

Online Voter id Generation with Online Voting System and Result Generation at an Instance of Time

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Abstract: The main objective of the democracy is "vote" by which the people can elect the candidates for forming an efficient government to satisfy their needs and requests such that their standard living can be improved. In developing countries like "INDIA" the election commission follows manual voting mechanism which is done by electronic voting machine. This machine is placed in the poll booth centre and is monitored by higher officials. Due to some illegal activities the polling centre are misused and people's vote to right has been denied. This seldom occurs in rural areas as well as in urban cities because the educated people are not interested in casting their votes to candidates who represent their respective areas. To ensure 100% voting automation came into play. But this automated system have been approved only on some developed countries since security have not been ensured to a large extent. Our main aim of the proposed system is to develop a mobile app with high security. The proposed system is mainly designed for our country. It has three phases. first the details of the persons who are above 18years are extracted from aadhar card database since it had become mandatory in present scenario. Automatically a new voter id with necessary details will be created and an intimation will be given to the persons through their e-mail. At the time of voting, the voting server will create a new session. The user can specify their id and password and can cast their vote to the candidates. As soon as they cast their vote from their mobile, their voter id and other details will be erased automatically and the mobile which they used will be tracked and will be locked to access the voting server. This is done to preserve the security. When people cast their vote the results will be updated automatically and on the same day of election, the results will also be published. In rural areas, from the poll booth centre the votes are also updated on the results server so no votes will be missed.

Keywords: Vote, electronic voting machine, aadhar card, voter id

I. Introduction

"Voting is the most precious right of every citizen and we've a moral obligation to ensure the integrity of our voting process"

- Hillary Clinton.

Democracy principles depends upon the people's decision. So, if we have great vision to success in our mission we have to take correct decision. This can be made by "voting". The conventional voting mechanisms follows the issue of voter id and other details which is generated manually. So, there are chances of parallax errors. Moreover the electronic voting machine may be devised in a such a way that people whatever and whomever they vote, will be converted into some other's party or candidates. It may be misused. To avoid this automation had been developed. Many organizations and developed countries have accepted this system.

II. Existing System:

The automated voting systems are developed before some years ago. The existing systems have only been approved in developed countries. That too, not in all developed countries. Because the security has not yet been fully preserved. We moved onto automation mainly to rely on security. But, the existing systems failed to ensure.

II. Related works

1. Secure Online Voting System:

This paper aims at creation of secure online voting system providing biometric security. Propose a new secure online voting system by using biometric and steganographic authentication. Use of homo-morphic technique encrypts the casted vote stored securely in vote casting and recording server.

Drawbacks:

1. It is not reliable
2. It is not user friendly

2. Mobile Voting System:

Mobile voting system is very secure, efficient and easy way to casting of vote. This paper uses RSA algorithm for security purpose. This system provides a new e-voting system which fulfills the security requirements of voting process. Totally three steps are required: Online Registration of voter, vote casting of voter and result display.

Drawbacks:

1. Process will be done through SMS messaging so there will be wastage of money.
2. Not compatible with current trends
3. The same user can cast their vote in paper ballot also. hence no security is ensured

Proposed System

Our Proposed System is a mobile application that enhances our country with a better voting system to ensure 100% voting. Since the existing voting system is not having high security our project will overcome this major drawback. Our online voting system generates the list of all the people in the state above 18 years from the aadhar card database since it is made mandatory in our country today. From the generated list our mobile app will automatically generate a voter id for people above the age of 18. Hence by this way nobody will be left out without getting their right to vote which fails in the existing system. Therefore 100% voting will be achieved.

Voting Phase: During the time of voting the voter can download the voter id from the net by using the aadhar card number. By installing this app he can cast his vote to his party at home itself. Even in rural areas where some people are not familiar with android mobiles this is possible. The people in rural areas as usual go the voting booth to cast their vote. But instead of existing voting machine we supply the authority in there with a government authorized mobile with this app installed. So the people in rural areas can also cast their vote with the latest technology and high security than the existing system. The major enhancement feature in our proposed system is the high security level which is not available in the existing systems. The security is maintained by making a voter to cast his vote only once. The second time even if he tries he will not be able to vote. And also when each voter is casting his vote the count will be updated at the same time in the database through the server and will also be displayed for the person casting his vote. Hence by this method it is very difficult to cheat and will also be very much satisfied for the people with the voting system and the winning party. Therefore our mobile app will lead our country to a smart world and will help to evolve into a developed country. Our proposed system will ensure 100% voting in the country with high security voting system as like the developed countries.

III. Working

Online Voter Id Generation:

The aadhar card information comprising of each individual's name, date of birth, gender, aadhar number, mail id, address, state, district, fingerprint of left and right hand along with retina scan is stored in the database. From the aadhar data voter id is generated for people above 18 years of age as it is the eligibility criterion for voting. The people can download their voter id from their mail id for their future use. A new database is generated for the people above 18 years of age for the voter id details.

Online Voting System (Android App):

An Android App is being developed for online voting system. The user has to first login into the system through the fingerprint. Authentication is being granted from the aadhar fingerprint database. If both the fingerprint matches, the user has to enter their voter id and cast their vote for their interested party. People trying to vote second time is not being allowed as once the fingerprint is granted authentication the login is being denied for the user. The casted vote is being updated at each instance of time in the database. The election results can be published at the same day with high accuracy and efficiency.

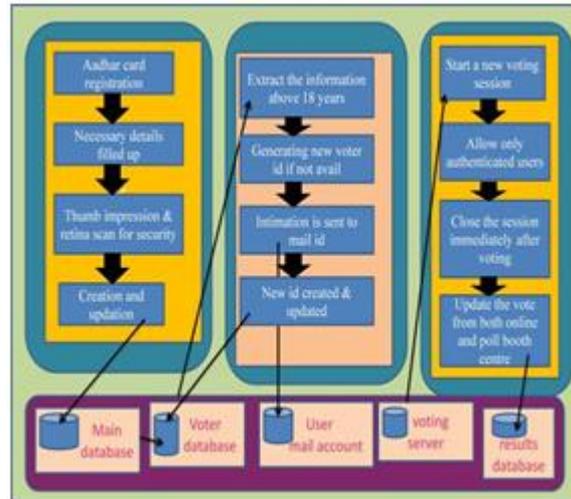
Online Voting In Rural Areas:

In rural areas people can move to the nearby election booth and cast their vote through the android app installed over there and the details will be updated at each instance of time in the central database.

Merits:

- Automated voter id generation
- Voting through android app from anywhere throughout the world
- Reduces manual work
- Overcomes reduction in voting percentage because of worse climatic conditions
- Transparent voting system
- Secure voting system through finger print matching

Architecture Diagram:



IV. Future Work

We are trying to develop an app that is compatible with windows and IOS.

V. Conclusion

A nation with less voting percentage will struggle to develop as choosing a right leader for the nation is very essential. Unfortunately our nation lacks in the 100% of voting. This is mainly due to the failure of the security level in the existing voting system. Our mobile application tends to make our nation into a developed country by increasing the percentage of vote by developing a high security voting system. Let's make our country smart by installing this app in our mobiles.

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