Ideation Phase
Brainstorm & Idea Prioritization Template

Date	30 October 2023
Team ID	NM2023TMID01455
Project Name	ELECTRONIC VOTING SYSTEM- BLOCKCHAIN
Maximum Marks	4 Marks

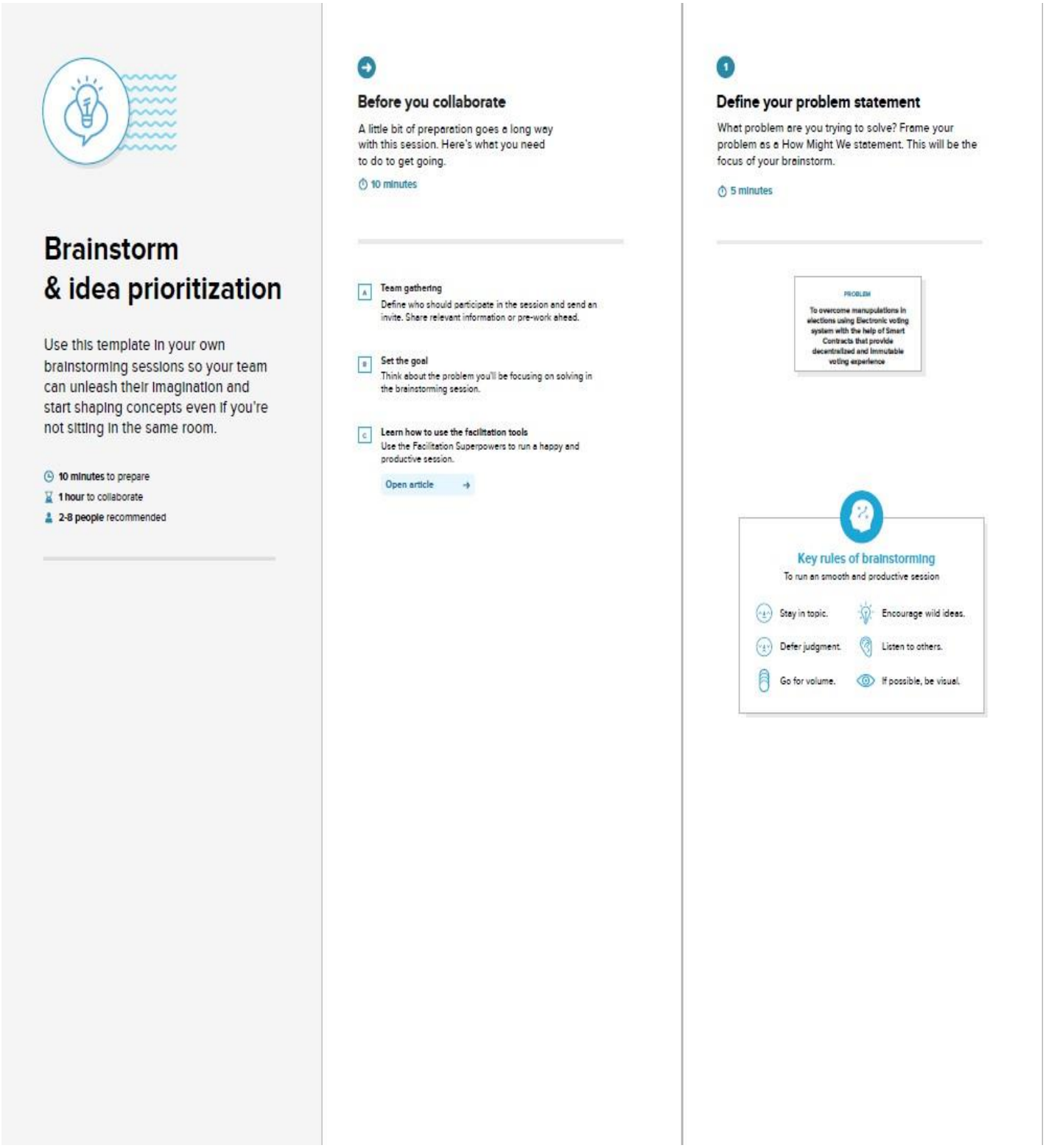
Brainstorm & Idea Prioritization Template:

Brainstorming provides a free and open environment that encourages everyone within a team to participate in the creative thinking process that leads to problem solving. Prioritizing volume over value, out-of-the-box ideas are welcome and built upon, and all participants are encouraged to collaborate, helping each other develop a rich amount of creative solutions.

Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.

Reference: https://www.mural.co/templates/empathy-map-canvas

Step-1: Team Gathering, Collaboration and Select the Problem Statement



Step-2: Brainstorm, Idea Listing and Grouping

2

Brainstorm

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

10 minutes

TIP

You can select a sticky note and hit the pencil [switch to sketch] icon to start drawing!

Aadithya.S

- Use blockchain to provide a transparent and immutable ledger of all votes, ensuring the integrity of the voting process
- Implement a blockchain-based identity verification system to ensure that only eligible voters can participate in the election.
- Develop user-friendly mobile applications that allow voters to cast their ballots securely from their smartphones.

Pavithra.S

- Ensure that all votes are encrypted and securely transmitted over the blockchain to protect voter privacy.
- Integrate biometric authentication methods, such as fingerprint or facial recognition, to enhance security.
- Use blockchain to maintain an immutable voter registration database, preventing duplicate voting.

Robinson.R

- Implement smart contracts to enforce election rules automatically, reducing the need for human oversight.
- Provide real-time vote counting, making election results available as soon as the polls close.
- Issue unique verification tokens to voters to confirm their identity, which are then recorded on the blockchain

Shree Mathi.M.D

- Allow voters to securely delegate their votes to trusted individuals or entities, ensuring representation for those who cannot vote in person.
- Develop the system as open source to encourage transparency and scrutiny by the community.
- Create an immutable audit trail of the entire election process, making it easy to verify results.

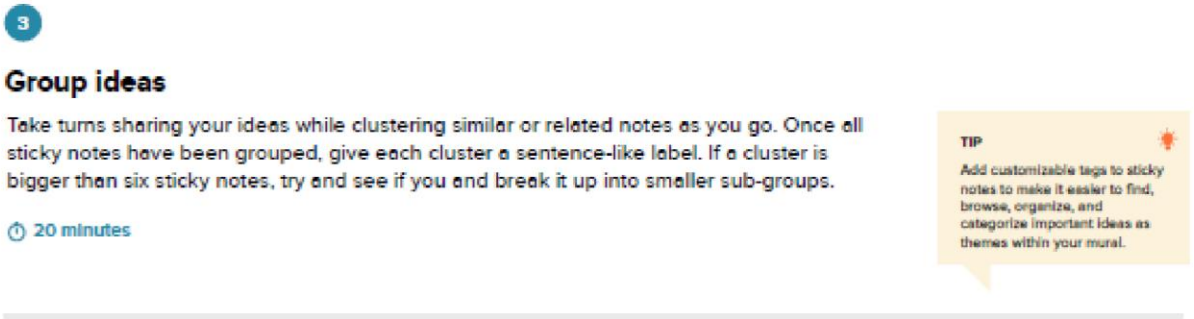
Balaji.S

- Implement secure digital wallets for voters to hold their voting tokens and cryptographic keys.
- Use multi-signature verification for important actions in the system, adding an extra layer of security.
- Consider using a permissioned blockchain to control access to the network and ensure only trusted participants can validate transactions.

Sujith Kumar.M

- Allow for offline voting with later validation on the blockchain, enabling voting in areas with limited internet connectivity.
- Allow voters to submit feedback or complaints directly on the blockchain, ensuring transparency and accountability.
- Explore the possibility of allowing citizens living abroad to vote in their home country's elections securely using the blockchain.

Step-2: Brainstorm, Idea Listing and Grouping



1) Blockchain-Based Security and Transparency:

Immutable Voting Records: Utilize blockchain to create a tamper-proof ledger of all votes, enhancing security and transparency.
Decentralized Verification: Implement decentralized identity verification and registration to prevent fraud.
End-to-End Encryption: Ensure secure, encrypted transmission of votes and results for privacy.

2) User-Friendly Mobile Voting:

Mobile Apps: Develop user-friendly mobile applications for convenient and accessible voting.
Biometric Authentication: Enhance security and ease of use with biometric authentication methods.
Real-Time Results: Offer real-time vote tally and election results for immediate feedback.

3) Smart Contracts and Automation:

Smart Contract Rules: Use smart contracts to automate election rules and reduce the need for human intervention.
Proxy Voting: Enable secure proxy voting for representation and flexibility.
Open Source System: Foster transparency and community scrutiny through open source development.

4) Trust and Verification Mechanisms:

Verification Tokens: Issue unique verification tokens to voters for identity confirmation, recorded on the blockchain.
Immutable Audit Trail: Create an unchangeable audit trail to verify the entire election process.
Multi-Signature Security: Apply multi-signature verification for critical actions in the system.

5) Global and Inclusive Voting:

Permissioned Blockchain: Consider a permissioned blockchain for controlled access and trusted network participants.
Offline Voting Support: Enable offline voting with later blockchain validation for remote or low-connectivity areas.
International Voting: Facilitate secure international voting for citizens residing abroad.

Step-3: Idea Prioritization

4

Prioritize

Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

20 minutes

TIP

Participants can use their cursors to point at where sticky notes should go on the grid. The facilitator can confirm the spot by using the laser pointer holding the **H key** on the keyboard.