DEFINE PROBLEM/PROBLEM STATEMENT

BUSINESS REQUIREMENTS

DATE	23.10.2023
TEAM ID	NM2023TMID08554
PROJECT NAME	Blockchain Technology For Electronic Health Records

Implementing blockchain technology for electronic health records (EHRs) requires careful consideration of several key business requirements:

1. Data Security and Privacy:

- Ensure encryption and robust access controls to protect sensitive patient data.

- Comply with healthcare data privacy regulations like HIPAA (in the United States) or GDPR (in the European Union).

2. Interoperability:

- Establish data exchange standards to enable seamless sharing of EHRs across different healthcare systems and providers.

3. Data Integrity:

- Implement mechanisms to maintain the integrity and accuracy of EHR data, preventing unauthorized alterations.

4. User Authentication and Access Control:

- Develop secure authentication methods to verify user identities.

- Implement role-based access controls to restrict data access to authorized individuals.

5. Consent Management:

- Create a consent management system that empowers patients to control who can access their EHRs, with clear auditability.

6. Audit Trails:

- Maintain detailed audit logs of all interactions with EHRs to track data access and changes.

7. Compliance and Regulatory Requirements:

- Adhere to healthcare regulations and standards relevant to your jurisdiction.

- Prepare for audits and compliance checks.

8. Data Ownership and Portability:

- Clearly define data ownership and enable patients to export their EHRs if required.

9. Scalability:

- Design the system to handle the increasing volume of EHRs and data requirements.

10. Cost Management:

- Develop a budget and cost management strategy for blockchain implementation.

- Consider long-term operational costs.

11. Research and Analytics Support:

- Enable secure and anonymized data access for research and analytics while safeguarding patient privacy.

12. Disaster Recovery and Redundancy:

- Establish data backup and recovery mechanisms to ensure EHR availability, even during disasters.

13. User Training and Education:

- Provide comprehensive training to healthcare professionals and staff on using the blockchain-based EHR system effectively.

14. Usability and User Experience:

- Ensure a user-friendly system to encourage adoption and minimize user errors.

15. Blockchain Technology Selection:

- Choose the appropriate blockchain platform (public, private, consortium) based on your specific needs.

16. Vendor Selection:

- Select reliable technology vendors or partners experienced in healthcare blockchain solutions.

17. Change Management:

- Plan for change management strategies to help staff transition smoothly to the new system.

These business requirements are essential to ensure the successful implementation of blockchain technology for EHRs, providing data security, regulatory compliance, and improved patient care while managing costs effectively.