Ideation Phase

Brainstorm & Idea Prioritization Template

TEAM ID	NM2023TMID04391
PROJECT TITTLE	BLOCKCHAIN POWERED LIBRARY MANAGEMENT

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define your problem statement

What problem are you trying to solve? Frame your problem as a How Might We statement. This will be the focus of your brainstorm,

⏱ **10 minutes**

Design and implement a blockchain-based library management system to address the challenges faced by traditional library management systems, including data security, accessibility, and transparency, while also ensuring efficient and cost-effective operations for libraries of varying sizes and resources.Libraries play a vital role in knowledge dissemination, research, and education. However, traditional library management systems often face challenges such as data security, transparency, and efficient resource allocation. In the digital age, there is a growing need to leverage emerging technologies like blockchain to address these issues and create a more secure, transparent, and efficient library management system.

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Brainstorm

Write down any ideas that come to mind that address your problem statement.

🕐 **10 minutes**

SENTHAN

Create a blockchain-based catalog system to track and manage library resources, making it more efficient and transparent. Each book, e-book, or other resources can be given a unique digital identifier on the blockchain

Implement blockchain to securely record ownership and lending history of books. This would simplify the process of tracking due dates and fines.

Utilize smart contracts to automate the lending process. Readers can check out books for a specific period, and smart contracts can enforce due dates and automatically charge late fees.

KABILESH KUMAR

Maintain an accurate and real-time inventory using IoT devices that feed data to the blockchain. This helps in preventing loss and simplifying restocking.

Implement a blockchain-based reward system for frequent library users, encouraging more people to visit the library and engage with its resources.

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KEERTHIVASAN

Allow library users to leave reviews and ratings for books and other resources, stored on the blockchain. This ensures transparency and helps others make informed decisions.

For e-books and digital resources, blockchain can be used to manage digital rights. This ensures that only authorized users can access the content and helps protect authors' intellectual property.

Streamline the process of interlibrary loans by creating a blockchain network that connects different libraries. Patrons can request resources from other libraries securely and efficiently.

ROKESH KANNA

Leverage blockchain's security features to protect sensitive patron information, ensuring their data is kept safe and private.

n: Archive historical records and documents related to the library's history on the blockchain to ensure their preservation and accessibility.

Create a community blockchain where library users can contribute to decision-making, suggest acquisitions, or propose events, fostering a sense of ownership and engagement.