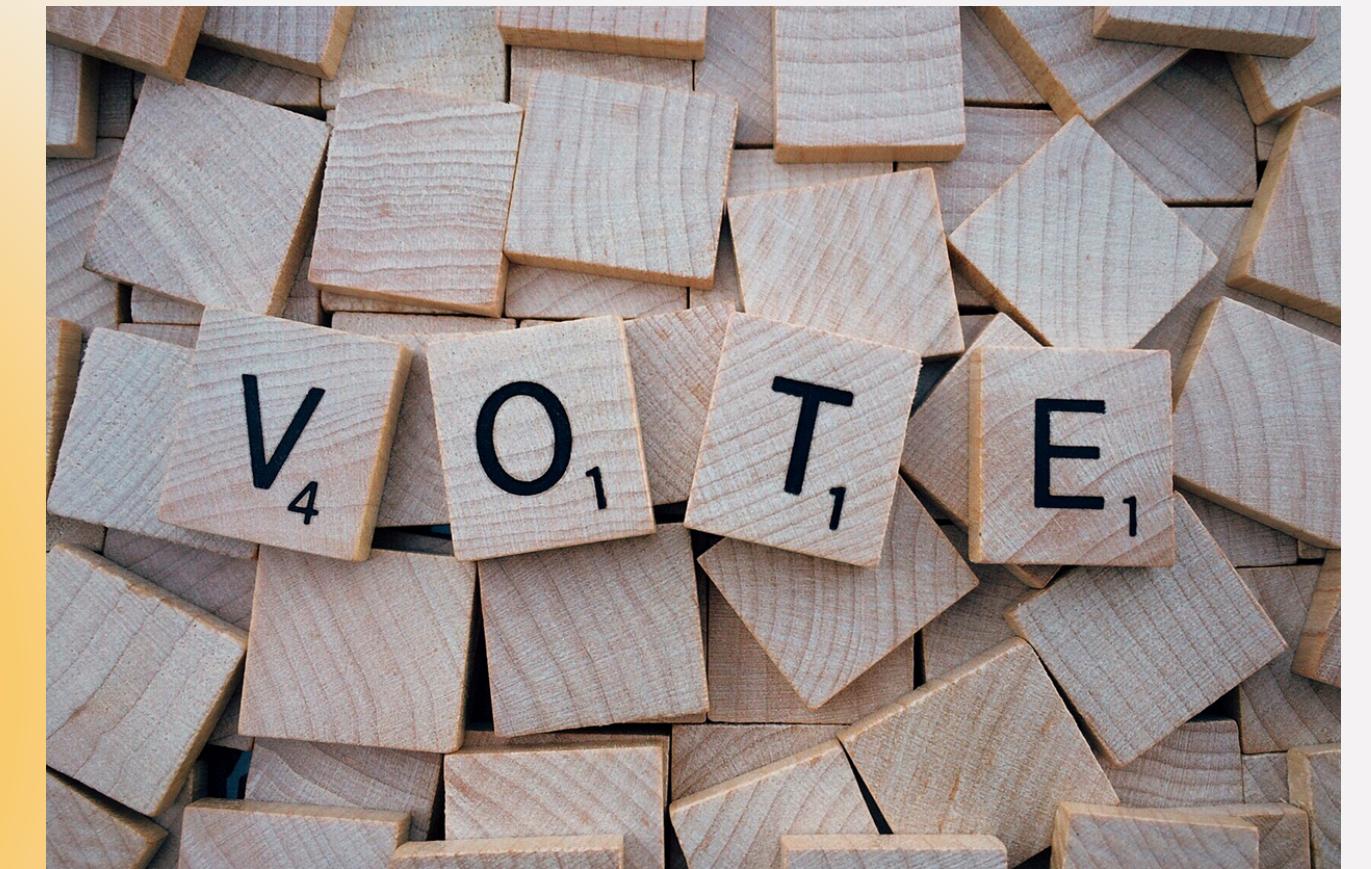


Decentralized Voting System

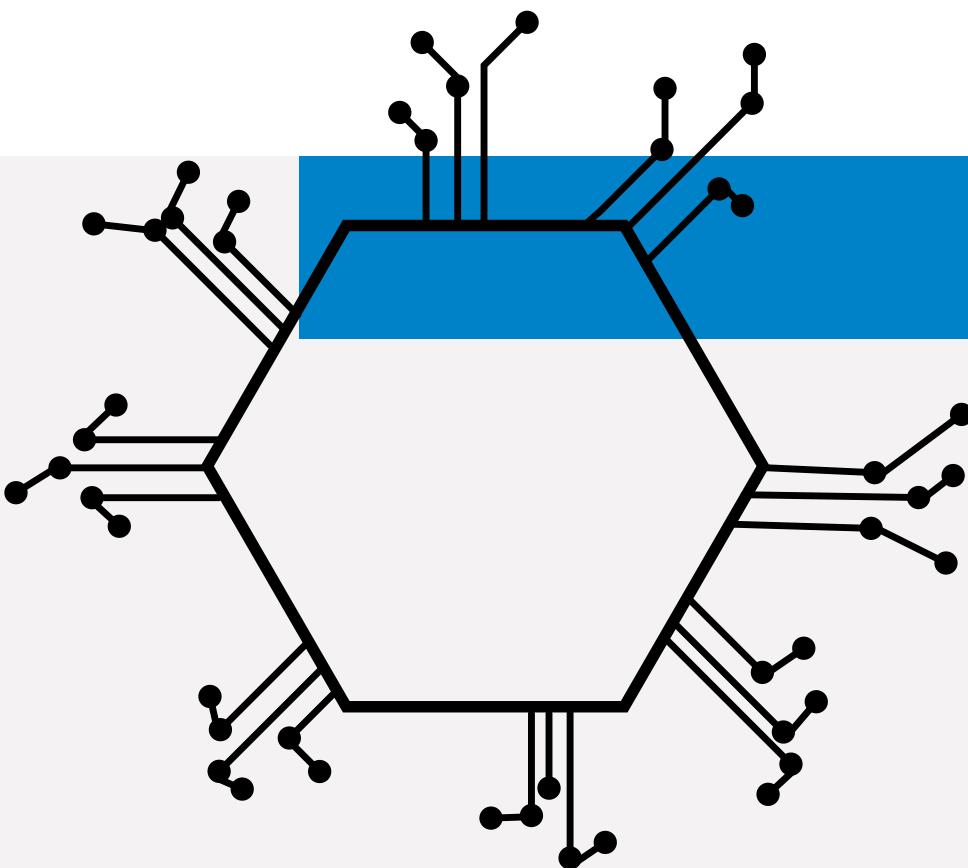
and its impact on the future.



Presentation By

Yash Yadav

- 01 - What is it?
- 02 - Analysis
- 03 - Statistics
- 04 - Conclusions



It is important to understand the utilities of Blockchain

New future

01 - What is it?

- **Overview:**

- Traditional voting systems often face fraud, manipulation, and lack of transparency.
- A blockchain-based voting system can address these issues by ensuring a secure, transparent, and immutable voting process.

- **Objective:**

- To understand how blockchain technology can revolutionize voting systems and provide a tamper-proof solution.

EVM



02 - Why Blockchain?

Artificial

Intelligence

Human

New future

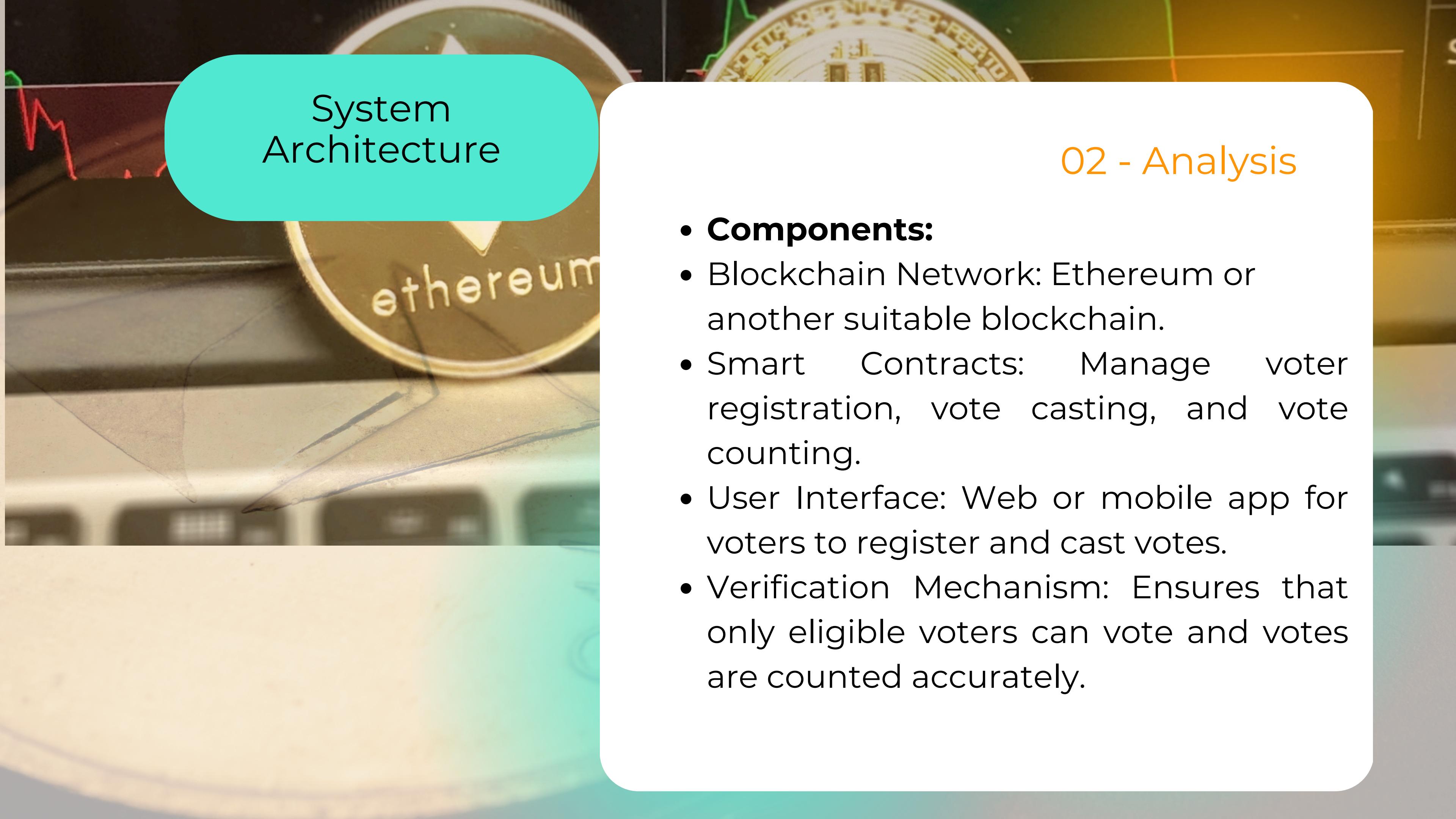
- Security:
 - Blockchain provides a secure way to record votes that cannot be tampered with.
- Transparency:
 - All transactions (votes) are transparent and can be audited by anyone.
- Immutability:
 - Once a vote is recorded on the blockchain, it cannot be altered or deleted.
- Decentralization:
 - Eliminates the need for a central authority, reducing the risk of manipulation.

How Blockchain Voting Works



02 - Analysis

- Step 1: Voter Registration
 - Voters register on the blockchain and receive a unique voting token.
- Step 2: Vote Casting
 - Voters cast their votes using smart contracts, which record the votes on the blockchain.
- Step 3: Vote Counting
 - The smart contract automatically counts votes.
- Step 4: Result Announcement
 - Results are published transparently on the blockchain



System Architecture

02 - Analysis

- **Components:**
 - Blockchain Network: Ethereum or another suitable blockchain.
 - Smart Contracts: Manage voter registration, vote casting, and vote counting.
 - User Interface: Web or mobile app for voters to register and cast votes.
 - Verification Mechanism: Ensures that only eligible voters can vote and votes are counted accurately.



03 - Statistics

Purpose:

- Ensure secure and automated vote casting and counting.

Here is the code for this - <https://github.com/KBA-Learning/edp-b1-project-Y-ash-Y/tree/main/Codework>

Codework for the Project

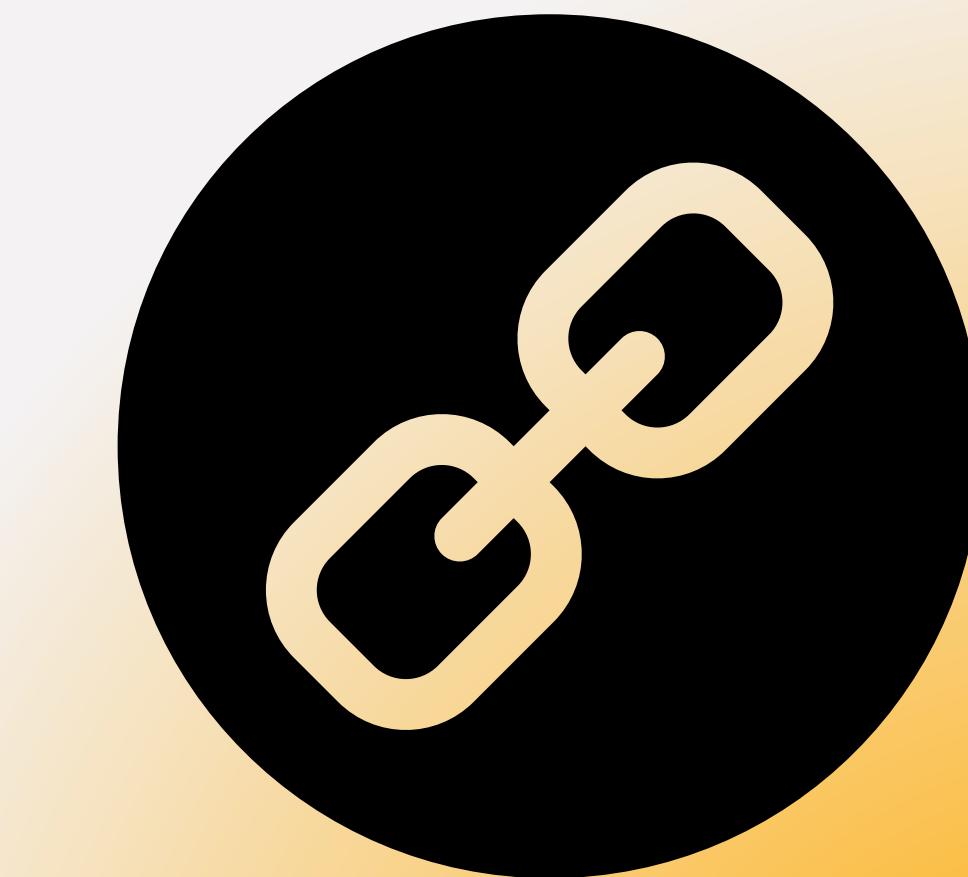
```
8 .box{  
9   position: absolute;  
10  top: 50%;  
11  
12  transform: rotate(-50deg);  
13  
14  padding: 10px;  
15  background: #rgba(0, 0,  
16  box-sizing: border-box;  
17  box-shadow: 0 15px 25px #000;  
18  border-radius: 10px;  
19  
20  h2{  
21    margin: 0 0 30px;  
22    padding: 0;  
23    color: #fff;  
24  
25  }  
26  
27  .box .box{  
28    width: 100px;  
29    height: 100px;  
30    border: 1px solid #000;  
31    border-radius: 50%;  
32    background-color: #fff;  
33    display: flex;  
34    align-items: center;  
35    justify-content: center;  
36    font-size: 24px;  
37    font-weight: bold;  
38    color: #000;  
39  
40  }  
41  
42  .box .box .box{  
43    width: 100px;  
44    height: 100px;  
45    border: 1px solid #000;  
46    border-radius: 50%;  
47    background-color: #fff;  
48    display: flex;  
49    align-items: center;  
50    justify-content: center;  
51    font-size: 24px;  
52    font-weight: bold;  
53    color: #000;  
54  
55  }  
56  
57  .box .box .box .box{  
58    width: 100px;  
59    height: 100px;  
60    border: 1px solid #000;  
61    border-radius: 50%;  
62    background-color: #fff;  
63    display: flex;  
64    align-items: center;  
65    justify-content: center;  
66    font-size: 24px;  
67    font-weight: bold;  
68    color: #000;  
69  
70  }  
71  
72  .box .box .box .box .box{  
73    width: 100px;  
74    height: 100px;  
75    border: 1px solid #000;  
76    border-radius: 50%;  
77    background-color: #fff;  
78    display: flex;  
79    align-items: center;  
80    justify-content: center;  
81    font-size: 24px;  
82    font-weight: bold;  
83    color: #000;  
84  
85  }  
86  
87  .box .box .box .box .box .box{  
88    width: 100px;  
89    height: 100px;  
90    border: 1px solid #000;  
91    border-radius: 50%;  
92    background-color: #fff;  
93    display: flex;  
94    align-items: center;  
95    justify-content: center;  
96    font-size: 24px;  
97    font-weight: bold;  
98    color: #000;  
99  
100 }
```



04 - Conclusions

Security Features :

- Immutable Records:
 - Votes once cast are permanently recorded and cannot be changed.
- Encryption:
 - Votes are encrypted to ensure voter privacy.
- Authentication:
 - Multi-factor authentication to ensure only eligible voters can vote.
- Auditability:
 - The system can be audited by third parties to verify the integrity of the voting process



04 - Conclusions

Benefits and Challenges :

- Benefits:
- Increased voter confidence due to transparency and security.
- Reduced costs compared to traditional voting systems.
- Faster and more accurate vote counting.
- Challenges:
- Technical complexity and scalability.
- Voter education and adoption.
- Regulatory and legal considerations.

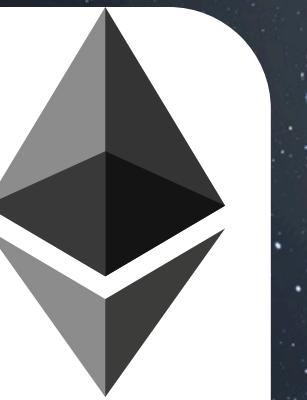
**VOTE
RIGHT**



04 - Conclusions

Future Enhancements

- Scalability:
 - Implement Layer 2 solutions (e.g., Rollups) to handle more transactions.
- Interoperability:
 - Enabling cross-chain voting solutions.
- User Experience:
 - Improving the user interface for better accessibility.
- Mobile Voting:
 - Developing secure mobile applications for remote voting



Thanks