

Secure E-Voting System For Election

¹Jeetendra R. Khairnar,²Prof. VipinWani

¹Student,²Assistant Professor

¹Computer Science and Engineering,

¹School of Engineering and Technology, Sandip University, Nashik,India

Abstract : E-Electronic casting a ballot framework can possibly improve level of the casting a ballot. in the customary casting a ballot, for example, the gadgets casting a ballot and paper based casting a ballot level of casting a ballot is diminishing. presently multi day's the vast majority of voters are occupied in his/her work and the vast majority of the voter are living far from casting a ballot focus some voter don't care to hold up in lines subsequently because of these voters don't visit to the pooling corner and Level of casting a ballot is diminishing. these is fundamental and Genuine disadvantage of conventional casting a ballot plot. presently multi day's some improvement required in this field, in this paper we are presenting such a framework which dispense with disadvantage of customary casting a ballot plan and this new casting a ballot conspire is in view of SMS. Presently new proposed framework for those voter having versatile and living in remote spot from casting a ballot focus or the individuals who don't like to hold up in lines or don't have time such voter can cast a ballot utilizing his/her own portable. So this framework concentrated on voter portable number which must be enlisted and synchronized with name in EV database. Utilizing just such enlisted portable number voter can cast a ballot. In this framework send the SMS to voter and framework offer reaction to such portable number and take vote of specific voter. When the vote of the specific people is taken then he/her can't cast a ballot once more.

Index Terms - evoting, election, authorization, Privacy, security, Data Mining, Udai Data, Data integration.

I. INTRODUCTION

In a fair arrangement of administration, race is exceptionally significant and the trustworthiness of the appointive process is hallowed. Race is a tedious activity that happens each predetermined time of time. Adding to that is the way that there are various sorts of races as well as various degrees of decisions and the need to help various races. Majority rule government in this manner urges singular opportunity as indicated by the standard of law, with the goal that individuals may carry on and convey what needs be as they pick. This not just allows individuals to pick their pioneers, yet in addition to uninhibitedly express their perspectives on issues. Web based casting a ballot is an electronic method for picking pioneers by means of a web driven application. The upside of web based casting a ballot over the regular "line strategy" is that the voters have the decision of casting a ballot at their very own available time inside the stipulated race casting a ballot period and there is no compelling reason to line up. It likewise limits on mistakes of vote checking. The individual votes are submitted into a database which can be questioned to discover who of the hopefuls for a given post has the most noteworthy number of votes. This framework is equipped towards expanding the believably and simplicity of the casting a ballot methodology since it has been noticed that with the old casting a ballot technique (the Queue System), the voter turnout has been a needing case. India is the world's biggest vote based system. In ongoing national races, a greater number of votes were thrown than the joined populace of the United States and Canada, and most by far of voters utilized paperless direct chronicle electronic (DRE) casting a ballot machines. In spite of the fact that paperless DREs have been to a great extent ruined in the scholarly security writing, Indian race experts keep on demanding that the electronic casting a ballot machines utilized in India, generally alluded to as EVMs, are completely secure.

Credibility of the Voting Process

Certain variables play out enormous in a given casting a ballot technique in a specific nation. Culture itself and in this manner the supporting social variables/values generally check the principles and guidelines that oversee any casting a ballot technique. In nations, where decision results are resolved through the voter checks that are counted by straightforwardly saving exceptionally planned casting a ballot cards into the casting a ballot boxes, there are propensities that discretionary votes can get abused from various perspectives; a few voters would will in general endeavor to cast a ballot more than the occasions admissible by law for a given applicant; different voters may attempt to cast a ballot in lieu of other messy voters with the goal that the voter tally would weigh positively towards some competitor, to make reference to only a couple. Fake/Malice is yet issue which will imperil the respectability of a race strategy. Robotizing a decision procedure, while depending on best in class in PC and ICT innovations, can altogether alleviate a considerable lot of the variables that would hamper a sound advancement of a race procedure. In any case, depending absolutely on accessible data advances can just warrant the confirmation/approval of the character of a given voter, yet, still, would not have the ability to hinder any endeavored maltreatment of the casting a ballot framework, viz., those voters who basically attempt to cast a ballot in the interest of others (misrepresentation). Without additional measures, the respectability of a casting a ballot procedure, inside the best possible setting, is a long way from any acceptable standard/s; the joining of biometry would without a doubt have an additional value towards accomplishing the predetermined dimensions of race integrity. Present day applications, including banking applications, guarding of high-security foundations, observing of travelers crosswise over outskirt posts, among numerous others are seeing expanding levels in the utilization of biometric innovations and gadgets. Biometrics is best plot as quantifiable physiological and/or organic qualities that might be utilized to confirm the character of an individual. They grasp fingerprints, retinal and iris examining, hand geometry, voice designs, facial acknowledgment, Gait acknowledgment, DNA and different strategies. They are of enthusiasm for any region wherever it's important to confirm truth character of an individual. At first, these methods were utilized fundamentally in pro high security applications; in any case, we are currently observing their utilizations and proposed utilizes in an a lot more extensive scope of open confronting circumstances.

II. LITERATURE REVIEW

1. Online Voting System for India Based on AADHAAR ID.

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. The additional feature of the model is that the voter can confirm if his/her vote has gone to correct candidate/party. In this model a person can also vote from outside of his/her allotted constituency or from his/her preferred location. In the proposed system the tallying of the votes will be done automatically, thus saving a huge time and enabling Election Commissioner of India to announce the result within a very short period.[1]

2. An Efficient Online Voting System.

This paper deals with design, build and test a online voting system that facilitates user (the person who is eligible for voting), candidate (Candidate are the users who are going to stand in elections for their respective party), Election Commission Officer (Election Commission Officer who will verify whether registered user and candidates are authentic or not) to participate in online voting. This online voting system is highly secured, and it's design is very simple, ease of use and also reliable. The proposed software is developed and tested to work on Ethernet and allows online voting. It also creates and manages voting and an election detail as all the users must login by user name and password and click on his favorable candidates to register vote. This will increase the voting percentage in India. By applying high security it will reduce false votes.[2]

3. Biometrics using Electronic Voting System with Embedded Security.

In this project the authenticating voters and polling data security aspects for e-voting systems was discussed. It ensures that vote casting cannot be altered by unauthorized person. The voter authentication in online e-voting process can be done by formal registration through administrators and by entering one time password. In Offline e-voting process authentication can be done using Iris recognition, finger vein sensing which enables the electronic ballot reset for allowing voters to cast their votes. Also the voted data and voters details can be sent to the nearby Database Administration unit in a timely manner using GSM System with cryptography technique.[3]

4. Biometric Security based Intelligent E-Voting System.

This research work is an attempt to make the existing E-voting system intelligent enough to ensure security aspect of electoral process specially regarding voter authentication, vote casting authenticity and mobility to avoid fake voting and to maximize the percentage of vote cast despite of corrupted (partial) input presented on EVM (Electronic Voting Machine) during vote casting.[4]

5. A Finger Print based Voting System

We have designed a finger print based voting machine where there is no need for the user to carry his ID which contains his required details. The person at the polling booth needs only to place his Finger on the device, thus allowing the acquisition of an on-spot fingerprint from the voter which serves as an identification. This Finger print reader reads the details from the tag. This data is passed onto the controlling unit for the verification. The controller fetches the data from the reader and compares this data with the already existing data stored during the registration Of the voters. If the data matches with the pre-stored information of the registered fingerprint, the person is allowed to cast his vote. If not, a warning message is displayed on LCD and the person is barred from polling his vote. The vote casting mechanism is carried out manually using the push buttons. LCD is used to display the related messages, warnings and ensuing results.[5]

6. A FRAMEWORK FOR A MULTIFACETED ELECTRONIC VOTING SYSTEM

This paper details the requirements, design and implementation of a generic and secure electronic voting system where voters can cast their votes anytime, anywhere and using a number of electronic devices including private computer networks, web and mobile phones.[6]

III. PROPOSED SYSTEM

Having characterized the prerequisites of the proposed framework, presently present the framework's plan which will incorporate the utilization of programming demonstrating devices to structure necessities. Organizing prerequisites help to comprehend necessities altogether. It is critical to have standard documentations for demonstrating, reporting, and imparting choices.

Proposed system having two modules

1. Admin Module
2. Super Admin
3. Voter Module

1. Admin Module

In Proposed system admin plays most important role which includes

1.1. List of Voters

This sub-module incorporate the rundown of complete voters present I specific zone/district. This module help administrator to foresee all out number of voters in territory.

1.2. List of candidates

This sub-module having target that it having rundown of applicants and administrator likewise having the survey to include new hopeful.

1.3. Add voter

Administrator having evaluate to add new voters to the database which goes under this sub-module.

1.4 Add candidate

Administrator having survey to add new contender to framework.

2. Super Admin

1.1. Edit candidate details

This sub-module use to edit the list of candidate and this is only done by super admin.

1.1. Generate Results

This sub-module use to generate the result of election, this module also shows the area wise result of election.

2. Voter Module

1.1. Login

A voter can login in the framework utilizing voter ID number and Aadhaar ID number and furthermore utilizing four digit OTP (One Time Password) which will give by framework on enlisted sell telephone. This is the principle preferred position of this proposed framework that without OTP voter won't login to the framework. The four digit OTP is get just on enlisted sell telephone. Likewise at the season of vote framework give the OTP before casting a ballot which will give high security to proposed framework.

1.2. Voting

This is required work for which framework is structure, however framework which is configuration is having more preferred position of security over different frameworks. In the event that a voter needs to cast a ballot utilizing plan framework he/her must enrolled in framework after this voter can cast a ballot from remote spot. For security reason framework give OTP (One Time Password) at the season of enrollment and furthermore at the season of casting a ballot too.

Conclusively, Secure E-voting System SMS authentication has been able to deliver an electronic voting system that solves all the highlighted challenges of the traditional system.

Architecture Diagram

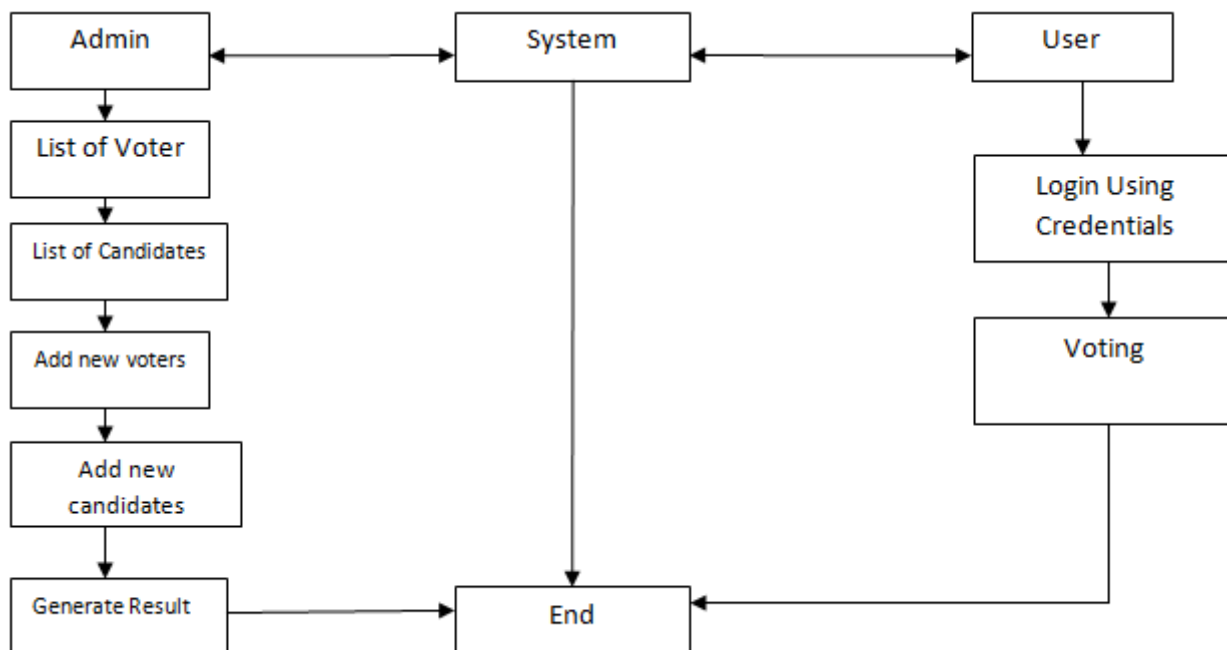


Fig 1. Architecture Diagram

IV. Methodology Used

1. SMS Verification

Step 1: Admin Login

Admin login using login credentials.

Step 2: After login admin can see the list of voter, list of candidates, add new voters, add new candidates and generate result.

Step 3: Voter Login

Voter login using Aadhaar number, Voter ID number and OTP (One Time Password)

Step 4: Voting

For voting voter have to login in system using credentials and for voting voter has to enter the four digit OTP number generated by system.

V. CONCLUSION

By alluding this paper security execution is improved, stay away from the security strains and furthermore evade the line in the casting a ballot time at surveying corner. Voter can make his or her choice effectively from wherever in given time. It can spare the season of the voter and maintain a strategic distance from the fabrication cast a ballot. Confirmation is continuously a troublesome prerequisite to satisfy for remote casting a ballot plans, the vast majority of which apply an open Computer Science and Data Technology (CS and IT) key based mark conspire for voter confirmation. In our plan, by utilizing the existing SMS validation framework, the open key overhead is to a great extent decreased. Our plan likewise improves the security and gives greater versatility and accommodation to voters. In this paper, we displayed the essential structure and convention of our SMS based versatile casting a ballot framework.

REFERENCES

- [1] Online Voting System for India Based on AADHAAR ID. 978-1-4799-2295-6/13/\$31.00 ©2013 IEEE.
- [2] An Efficient Online Voting System. International Journal of Modern Engineering Research (IJMER) www.ijmer.com Vol.2, Issue.4, July-Aug. 2012 pp-2631-2634 ISSN: 2249-6645.
- [3] Biometrics using Electronic Voting System with Embedded Security. International Journal of Advanced Research in Computer Engineering & Technology (IJARCET) Volume 2, Issue 3, March 2013.
- [4] Biometric Security based Intelligent E-Voting System. International Journal of Computer Applications (0975 – 8887) Volume 117 – No. 4, May 2015
- [5] A Finger Print based Voting System. International Journal of Engineering Research & Technology (IJERT) ISSN: 2278-0181 IJERTV4IS050948 www.ijert.org (This work is licensed under a Creative Commons Attribution 4.0 International License.) Vol. 4 Issue 05, May-2015.
- [6] A FRAMEWORK FOR A MULTIFACETED ELECTRONIC VOTING SYSTEM. International Journal of Applied Science and Technology Vol. 1 No.4; July 2011