients and healthcare providers.

Technical Details of the Recipe Sharing Project in Web Development:

Frontend Technologies:

HTML: For structuring web pages (e.g., displaying recipes, forms, user profiles).

Bootstrap: Optional, for responsive layout and pre-designed UI components.

Database:

SQLite (or MySQL/PostgreSQL in advanced implementations):

- Stores user details (username, password, email), recipes (title, ingredients, instructions), and ratings/reviews.
- CRUD operations: Add new recipes, edit existing ones, delete recipes, and fetch recipes for display.

Authentication:

- Flask-Login: Manages user sessions, allowing users to log in, stay logged in, and log out securely.
- Password Hashing: User passwords are hashed using tools like werkzeug.security to prevent storing plaintext passwords.

Backend Framework: Flask

Flask is a lightweight web framework in Python, used to handle routing, backend logic, and user authentication.

Key Features

User friendly interface

- A simple design that allows the patient to navigate the app easily .

Appointment Scheduling

- Patients can book or cancel available appointments through the app.

Real-time Availability

- The app displays Real-time availability of healthcare providers ,ensuring patients can select convenient time slots.

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Care 360

Home   Dashboard   Track Appointments   cart   Logout

Your Added Appointments

Book	Author	Price	Action
Dr. Vikas	cardiologist	21/2/25	REMOVE
Dr. Vikas	cardiologist	21/2/25	REMOVE
Dr. Priya	dermatologist	21/2/25	REMOVE

BOOK APPOINTMENT

Care 360

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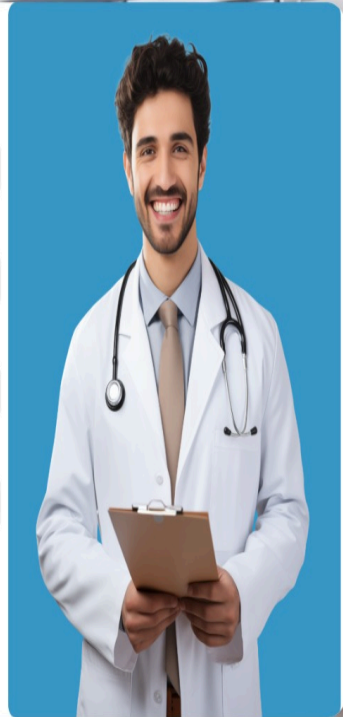
Orders

Doctor Name	Date Of Appointment	Status	Action
Dr. Vikas	21/2/25	Accepted	
Dr. Vikas	21/2/25	Rejected	
Dr. Priya	21/2/25	Accepted	
Dr. Priya	21/2/25	Rejected	
Dr. Vikas	21/2/25	Accepted	
vaibhav	23/2/25	Accepted	
Dr. Vikas	21/2/25	Pending	ACCEPT REJECT
Dr. Vikas	21/2/25	Pending	ACCEPT REJECT
Dr. Priya	21/2/25	Pending	ACCEPT REJECT

Conclusion

Core Features
- Appointment Scheduling
- Real-time Availability
- Patient Profile Management

Technology used
- HTML
- CSS
- Python(Flask)

Method
- Use responsive design technique to ensure usability across devices.

Purpose
- Allowing people to book, cancel or reschedule appointments .

References And Sources
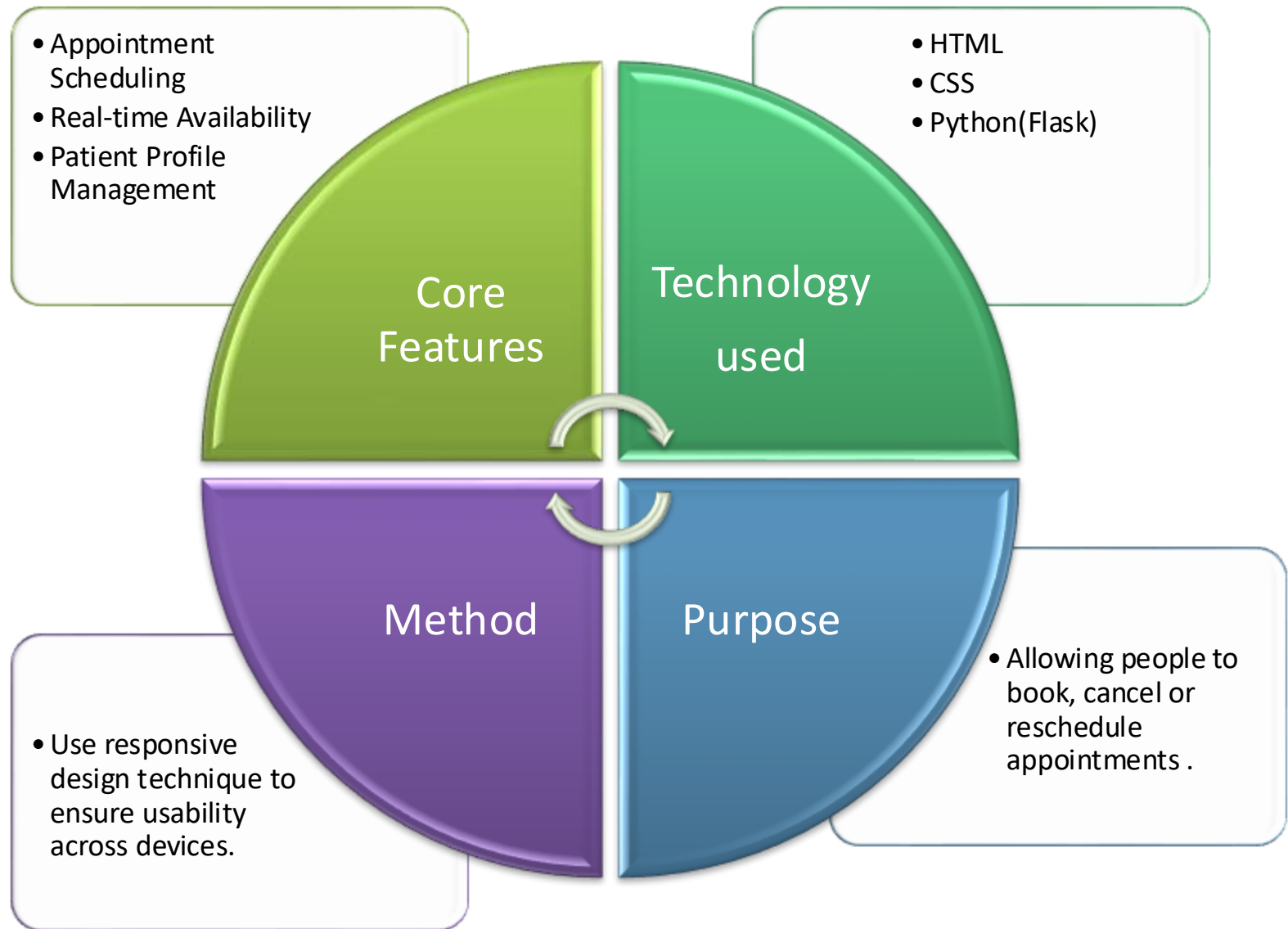
References

- Flask Documentation

Sources

- Google & MDN Docs