

ADVANCED VOTING SYSTEM USING FACE, SOUND RECOGNITION AND FINGER PRINT

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Abstract: Now a days, the most active problem that affect both physically and mentally for the mob is the problems occurs when live vote happens. The problems created by political party leaders that sorrouned on different platforms of the booths, ineffective way of counting votes, the rude behaviour from the volunteers, and of the election officers in the booth. And a main problem is that old age peoples can't vote because of their physical and both mental illness. Everyone has the right to vote, it is the fundamental right of a person. He /She have the right to vote. For that here we are implementing the Electronic voting system or E-voting. In our day to-day life, the implementation of electronic devices are being increasing day by day. The knowledge of peoples that how to use smartphones and other digital devices are so efficient now. Here through web applications we can reveal our votes. The promotion of safe, serviceable and easy voting system are there. The group voting methodology and also the face recognition and fingerprint are also implementing.

Keywords: face recognition, voice recognition and finger print, Group voting, Blind and Deaf voting.

INTRODUCTION

Voting was a major process that was so risky. There was no security or promises that it would be successful or not. Voting method mainly aims that selecting an individual who is a quality person who promises that he/she will protect our country. He/she will be able to do many services for the society. Traditionally the voting methodology was implemented using the ballots paper to a sure the process system. The ballot paper voting was done by, people represents their vote by filling out the election paper (ballot paper) in order to exercise their right to vote. Generally the ballot papers are considered as an official document. These represented votes are being counted manually and then recorded and reported in the election board. The problem that enters here is that those who counts the votes would sometimes miss counting and do some kind of favouritism.

To avoid this problem of counting mistake, action of favouritism, quarrels, miss understandings, fraudulent voting, booth capturing, party loyalists, Government introduced a new methodology of voting that is "The Electronic Voting Machine (EVM). Its features such as electronically limiting the rate of casting votes to five per minute, a security feature, and there is an electronic database that records the thumb impressions and the signature of the voters which is highly secure. The EVM consists of battery powered mechanism and do not contain any wired or wireless internet connection. In EVM, Biometrics is used to identify the fingerprint. In this methodology of voting, the main problem that arrived was the election service cost. Government have to invest a bulk amount of money for this. Other than that, it should assign many election officers, special duty workers and staffs for this and have to pay a good amount for them. And in between these tasks there will be some favouritism in counting, party loyalists. One of the main problem is that those who were not well have no way to register their vote.

In order to make these situations perfect, introducing a web based application for voting. This journal paper is about the web application methodology which is very beneficial and very easy to poll our vote. It has two important and secured features that is the face recognition and fingerprint. A user can easily register their name and other details and can upload the proofs and can poll their vote as their wish and using the face recognition and finger print can reveal their votes securely. No need to spend more time on the booths and there is no need to face the political loyalties, also the term favouritism don't have any meaning. Also here introducing a new methodology called group voting system. In parliament elections, the MLA's are being elected by the concept of group voting system. Also in our home, or on a small people circle there is a way to do group vote. The key feature of this application is to decrease the election cost

and fake votes and to enable make everyone to vote. Also here implenting the blind and deaf voting mechanism that is the individuals who were deaf and blind can also vote using the voice recognition mechanism.

I. PROBLEM STATEMENT

The first traditional voting system that is the usage of ballot paper has a lot of demerits such as the voter permits only singular votes. The ballots cannot be used repeatedly. A person who is blind can't even imagine the voting paradigm because it is not so user friendly for the blind peoples. The ballot will not provide the actual identity of the voter. There will be a lot of physical attacks and political loyalties will be there. By the arrival of Electronic Voting System, there also exits many problems such as a blind can't vote, lack of security, political loyalties and unable to reveal vote for the peoples who are in bed because of some physical illness. Lack of accuracy in counting the vote is also a major issue. Because of this the traditional voting system shows very poor performance now a days.

II. LITERATURE SURVEY

Now the implemetaion of the ballot paper voting mechanism, and the Electronic voting system has made many problems in our society. Those the peoples that of eyeless cannot vote and they can only do that by the help of an external person. There are also many problems that will rises when we depend upon any external person for voting. He/She will do some kind of favouritism and political loyalties. An eyeless person can't understand what is happening in the outside world. The availability and reliable operation of advanced information and communication technology has become connected to the proper realisation of democratic rights (ICT). While modern societies rely on ICT for all aspects of commerce, work, and pleasure, the use of ICT for democratic decision-making is still in its infancy. E-voting is being scrutinised by countries all over the world because it has several distinct advantages over traditional paper voting, including security for casting votes, accuracy in counting and analysing votes, and the ability to conduct voting in a centralised or decentralised manner, among other things. The main reason why e-voting technology has not progressed to the same level as other business and leisure activities is due to a lack of trust and fear of electronic threats. While other countries are still debating how to conceptualise or test evoting systems, three cantons in Switzerland have led the way in advancing e-voting to its full technological maturity. The world is always improving and growing in terms of technology, which is why we should keep up with it in order to get the most out of it.

The author then concentrates on voter face detection in the next step. The face of the voter is detected, and if it matches, the system validates that the voter is entitled to vote. After voter confirmation, the voter will be eligible to vote. cast a ballot This strategy necessitates Jess manpower as well as a high level of security. The author concentrates on the biometric data of the participant. voters to be able to distinguish between genuine and impostor voters. The information from the biometric image will be provided to the web application once it has been read. Using the serial port of the microcontroller After comparing the biometric image to an existing image in the database, The message is sent to the database and shown on the LCD, validating the owner's identity. It is not confirmed if it is not confirmed.

E. Multimodal Biometric Fingerprint and Face Recognition that is Secure and Reliable. The author concentrates on the extraction of facial features using a component-based face detector. After all of the features have been retrieved, the data is compressed into a single file. It is supplied to the recognizer as a feature vector. The entire procedure is carried out in MATLAB. The same thing is done. includes photos of fingerprints The distance between each pixel in fingerprint photographs is studied, but for facial images the distance between each pixel is analysed. The relationship between facial marks or features is investigated. The procedure is known as principal component analysis. This strategy is effective aids in the development of a better version of the existing system.

Before making potentially dangerous decisions, the concerns of e-casting a ballot should be thoroughly examined. Protection and security are desired in a voting system, but they are not always available at a reasonable cost. It is difficult to authenticate a person in an e-voting system, and reliable verification and anonymity are difficult to achieve. This research highlights some of the numerous concerns with e-viability, voting's as well as why public elections are far too important to entrust to it. When it comes to the security and design of an e-voting system, there are several elements to consider. The three critical steps of a secure system are design, development, and deployment.

Any additional security or spam checks will alleviate the security concerns that people have about e-voting systems these days. A programme that can create and grade tests that individuals can pass, which is something that current PC applications can't do. CAPTCHAs (Computer Algorithms for Public Turing Tests) are This is used in our project to confirm that users are attempting to vote rather than the other way around. PC frameworks that have been robotized. The following are some of the many uses for CAPTCHAs in terms of practical security. such as comment spam

prevention in blogs, web registrations protection, and online polls where you want to ensure that your data is secure. People, not programmes, cast ballots, preventing dictionary assaults, search engine bots, worms, and spasm, among other things. For The official CAPTCHA website has issued certain guidelines.

It some guidelines has published by official CAPTCHA site .

- Accessibility: It ought to be effectively open for perusing the content. we also can use audio CAPTCHA that if an issue arises because of legitimate reasons.
- Image Security: Image's ought to be misshaped arbitrarily. Application will be available to the assaults without arbitrary contortion, application will be available to the assaults.
- Script Security: In the wake of utilizing this systems are shut to any PC assaults. Anyway, we likewise need to ensure that contents utilized are not effectively accessible so attacker will track down the simple route around them to utilize the systems.
- Security Even After Widespread Adoption: Some of the destinations may be utilizing the locales that have Captcha's setup. It is significant that the security level kept Something very similar, and these destinations are as yet secure even after countless sites embrace them .

IV.SYSTEMARCHITECTURE

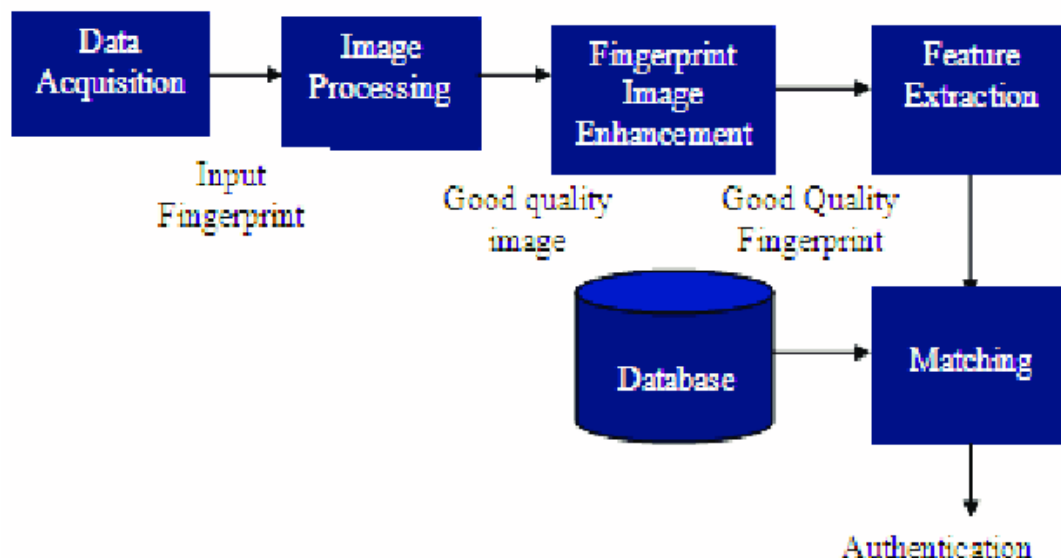
An election is a legal procedure through which a population or society chooses a candidate for a political position. Elections have been the normal procedure by which today's representative majority rule system operates, dating back to as early as the seventeenth century. The classification of voting systems is divided into two categories: traditional or paper ballot voting systems, and electronic voting systems.

- Electronic voting machines (EVM) (EVM)

In traditional elections, a voter must go to the polls to cast his or her vote. It is therefore possible for voters to vote after manual verification using government ID proofs. After that, the voter is given a ballot that only allows for one vote. It can't be used again once it's been utilised. This ballot, however, should be anonymous. The polling form should indicate that the elector is permitted to vote but not reveal their true identity, and the citizen should receive confirmation of this. During the polling process, traditional polling relies on a large number of gatherings.

The most recent method available presently is a machine and paper-based democratic framework that necessitates a great deal of labour and a big amount of resources. During the existing democratic framework, several issues develop.

Due to the fact that it is physically checked, the counting is also checked. As we have stated, the e-voting system will be used to defeat this. System provides an effective way to complete the entire democratic framework. The e-voting framework is a web-based programme. This gives the client the ability to vote In comparison to the current framework, this is more evolved. It doesn't have to do any work since it doesn't have to. Furthermore, citizens are not required to visit the polling station. The web-based programme, Because it is designed, it also reduces the complexity of tallying. This system is completely automated.



III. CONCLUSION

The existing voting system, which has an issue with the expense of providing ballot papers, as well as the electronic voting machines manufactured in India, can be used to demonstrate that the system has been solved. Consequently. The voting system in the Web-Application has drawbacks. It included the issue that arises when the system isn't working properly. If the voting system is damaged or hacked, it will result in a voting error. Otherwise, the voting web-application

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