A storage architecture for blockchain-based healthcare systems.

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1. Background

Blockchain technology provides immutability and integrity of data.

Large volumes of healthcare data require alternative storage solutions for the blockchain-based healthcare system.

2. Research Question

"Given the blockchain-based healthcare system, what is the most optimal architecture considering different storage methods?"

3. Related work

Ongoing efforts are still at initial stages and lack technical details in storage methods and techniques.

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4. Key requirements

Data location and format
Each medical facility provides their own cloud-based storage.

Storage security and access mechanisms
Security techniques[1] for data storage and accessibility already exist.

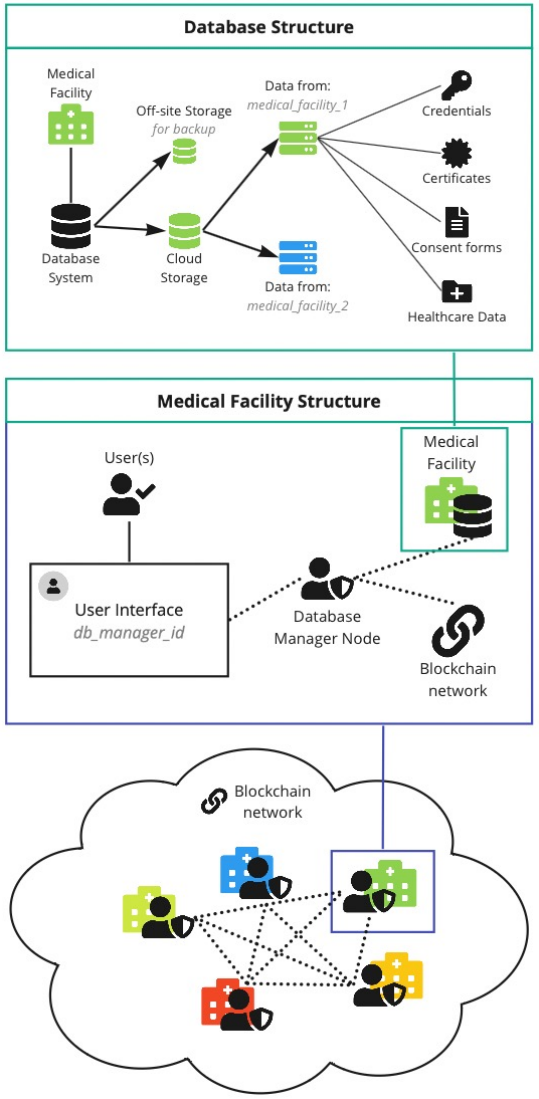
Third parties
No third parties in the network.

Storage purpose and access logs
The ledger is used fpr reference and accountabity.

Operation policies
Each medical facility provides their own policy.

Stored data integrity
Additional live copy of the database for integrity.

[1] K. Jakimoski, "Security techniques for data protection in cloud computing," International Journal of Grid and Distributed Computing, vol. 9, no. 1, pp. 49–56, Jan. 2016. [Online]. Available: https://doi.org/10.14257/ijgdc.2016.9.1.05



5. Conclusion

Cloud-based storage for efficient data sharing and access management.

Each medical facility has their own network to handle operations.

Database scheme:
Visual representation of the data location.