Ideation Phase
Brainstorm & Idea Prioritization Template

Date	04 November 2023
Team ID	NM2023TMID11282
Project Name	Electronic Voting System

Brainstorm & Idea Prioritization Template:

Prioritizing security, biometric authentication, and public trust as high-priority initiatives ensures a strong foundation. Medium-priority tasks, such as open-source software and voter verification, enhance system reliability and user experience. Lower-priority activities like ethical hacking and international collaboration can follow, providing continuous improvement and adaptability. This approach ensures a robust, secure, and accessible electronic voting system.

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

Step-2: Brainstorm, Idea Listing and Grouping

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Brainstorm

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

⏱ 10 minutes

3

Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go. Once all sticky notes have been grouped, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you and break it up into smaller sub-groups.

⏱ 20 minutes

Person 1

- Implement a blockchain-based voting system to enhance security and transparency. Blockchain can provide an immutable ledger of votes, making it extremely difficult to malicious actors to tamper with the data.
- Use biometric verification methods such as fingerprint or facial recognition to enhance security and prevent voter fraud
- Ensure end-to-end encryption of voting data to protect it from interception or tampering during transmission

Person 2

- Develop open-source voting software to allow for public scrutiny and contributions, increasing transparency and security
- Combine electronic voting with printed paper receipts that can be used for auditing and as a physical record for voters
- Implement multi-factor authentication for voters to ensure the identity of the voter and prevent unauthorized access

Person 3

- Regularly conduct risk assessments and penetration testing to identify and address vulnerabilities in the voting system
- Utilize PKI for secure authentication, encryption, and digital signatures to protect data and ensure the authenticity of users
- Use VVPAT systems alongside electronic voting machines to provide voters with a physical paper record of their vote

Person 4

- Develop secure mobile apps or online platforms for remote voting, ensuring accessibility for those unable to visit polling stations
- Implement a real-time monitoring system to detect and respond to any anomalies or cyber threats during the voting process
- Conduct routine post-election audits to verify the accuracy of the electronic vote count and ensure the integrity of the system

VoteSmart offers educational resources, including articles, videos, and infographics, to help voters understand complex policy issues and the electoral process

Introduce gamification elements to incentivize participation, such as earning badges or points for engaging in discussions, verifying information, and casting vote

Step-3: Idea Prioritization

Importance

E-voting can make it easier for elderly citizens to participate in the electoral process, as well as voters in remote or geographically isolated areas

Feasibility

The feasibility of e-voting depends on the ability to educate voters and election staff on how to use the systems