Design - Online Medical System

The design of the Online Medical System focuses on providing a user-friendly and intuitive interface, efficient data management, and seamless interaction between the front-end and back-end components. The system is designed to satisfy the functional and non-functional requirements outlined in the requirements specification. The following design aspects are considered:

Component Interaction

The Online Medical System follows a client-server architecture, where the client-side is responsible for rendering the user interface and handling user interactions, while the server-side manages data processing and storage. The communication between the client and server occurs through HTTP requests and responses.

User Interface Design

The user interface is designed using HTML, CSS, and JavaScript to create an intuitive and visually appealing experience. The system employs responsive design principles to ensure compatibility across various devices and screen sizes. The user interface incorporates clear navigation menus, input forms, and interactive elements to facilitate seamless user interaction.

Database Design

The system utilizes a MySQL database to store and manage data. The database design follows a relational structure, ensuring data integrity and efficient querying. Tables are created to represent entities such as patients, doctors, appointments, and medical records. Relationships between tables are established using primary and foreign keys to maintain data consistency.

Scalability and Performance

To ensure scalability and optimal performance, the system is designed to handle a large number of concurrent users and data transactions. Efficient database indexing and query optimization techniques are employed to minimize response times.