Clinic Management System

Group Number : 33

Group Members :

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Project Overview

What is it about?

A database system designed to manage clinic operations efficiently by scheduling, record-keeping, and patient management.

It optimizes clinic workflows, reducing administrative overhead and minimizing errors in patient records and scheduling.

The system improves accessibility and security of medical data, ensuring that both patients and staff can interact with the database seamlessly.

Problem Definition

Fragmented patient records contribute to missing or inaccurate medical histories, increasing administrative workloads and reducing efficiency.

Many smaller clinics lack the financial and technical resources to adopt expensive, complex medical scheduling software.

Scope

Patient Records: Centralized database for patient details and medical history.

Appointment Scheduling: Booking, rescheduling, and cancellations.

Doctor Availability: Dynamic schedule tracking to prevent conflicts.

Billing: Payment tracking linked to appointments.

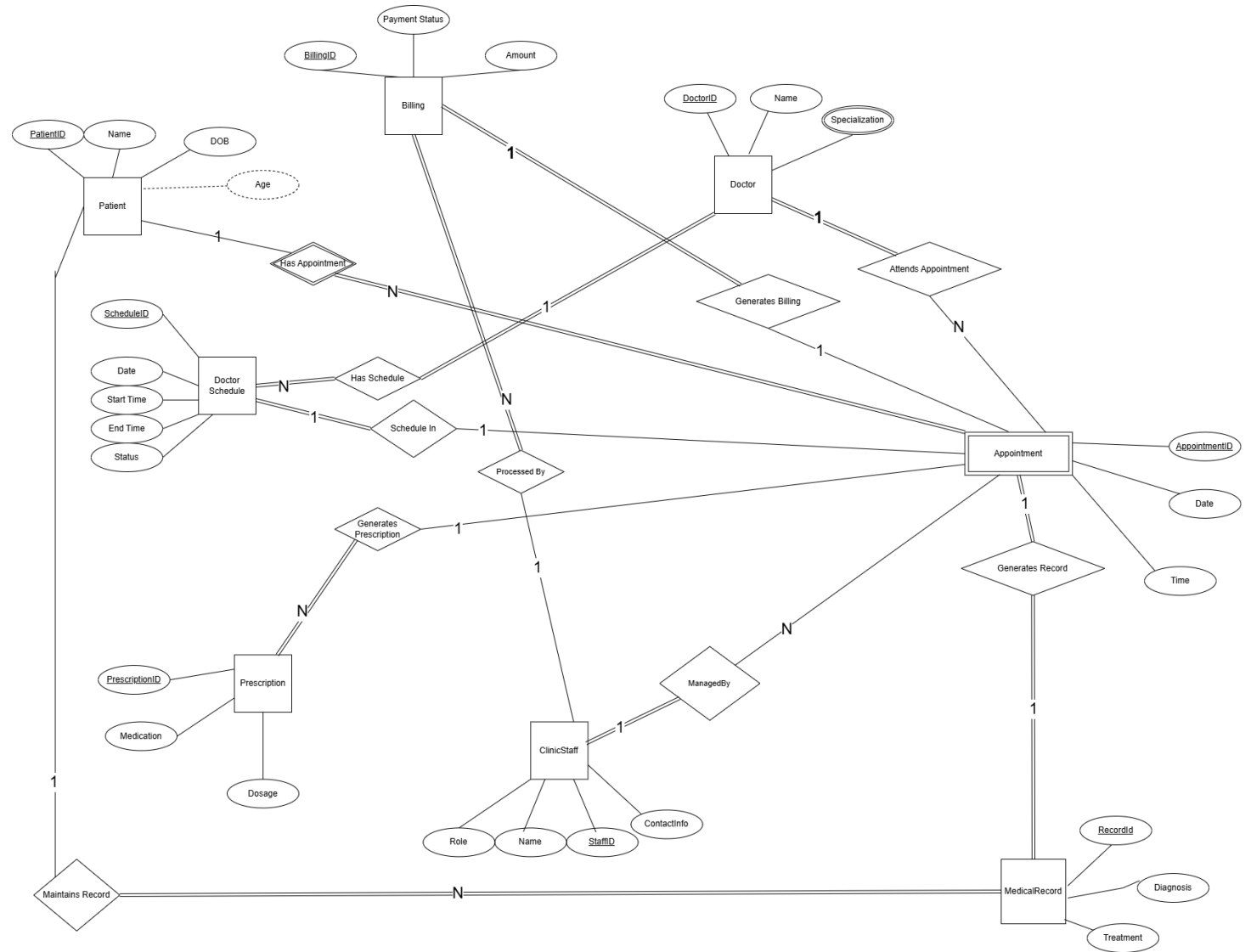**Feedback System**: Patients can submit reviews or complaints.

Type of Project

•**Website:** User-friendly interface for clinic staff and Doctors to manage appointments

•**Backend API:** Robust service layer with SQL database for data management.

EERD Diagram

- Latest version of our EERD diagram.
- Full screen here.

Tech Stacks

Front-End:

- Framework: React.js

- Languages: HTML, CSS, JavaScript

- Styling: Bootstrap or Material UI

Back-End:

- Framework: Node.js with Express.js

- API: RESTful design

Database:

- SQL Database: PostgreSQL

- Development: All database components are developed using SQL (e.g., schema creation, queries, and constraints)

Distribution of Contributions

Danielle Park

Documentation, Testing & Quality Assurance

- Manage project documentation (user manuals, developer guides).

- Perform testing (unit, integration, UI tests) to ensure quality and stability.

- Assist with UI enhancements and minor feature implementations.

Gaurav Gulati

Back-End & Database Specialist

- Design and implement the PostgreSQL database schema.

- Develop back-end logic using Node.js and Express.js.

- Create RESTful API endpoints with secure data transactions

Rhett Bramfield

Front-End Developer & API Integration Lead

- Build the UI using React.js.

- Ensure responsive design and seamless API integration.

- Implement client-side validations and user experience enhancements.

Questions ?