Online Voting System linked with AADHAAR Card

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Abstract: This paper deals with the online voting system that will make the voting system smart, more secure and easy to vote. This paper illustrates a system which can be is linked with Aadhaar card. In the whole country Aadhaar card Number is Unique for every person and it contains biometric information of each citizens. So it will be helpful in eliminating fake Voting. The proposed model has a greater security in the sense that voter high security password is confirmed before the vote is accepted in the main database of Election Commission of India. After voting user want to cross check their vote then they can confirm with reference of unique id, which was generated by ECI. In this model a person can also vote from outside of his/her allotted Constituency or from his/her preferred location. Our system also facilitate the live streaming of vote counts thus saving a huge time by providing on time result.

Keywords: AADHAAR ID based online election, Reference ID, Candidate ID, Online voting system, Election commission of India, Unique identification authority of India.

I. INTRODUCTION

Online voting system is a way that helps public to select their representatives and express their preferences for how they will be governed. Naturally, the belief of the election process is utmost important. Election process has strong media coverage, particularly if something goes wrong. This system will increase the level of security and also the trust of voters. The problems of Maoist affected places for the voting has been addressed in while describe the genesis of Maoist violence and showed that public needs a more secure way of casting their vote.

Online voting system definition given in states that Online voting systems offer advantages compared to other voting processes. It is hard to make the voting system trustworthy only because it has high security requirements: confidentiality and integrity.

Confidentiality: confidentiality means all voters get assured about the privacy of votes and prevent selling of votes.

Integrity: integrity means the assurance of election results and the votes are counted correctly

II. TRADITIONAL SYSTEM

a) Paper Ballots:
Paper Ballots is a Traditional Voting system. In which there is a paper on which we have to tick on the name of a Candidate to vote. In Paper Ballots System a voter can only vote once. It takes a huge amount of Time to count the Vote before declaring the results. In few places where the governance is corrupt they can easily insert bogus paper votes in the ballots and it becomes impossible to track a honest vote.

b) Electronic Voting Machine:
This is the current voting System in our country. In this vote is cast using electronic ballet.
This voting system is quite easy and simple. Also this system is secure enough and portable. Many software programmers have claimed that electronic voting machine are vulnerable to malicious programming and if it's get affected then any hacker can hack the machine and can temper the vote count easily. A voter has to wait in queues to vote due to which a lots of time is wasted. Therefore, instead of standing in queue they prefer not to vote for a time. Also voters have "no confidence" in EVM that their votes are casted to same candidate whom they have voted.

III. PROPOSED SYSTEM

a) Online Voting System
In this system voter can cast their vote through internet. This system is linked with Aadhaar card. The proposed model has a greater security in the sense that voter high security password is confirmed before the vote is accepted in the main database of Election Commission of India.

After voting user want to cross check their vote then they can confirm with reference of unique id, which was generated by ECI. In this model a person can also vote from outside of his/her allotted Constituency or from his/her preferred location. Our system also facilitate the live streaming of vote counts thus saving a huge time by providing on time result. There is no need for user to stand In a queue for voting this makes a voter more comfortable to vote.Voter can vote without fear and without hesitations This is secure, cheap and less time consuming.

IV. SYSTEM OVERVIEW

Step 1: Voter registration
In Online Voting System, Election Commission of India can access data from UIDAI (Unique identification authority of India).
User has to register via entering Aadhar number in this proposed system and later a OTP will be generated on registered mobile number, once user is verified the system will generate an unique id from that reference user can vote. This unique id is very important as user can cross check with reference to that id.

Step 2: Candidate registration
For who is standing in election has to approach Election Commission of India and submit there application to the ECI. After approval, ECI will upload the information of the candidate and give them a unique id and password to login to check their status.

Step 3: Check validation
As user register through their aadhar Id, cross verification is to be done.

Step 4: Election status
The administrator open the voting website server by giving notification to the voter and candidate. Those who have not voted will get frequently notification from the Election Commission of India

Step 5: Voter Login
Voter will login to it account as the time of voting starts. Voter will have their specific unique id which was provided by ECI, through which the voter can be able to vote securely.

Step 6: Cast a vote
After login successfully, user can view profiles of candidates and proceed for voting. Once voted, user cannot alter or change their vote. And their perspective vote will be stored in Database of Election Commission of India.

Step 7: Live status
This system will display the live count of vote so it will be able to helpful for user to cast their vote. It will generate instant result…....

Step 8: Cross checking of votes
After voting gets over Election Commission of India will generate a report of how much people has voted and. User can cross check it votes with reference to id which was generated by Election Commission of India

Step 9: Result declaration
Election Commission of India will declare final result.
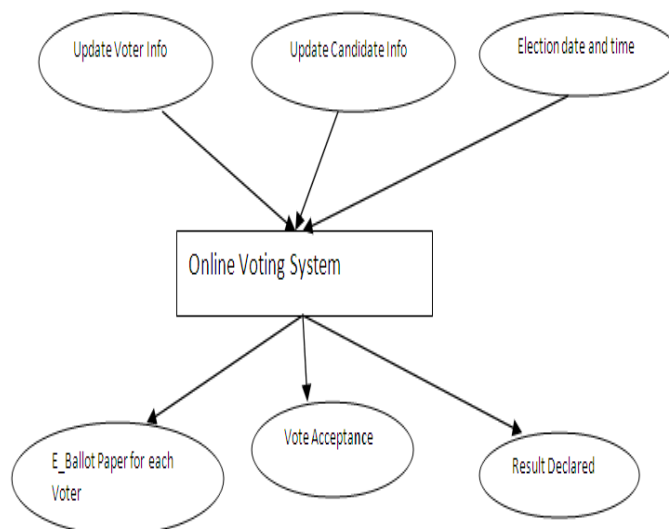
Input/output Scenario of Online Voting System

Fig 1: Input/output Scenario of Online Voting System

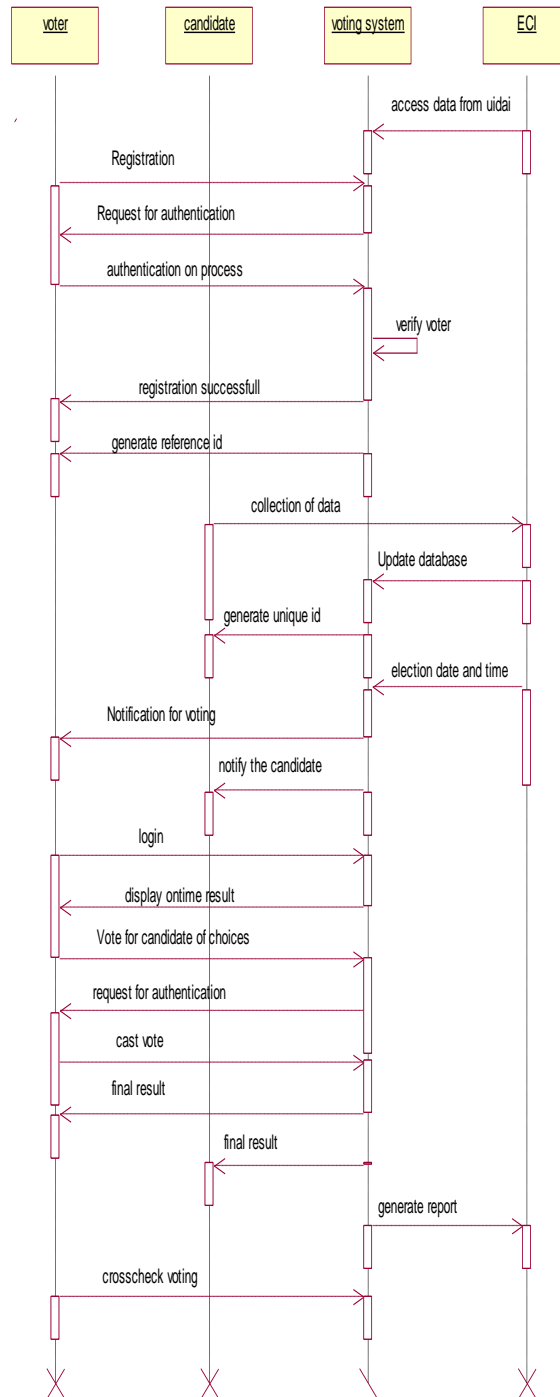**Detailed Architecture of Online Voting System**

Fig 2 : Architecture of Online Voting System

V. SAILENT FEATURES

a) Our proposal enables a voter to cast their vote through internet without going to voting booth.
b) Proxy vote or double voting is not possible fast to access, highly secure system, easy to maintain all the information of voting.
c) Highly efficient and flexible
d) It is excellent mechanism that does not require geographical proximity of voters for example solider abroad can participate in elections by voting online.

VI. CONCLUSION

Our proposed system has the capability to reduce or unwanted human errors. In addition to its reliability, online voting can handle multiple modalities, and provide better scalability for large elections Online voting is also an excellent mechanism that does not require voter location proximity. It leads to the easier verification of voters and candidates. In the proposed framework, we have tried to build a secure online voting system that is free from unauthorized access while casting votes by the voters. The server aspects of the proposed system have such distribution of authority that server does not enable to manipulate the votes. It is expected that the proposed online voting system will automatically increase the transparency.

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