ONLINE VOTING SITE

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***Abstract*-The Online Voting site is made for the benefits of the people for casting their votes to their representatives and it is useful for the election committee in segregating illegal Vote registration. This project is build on the basis of User-oriented online polling system. In this, the following two techniques Face recognition and Fingerprint scanning play a vital role for online vote casting and immediate results and the voters details are also and verified with the database that contains voter ID, phone numbers linked to aadhaar cards.**

I. INTRODUCTION

The online voting site thus reduces the time of the voters instead standing in large queues .This makes the process simple and reliable by registering votes online and counting becomes easy .The authority scans the face of the voters with the database to avoid any illegal activities. Thus the site is developed to overcome the problem of fake voting.

A. Existing System:

The paper-based voting, Lever voting machine, Punch card, and Optical voting machine are the prevailing voting systems having major disadvantage of more Time consumption. These kind of existing systems resulted in fake voting.

B. Proposed System:

This project has the capability to overcome such illegal actions, because of the two authenticated techniques of Face recognition and fingerprint scanning.

- Reduced costs- The system helps to enjoy reduction of cost without any mailing, tabulating or lessen the ballots and it also reduced the works of the election committee.

- Ability to correct mistakes- This system of voting has a significance that it allows voters to recheck once and also allows to alter before submission. Once it's verified however it cannot be changed.

- Fingerprint scanning-Fingerprint scanning provides the identification of a person based on the patterns and ridges of the fingers. The basis of identification, however, is nearly the same. The identification process consists of sensor that scans the fingerprint and a processor that stores the fingerprints. Now the scanned fingerprints of voters are checked for matches with the fingerprints that are linked with the aadhaar card .This process of verifying eliminates other irrational actions in voter registration.

II. Explanation about the site

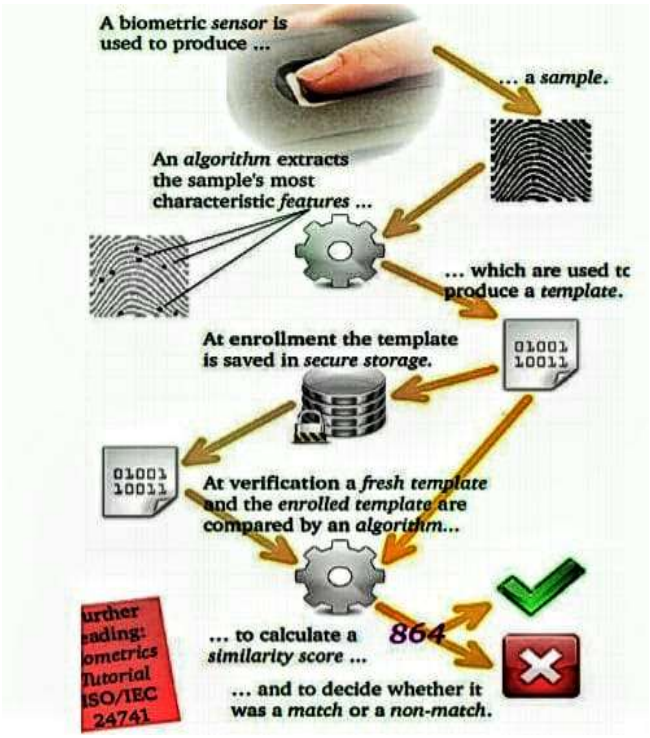
In this site, the first voter has to give the voter card and aadhaar details then after submission the page is redirected to the validation of a phone number which was linked to an aadhaar card so here after entering the ten-digit phone number, the one-time password (OTP) is generated when voter enters into the OTP the page is redirected to the camera after validation of OTP where the front camera captured the user's face then it compares the captured face and voter face.

When it verified then a candidate list was generated in that site so then voters can vote to the leader. Here it has a small security test it can generate a motion emoji it can automatically capturing your face if you do the same expression like an emoji the vote is updated into the database.

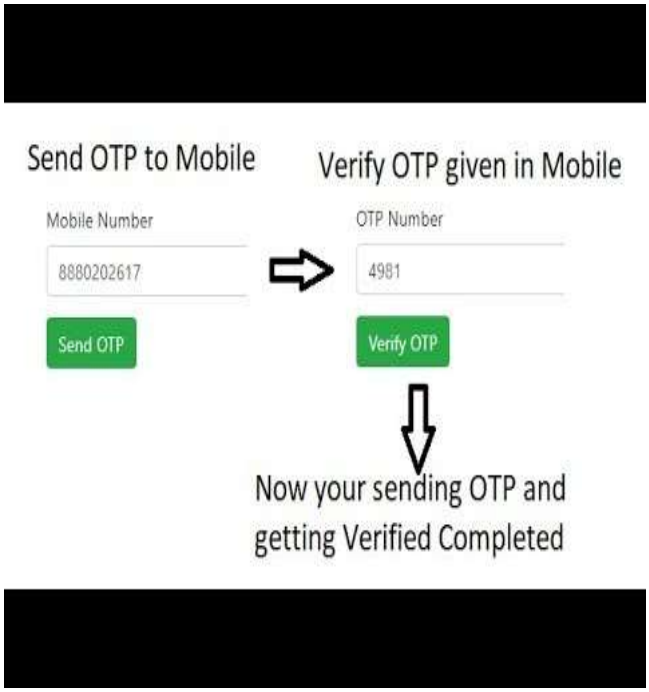
A. FingerprintRecognition:

Fingerprint is an authenticated technique which tries to eliminate the unwanted actions to be taken place .This process consists of a sensor to scan the fingerprint and its differentiate unique patterns and ridges .The processor is used to store and retrieve the uploaded contents from the database.

An exact biometric can give an exact details about an voter And always make an correct decision but in real life it is un predictable in this we can actually train the data and we match the voters fingerprint with our data fingerprint if it equals then the site can give access otherwise it doesn't give the access to cast a vote to the voter. The below figure shows about the process of a biometric system.



Fingerprint recognition system



The Enrollment process:

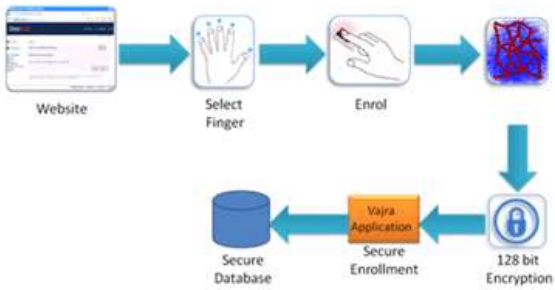


Diagram 1

B. One Time Password Verification:

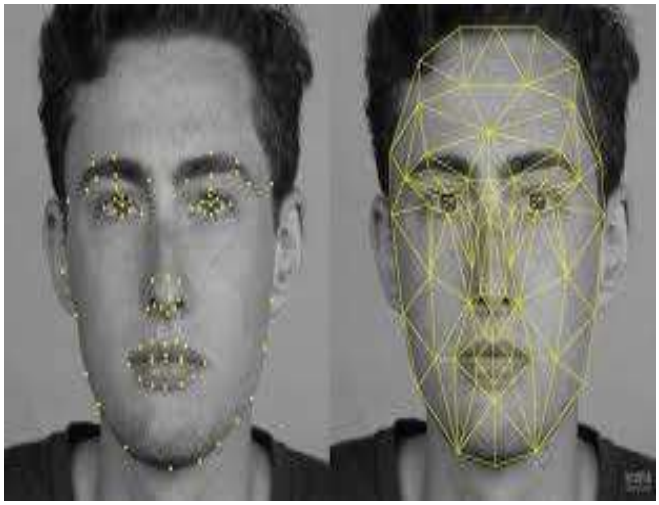
In this site after completion of all the verification details the voter can enter their phone number for verification which was already added in an aadhaar database so this two numbers are verified. If the both the numbers are same then the algorithm can send OTP to its registered phone number.

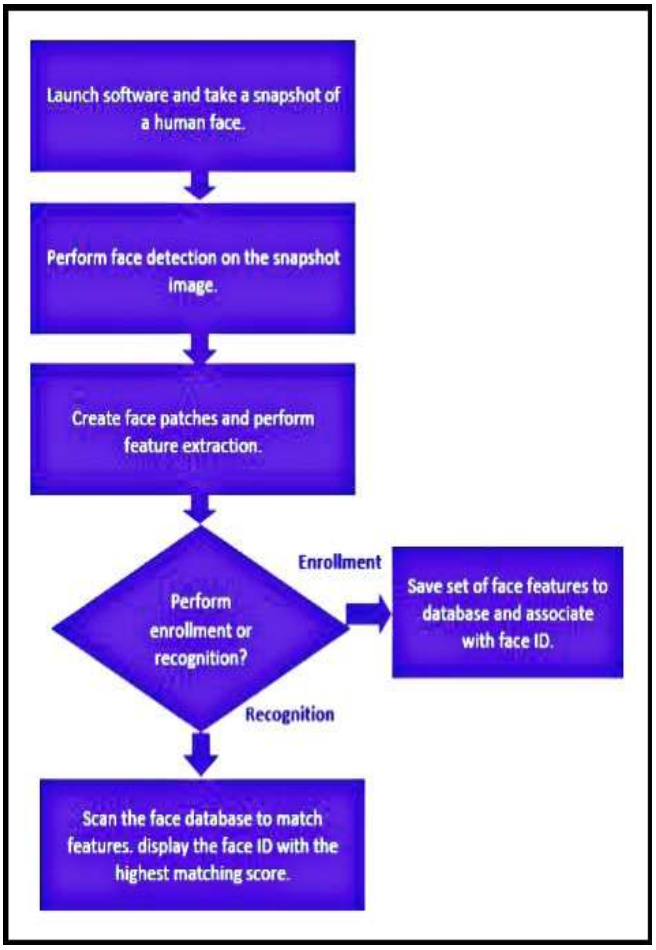
After voter can validate their phone number by OTP then the site is redirected to candidate list then we can select our candidate.

C. Face recognition:

Face recognition is the secured process and access control that verifies users face with the face patterns that are been stored in the database which are retrieved from different means of multimedia streams. It analyse using the facial features of the persons. This process can also be described as the biometric artificial intelligence technique.

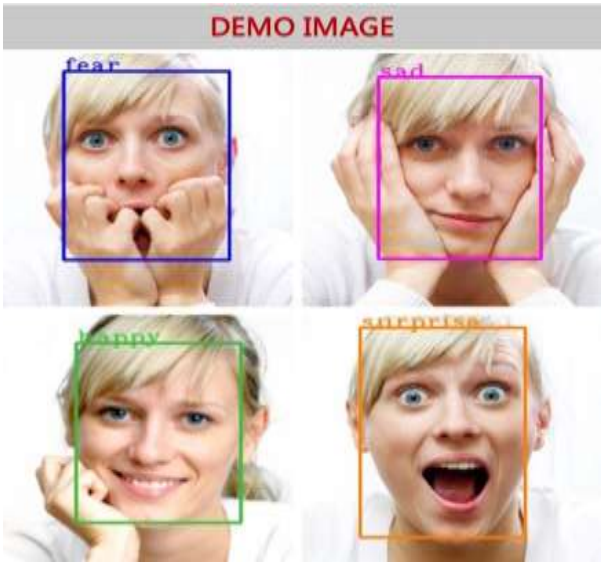
In this site we also present an authentication techniques by using a face detection system it can be useful to detect the person whether the vote can casting the eligible person or not and it can also useful to detect the person who can already casted their vote and this system is mainly used to remove the duplicate entries and avoid the safe voting by facial emoji's which can used we can give the information to this site whether the surrounding places are safe or not.





D. Face Emotion detection:

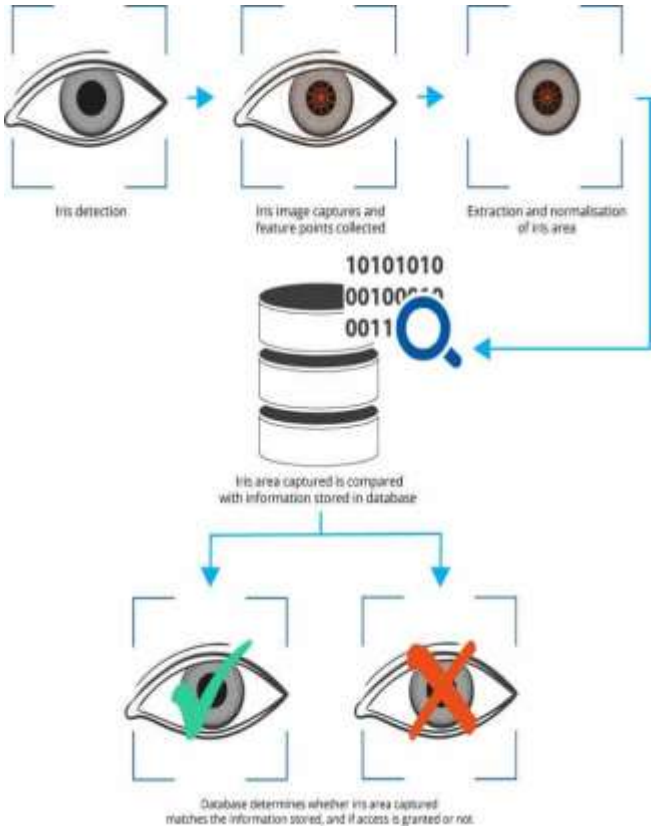
The Face detection is a process which can be identifying a human emotion which can play a major role to detect the violence from strangers which can help to avoid the vote to upload into the database it can help like the unique emoji with yes or no option can display in a screen then if we access the emoji below to yes option the vote can be updated into database else the vote was avoided and the help message is sent to a nearer police station to help the voter [3].



E. Iris Recognition:

Iris recognition model used to identify the biometric Identification by using mathematical methods while scanning the voters face it can checks the iris of a voter for the security purposes for both the individual eyes.

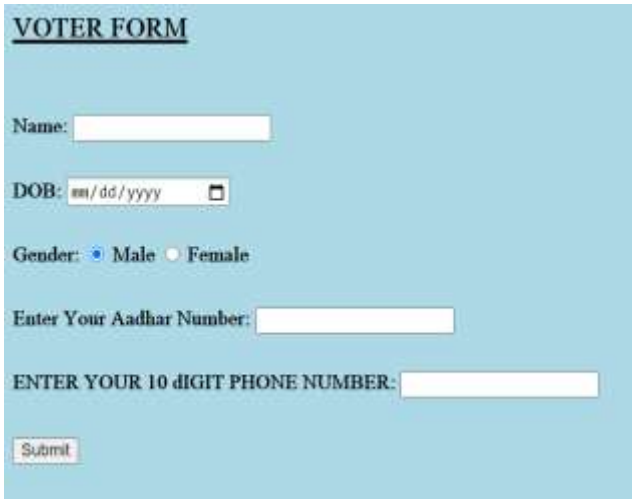
The verification process was go on while once the data can stored in the database while checking it scans the code of your eye comparing in an database when it matches the site can allow to vote.

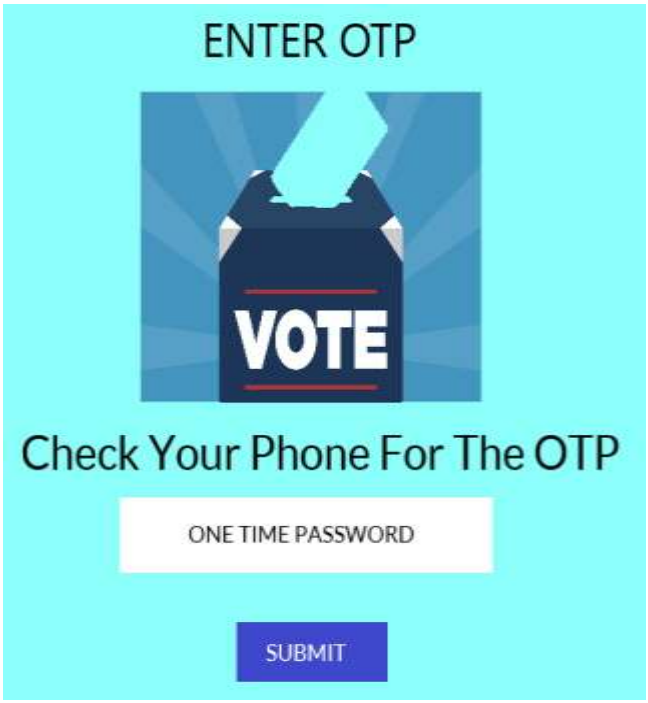


From the above figure the scanner can scan the voter eye and after capturing the iris area can normalize and remove the eyelids from the image then it stores in to iris database and it checks whether the iris can matches to the database data or not.

III Related works

Display:





The above images are Front page and OTP verification page of a voting site. We have to give the information to poll the vote after completion of this step then the page redirected to the one time password page then it displays the candidates list by using our fingerprint we can vote to our candidate then the vote can stored in to database.

1. After completion of filling the details otp can send to the voters registers number after verification of the phone details the site is access to the candidate list to select the candidates.

2. In the second stage the voter can cast their vote by accessing the fingerprint and by scanning the retina whenever we cast the vote the fingerprint is mandatory to upload the vote in to the database.

3. After the completion of scanning it checks whether the data can matches or not if data matches the voter can allowed to vote otherwise the site cannot give the access to the voter to cast the vote.

4. Finally after completion of the vote the site can ask whether the surroundings are clear or not this stage is mainly checks if any party members come near to the voter and make violence to cast the vote to their parties.

5. So the final stage is very distinct to all the voters it sends the random facial expressions to the voter by mentioning the yes or no options. The site can ask whether any problem was occurred to the voter while voting if the votes can occur the problem the voter can show the expression which was displayed in the screen then an alert message can forwarded to the nearer police stations to avoid the problem for the voter.

IV. System Requirements

A. Software requirement

I. MYSQL DBMS:

MySQL is a database this SQL is used for wide range of applications it is useful to designing and including e-commerce applications and so on.

II. Net Beans IDE 7.1.2:

Net Beans IDE is used to develop and evolve java desktop and mobile, mobile and web applications, and this ide provides to develop a great tools like c developers and it can be used as well as HTML5 applications with JS and CSS.

III. VeriFinger Standard SDK:

This SDK is based on fingerprint recognition and it will used to develop biometric systems and integrators. The VeriFinger algorithm for Linux, Mac and Windows OS was help to allows quick development on biometric applications.

IV. DeepFace:

DeepFace is a recognition system for facial by deep learning methodology. It can scanned and identifies the human faces in digital manner in this site it will useful that weather the vote will casting original votes or duplicate votes.

V. Testing: Xampp / Wamp Server:

Xampp is a server based software which can be an open source and it can be used to different computers with different packages web server solution. This server was developed by Apache team and this can be written in PHP and Perl languages.

V. Advantages

1. This site is used to remove submission of fraud voting
2. Less effort and less labor.
3. This site is helpful to vote a candidate from anywhere.
4. It is very easy and more convenient to vote

VI. Conclusion

Finally the votes can be stored into a database and the percentage of votes can be updated automatically and the result will be displayed in the voting site.

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