ONLINE VOTING PORTAL BASED ON AADHAAR CARD VERIFICATION

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ABSTRACT:

Voting is the most important thing which makes India the most democratic country. Voting is done to elect a candidate and make him/her the leader of a specific area which can be even large as a country. People have faith in that candidate, they hope that he will work in the favour of the society. The elected candidate has many powers which are provided to him by the government. These power can be misused too. There are many people who want to be elected for that power. In today’s world security and authenticity is very important aspect and people want that only the most deserving candidate should win. Every single vote is important. All the votes given by the public should be kept private and its authenticity should be maintained throughout the election process. We currently have a voting system which makes a person to physically go to an allotted booth which is given by the election commission of India according to the area in which the person is residing. There is no such procedure which allows us to vote by sitting in our homes. This is the era of internet, if we are having such facility then why not use it. The main problem in this procedure is security and authenticity. This particular paper proposes online voting application that can be operated remotely from your computers, smartphones, tablets, in short from every device which can run internet. By using this application user can vote online. The application provides verification through AADHAAR card for security and authenticity. The principle aim of this paper is actually providing an online voting application to vote and elect the most deserving candidate for a specific area. This application is quite secure and votes are authentic as it is using AADHAAR card for verification.

Keywords: Voting, AADHAAR card registration, AADHAAR card verification, Election Commission of India.

[1] INTRODUCTION

The security of the online voting portal is an issue, as the technology is advancing there are more and more chances of the application to be hacked. If the application is hacked, it will lead to adverse effects as election process is no joke. The application should be designed in such a way that it can handle any type of security threats. The aim is to keep systems as secure as possible easing the user’s effort towards security of their system. There can be a possibility of a scenario when a user of the application shares personal credentials or an intruder
gets to know that credentials illegally but our application is designed in such a way so that it can handle such scenarios. Apart from secret username and password, we are providing the users with an additional security layer which focuses on AADHAAR verification. During registration of a user, a unique pin is sent to their email id which is registered with their AADHAAR card. That unique pin has to be entered along with the username and password. The objective of system security is the protection of information and data from theft, corruption and other types of damages and threats. There are a number of different ways to application security, including the use of a firewall, data encryption, passwords and biometrics. The basic method of securing data or information is protecting your system(s) through password(s).

[2] LITERATURE SURVEY


This research paper states the proposed system for online voting portal for the country. The proposed tool is much safe and effective than the traditional voting system. Influence of votes and adjournment of election results can be avoided simply. A unique AADHAAR identity is the main point of our planned system. It leads to the easier authentication of both voters and candidates.

In the proposed structure, we have tried to build a safe online voting portal that is free from unauthorized access while casting votes by the voters. The server features of the proposed system have such distribution of right that server does not enable to manipulate the votes. It is anticipated that the proposed online voting model will increase the transparency and dependability of the existing electoral model.


In this paper we have offered a method for incorporating cryptography and steganography. We are also able to alter the cover coefficients randomly.also, bearing in mind the complication of elections, we have provided sufficient proof of genuineness of an individual in form of both biometric measures and unique key. As upcoming work, we will be trying to improve two significant aspects of the algorithm, namely, speed and dependence on pseudo random function.


Our key idea is to permit the user to cast the vote using Online voting portal without going to the voting centre. Voter can give his vote form his house, work place or anywhere else. And to diminish the fake votes and in booth capturing situation this model help us. Because of easy and safe voting the voting percentage also rises drastically. The main advantage of the model is that it does not require the physical security. So that soldier, policeman and other
busy person are able to contribute in the election and make their vote count. This model is developed such that every voter can use it easily. In this, first, the voter has to open the website. Then voter has to login through his thumb impression or biometric credentials. The testing and development is done through Ethernet. Online voting portal is the active part of research. The main problem is its safety, security and authenticity. This problem is needed to be tackled so that voter can give their vote without any fear and difficulty.

[3] PROPOSED SYSTEM

The proposed system allows user to login with a unique set of username and password and then vote for a candidate. Before this, the election commission of India must maintain a database which should have AADHAAR card registered of the population. When a new user or voter registers, he is asked to enter AADHAAR number which is then verified from the database. After verification he/she can register for the application and can select desired username and password.

After the voter registration a unique code is sent to the email id which is mentioned in the AADHAAR card. Whenever the voter tries to login he/she has to enter that unique code along with user name and password.

There are two modes of logging in, one is admin mode (Election Commission of India) and another is voter mode. Administrator has the authority to add AADHAAR numbers to the database, can update the details and can see the vote count (cannot manipulate the vote count). The voter can vote and can see the winner when declared.

[4] SYSTEM ARCHITECTURE

![System Flow Diagram](image-url)
[5] IMPLEMENTATION MODULES

Now let’s see some of the implementation modules of our proposed systems.

AADHAAR card verification: When voter registers for the system he/she gets a unique code on his registered email id. That code has to be entered while logging in the application along with the username and the password that has been selected by the voter during registration.

Adding AADHAAR card: The admin (election commission of India) can add the AADHAAR details in the database. Only the AADHAAR card holders who exists in the database can vote (vote can be given to candidates by the voters of the specific area from which that candidate is standing).

Voting: only the registered voters can vote (vote can be given only once)

Checking and Displaying of the results: Only the admin can check the votes received by different candidates of different areas. He/she can publish it for the viewing of the voters.

[6] ADVANTAGES

   a)  Voters can vote from their homes.
   b)  Voter count will be increased drastically.
   c)  Secured voting process.

[7] CONCLUSION

The Proposed tool will manage the Voter’s information by which voter can login and use the voting rights. The system will include all features of voting system. It provides the tools for maintaining voter’s vote to every party and Candidate vote count. There is a database which is maintained by the administrator of proposed tool in which all the names of voter as well as candidates is stored.

In this user who is eligible to cast vote will provide the aadhar number to register and when he/she want to vote he/she has to login by his username, password and Unique code which is sent to his/her registered email address and can vote to any candidate only once. Voting details are stored in the database and the result is displayed when the administrator publishes it after the voting process is completed. By our proposed tool percentage of voting will increase. It reduces the expenditure and time of voting process. It is very easy to understand and is very user friendly.

REFERENCES


Author[s] brief Introduction

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