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Online Voting System

S.Soorya[a] R.Sowmya[a] M.Santhosh Kumar[a] M.Mohanasundari[b]

[a] *Student , Department of CSE, Vellalar College of Engineering and Technology, Erode, Tamilnadu, India*
[b] *Assistant Professor , Department of CSE, Vellalar College of Engineering and Technology, Erode, Tamilnadu, India*

***Corresponding Author**
M. Mohanasundari

ABSTRACT: Traditional voting systems should be computerized to reduce the vote counting time, to provide evidence that a vote is being correctly accounted, to reduce fraud, remove errors in filling out ballots, to improve system usability for people with special needs.In this System , IRIS image,aadhar number of all voters and details are stored before the election. The code book for all voters are issued before the election.The voters have to register their iris image on the day of election through online; this will be compared with the already stored prints. If both matches their votes will be taken in to the account and if not their vote will be discarded. So, No one can vote for others this will reduce the illegal votes. User can view all the nominees in their district with their corresponding party symbols. They can also view how many votes are registered before they are going to register their votes, this may be useful to know the leading result.

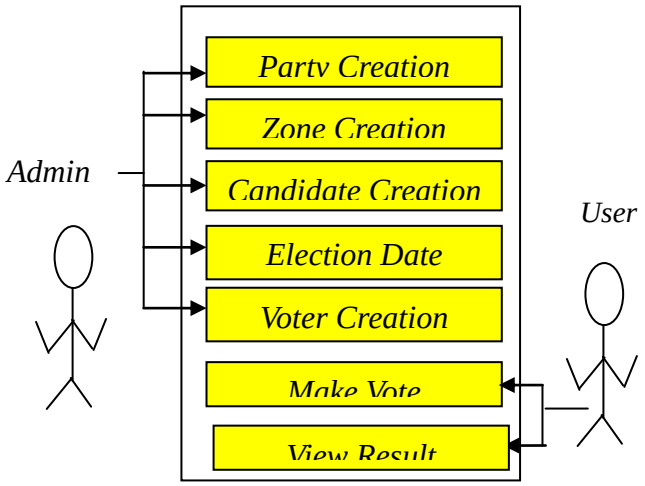
1 Introduction

In listening to the problems here there is various problems faced by each and every citizen in the country. The major problem is that there is not a single unique identity/card for all propose for the government departments which are used by the citizens. So there is a multiplicity in card (different cards for different department). So the citizen is suffered to take correct card for a right department. So there is a missing of card is possible. So we are disused to use a unique id/card for all purpose for those activities like id, verification and proofs.

We not yet find a good security in this existing one because there is a theft in major time. We can't maintain these logs for maximum time and we should enter these records later. We should also keep these record safely by avoid accident like fire and natural disasters.

There is missing of records are possible in keeping these record in a paper format. But when we are in a electronic records (E-records) we can be keep safely by maintaining it by the server and backups we need to keep and we can store Hard disks and other storage areas.

Thus we are going to make a good advanced technology of having these records in electronic formats. It gives us very big advantages we ever seen before. Thus we are maintaining a good record for a long period and it could not be easily destroy by any natural disasters and accident.Therefore backups are there as well as data is located in different servers,which are placed at different locations of country.These are problems facing on the existing system that we can solve by this electronic proposed system



2.Related Works

Luis Panizo et al.,[1] Described about despite the claimed benefits of e-voting initiatives, wider

adoption of e-voting mechanisms and implementation processes is slower than expected. Several technical, social, and cultural challenges hinder generability and applicability of e-voting. Amongst them, the evaluation and harmonization of e-voting systems, given different legal and statutory frameworks, is still an important challenge to overcome. Yet, only a few works have addressed this topicin the field. This article aims to contribute to further understanding this unexplored topic by applying a practical evaluation framework to Helios Voting, one of the most widely used e-voting tools to date. Our framework, strongly based on the technical and security requirements issued by the Council of Europe in 2017, is a valuable source of information for election officials, researchers and voters to understand the strengths and weaknesses of Helios Voting and, as a result, to improve decision-making processes regarding the type and size of elections that can be securely handled by Helios Voting. The ultimate goal of our paper is to conceptually and practically support the gradual, secure and protocolized expansion of e-voting.

Rohan Patel et al., [3] This project proposes a secure online e-voting system that uses UIDAI or aadhar database as its backend. The system ensures authentication of an individual by matching fingerprints and eligibility is checked by calculating the age of the voter thus making the existing voting cards redundant. The proposed system can handle voting at different levels such as Parliamentary, Municipality, State legislative assembly, etc simultaneously. The project will bring transparency in the voting process by assuring the voters that their votes will be in favor of the candidates of their choice. Besides electronic recording and counting of votes will be faster, more accurate and less labor intensive. The design of this system will make voting process more convenient and may therefore lead to improve the turnout.

Firas Hazzaa, Seifedine Kadry [4] described about the problem of voting is still critical in terms of safety and security. This paper deals with the design and development of a web-based voting system using fingerprint in order to provide a high performance with high security to the voting system also we use web technology to make the voting system more practical. The new design is proposed an election for a university for selecting the president of the university. The proposed EVS allows the voters to scan their fingerprint, which is then matched with an already saved image within a database. The software is implemented completely as a .net managed code in C#. Upon completion of voter identification, voters are allowed to cast their vote using voting website. Casted vote will be updated immediately. The result shows that the proposed electronic voting system is fast, efficient and fraud-free.

Sobia Baig et al., [5] This paper deals with the design and development of an Electronic Voting System (EVS) Using Fingerprint Recognition. The proposed EVS allows the voter to scan their fingerprint, which is then matched with an already saved image within a database, using Matlab with the help of Gabor filter method. Gabor filter method shows improved result as compared to other fingerprint matching techniques such as Correlation Based Matching and Minutiae Based Matching. Upon completion of voter identification, voters are allowed to cast their vote using LCD and keypad interface. Casted vote will be updated immediately, making the system fast, efficient and fraud-free.

Rakesh S Raj et al., [6] This paper enables a voter to cast his/her vote through internet without going to voting booth and additionally registering himself/herself for voting in advance, proxy vote or double voting is not possible, fast to access, highly secure, easy to maintain all information of
voting, highly efficient and flexible. Hence, by this voting percentage will increase drastically. The using of online voting has the capability to reduce or remove 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 geographical proximity of the voters. For example, soldiers abroad can participate in elections by voting online.

Ankit Anand and Pallavi Divya [8] 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.

3.Methodology

Security involving communications and networks is not as simple as it might first appear to the novice.The requirements for security services a can be given self-explanatory one word labels: confidentiality,authentication,no repudiation, integrity. But the mechanisms used to meet those requirements can be quite complex and understanding them may involve rather subtle reasoning. In developing a particular security mechanism or algorithm one must always consider potential countermeasures.In many cases, countermeasures are designed by looking at the problem in a completely different way.

The procedures used to provide particular services are often counterintuitive: It is not obvious form the statement of a particular requirement that such elaborate measures are needed. It is only when the various countermeasures are considered that the measures used make sense. Having designed various security mechanisms, it is necessary to decide where to use them. This is true both in terms of physical placement and in a logical sense.

Security mechanisms usually involve more than a particular algorithm or protocol. They usually also require that participants be in possession of some secret information (e.g. an encryption key), which raises questions about the creation, distribution, and protection of that secret information. There is also a reliance on communications protocols whose behaviors may complicate the task of developing the security mechanism. For example, if the proper functioning of the security mechanism requires setting time limits of the transit time of a message form sender to receiver, they may protocol or networks security service and mechanism can be seemed.

The work is to implement the electronic voting system using iris image authentication. In this, iris image will be used for substantiation and to monitor the presence of a person. There will be a central data repository with all iris image scan where mapping will be made for verification to vote for the particular ID number.

This work helps to maintain the details of the Candidates, Voters details, Votes and zone details in full fledged security. Unauthorized persons cannot access the data. In voter creation, usually voter will be given a password. But in this web site, the voter's iris image,code book and aadhar card number is given. The image will be converted in to byte array and saved in database.

The proposed system has the facility with uploading the iris image of voters during voting process and security is better than the earlier system. This paper succeeds the voting process problems especially when the voters are out of their zone such as military people. This web application contains the following modules,

- Admin Module
- Party Module
- Zone Module
- Candidate Module
- Voter Module
- Voting Module
- Report Module

3.1 Administrator Login

This is a module used by the admin to enter into the modules. The Admin enters into the project by giving their username and password.

3.2 Party Addition

The administrator adds new party details such as party id and name. If the party name is already exists then it wont be added. In addition, all the party names are displayed below in a grid so that the administrator may not enter duplicate names.

3.3 Zone Addition

The administrator adds new zone details such as zone id and name. If the party zone is already exists then it wont be added. In addition, all the zone names are displayed below in a grid so that the administrator may not enter duplicate names.

3.4 Candidate Addition

The administrator adds new candidate details such as Candidate id, name, address, phone, gender, age, finger print image, number of attempts and income. If the candidate is already exists then it wont be added. In addition, all the candidate names are displayed below in a grid.

3.5candidate/Zone Allotment

The administrator adds zone details for each Candidate using this module. The zone id, candidate id and party id are selected. In addition, all the details are displayed below in a grid.

3.6 Election Date Fixing

The administrator adds election date using this module. In addition, all the previous election dates are displayed below in a grid.

3.7 Voter Addition

The administrator adds new voter details such as voter id, name, address, phone, gender, age, father name, mother name, occupation, iris image and income. If the voter is already exists then it

cannot be added. In addition, all the voter names are displayed below in a grid.

3.7 Make Vote

The voter makes vote using this website. During the vote entry, the voter uploads the iris image and selects the party id and name. If the vote is already made then an error message is displayed.

3.8 Reports

Both the administrator and voters view reports such as parties, zones, candidates list, and result status using grid view controls.

4. Conclusion

The new system eliminates the difficulties in the existing system. It is developed in a user-friendly manner. The system is very fast and any transaction can be viewed or retaken at any level. Error messages are given at each level of input of individual stages. This software is very particular in reducing the work and achieving the accuracy. It will reduce time be avoids redundancy of data.

The user can easily understand the details available from the report. This software will support for the future development.

- ✓ The software is menu driven. Simplicity and the hallmark of this project.
- ✓ Very large date can be stored and also can be retrieved very easily.
- ✓ Speed and accuracy is maintained in the votes with iris image.
- ✓ Data is entered in formatted manner.
- ✓ The report can be taken in any format.
- ✓ Modification and maintenance can be made very easily

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