Healthcare appointment system

Functional Requirements (FR)

1. *What core functionalities must the healthcare appointment system support?*

2. *How should the system integrate with external systems (e.g., billing platforms, SMS/email notification services)?*

3. *What domain entities and relationships (e.g., Patient, Provider, Appointment, Clinic) should be modeled to accurately reflect the healthcare appointment workflow?*

Non-Functional Requirements (NFR)

4. *How should the system handle patient and provider authentication and authorization to ensure data privacy and regulatory compliance (e.g., HIPAA)?*

5. *What level of system availability and response time is required during peak usage?*

6. *How will the system scale to accommodate increasing numbers of users and appointments?*

7. *Should the architecture follow a specific style to support modularity and future enhancements?*

8. *What usability requirements must be met to ensure accessibility for diverse users?*

9. *How will the system manage data consistency and integrity across distributed components?*

10. *What backup, disaster recovery, and audit logging mechanisms are needed to meet healthcare regulatory and operational standards?*

Text Summary of interview:

In the trial interview, the expert explained that a healthcare appointment system should support patient registration, scheduling with options to reschedule or cancel, automated reminders, and provider availability management, while integrating securely with electronic health records. They highlighted the need for standardized APIs to connect with billing and notification services, described core entities like patients, providers, appointments, and departments, and emphasized strong security with multi-factor authentication, role-based access, and encryption. For performance, they recommended high availability, fast response times, load balancing, and horizontal scaling on the cloud, supported by caching and a microservices architecture. Accessibility (WCAG compliance) and resilience were also noted, including backups, redundancy, and disaster recovery planning.