

The Business Requirement

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Team ID	NM2023TMID08529
Project Name	Vaccine Tracking Transparent
Maximum Marks	

The Business Requirements For The Vaccine Tracking-Transparent System Are As Follows:

1. Real-Time Monitoring and Traceability: The system should provide real-time monitoring and traceability of vaccines throughout their entire lifecycle, from production to administration. This ensures that the movement and status of vaccines are continuously tracked and recorded.

2. Blockchain-Based Ledger Technology: Utilize secure blockchain technology to establish a tamper-proof ledger for vaccine data. This ensures data integrity and transparency, making it impossible to alter or manipulate vaccination records.

3. Authentication Mechanisms: Implement robust authentication mechanisms to prevent unauthorized access to the system and unauthorized distribution of vaccines. Only authorized personnel should have access to the system.

4. Integration with Healthcare Facilities: The system should seamlessly integrate with vaccination clinics and healthcare facilities. This integration ensures that vaccine data is shared across the network, allowing for efficient coordination and communication among stakeholders.

5. Automated Alerts and Notifications:

The system should support automated alerts and notifications. These notifications can be used for vaccine inventory management, alerting when vaccine supplies are running low, and optimizing distribution to ensure vaccines reach the right recipients on time.

6. Regulatory Compliance: Adhere to regulatory compliance standards, ensuring that the system complies with all relevant laws and regulations related to vaccine distribution and administration.

7. Waste Reduction: Aim to reduce vaccine wastage by ensuring that vaccines are administered before their expiration dates and that spoiled vaccines are identified promptly.

8. Increased Vaccination Coverage: The primary goal is to increase vaccination coverage rates. The system should help ensure that vaccines are efficiently distributed and administered, thereby safeguarding public health by preventing disease outbreaks.

9. Data Security: Ensure that sensitive vaccine data is stored securely and that access to this data is restricted to authorized users only.

10. Transparency and Accountability: Enhance vaccine accountability and transparency, building trust among stakeholders and the general public regarding the vaccination process.

11. Scalability: The system should be designed to scale as vaccination programs grow or evolve, accommodating a larger number of vaccines and an expanding network of healthcare providers.

12. User-Friendly Interface: Develop a user-friendly interface that is intuitive and easy to navigate for healthcare providers and administrators.

13. Reporting and Analytics: Include reporting and analytics capabilities to provide insights into vaccine distribution, consumption, and trends, allowing for data-driven decision-making.

14. Data Backups and Recovery: Implement data backup and recovery mechanisms to ensure that vaccine data is never lost, even in the event of technical issues or system failures.

15. Training and Support: Offer training and support to healthcare personnel and administrators to ensure they can effectively use the system.

The business requirements for Vaccine Tracking-Transparent focus on creating a comprehensive system that leverages blockchain technology for data integrity and transparency. This system aims to improve vaccine accountability, reduce waste, increase vaccination coverage, and comply with regulatory standards while ensuring secure and efficient vaccine distribution and administration.