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ONLINE VOTING SYSTEM

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Abstract-

The Online Voting system is made for the people of the country residing around the world and wants to vote for their representative. Using Electronic Voting may encompass a range of Internet services from a touch screen kiosk at a polling station to voting online. This Project is developed for the threat free and user oriented Online Voting System. Face Recognition is a authentication technique. The election can be conducted in two ways the paper ballot election and the automated ballot elections. The automated ballot elections are called the electronic voting. The online voting system is highly developed and the online polling system can be replaced by accurately and directly voting online and immediate results. The online voting system is done by the internet so it can be called the Internet Voting.

Keywords— E-Voting, Internetvoting, FaceRecognition, Image processing.

1. INTRODUCTION

The project Online Voting system is designed to count the number of votes and thereby calculate the percentage of votes. Also the number of vote a candidate obtains is also obtained. Along with the number the percentage of votes for each candidate is calculated. The system is so designed that it can also check for duplication. It then decides the winner in every section. The project is designed with a modular approach and the number of modules is decided as per the requirements of the organization. The two modules are administrator module and the user module. The administrator has total authority of the organization and maintains all the aspects. The user has the provision to view the list of all candidates and results as well as vote for the desired candidates.

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1.1. Existing System

Existing System consist of methods like paper based voting,Lever voting machine,Punch card and Optical voting machine. The main problem with existing system was time consuming which used to take lot of time for voting.Paper based voting method were used in existing system which also gave the results of fake voting.

1.2. Proposed System

This system has overcome the problems of existing system.

Saved Ballot Templates-Eliminate the need to configure elections from scratch. Just do it once, then save that ballot configuration, and in subsequent years, specify only the names of the candidates.

Reduced costs - are enjoyed when the expenses of printing, mailing and tabulating paper ballots are lessened or even eliminated entirely from the election process.

Email Validation-brings added value to your online election by inspecting your voters' email addresses and notifying you of any that are not properly formatted.

On-demand Paper Ballots-simplify hybrid elections by allowing an election administrator to generate a voter-specific paper ballot that honors all the election settings just as web ballots do.

Ability to correct mistakes- allows voters to go back and correct any mistakes before final submission of their ballot. Once a ballot has been submitted however, it is final and cannot be altered.

Fingerprint scanning-essentially provides an identification of a person based on the acquisition and recognition of those unique patterns and ridges in a fingerprint. The actual fingerprint identification process will change slightly between products and systems. The basis of identification, however, is nearly the same. Standard systems are comprised of a sensor for scanning a fingerprint and a processor which stores the fingerprint database and software which compares and matches the fingerprint to the predefined database. Within the database, a fingerprint is usually matched to a reference number, or PIN number which is then matched to a person's name or account. In instances of security the match is generally used to allow or disallow access.

2.Techniques for Face recognition and fingerprint detection.

For the comparison purpose we studied many techniques for generating the alphanumeric password and fingerprint detection. The brief idea of them is as follows.

2.1 Fingerprint Recognition-Fingerprint recognition describes the process of obtaining a digital representation of a fingerprint and comparing it to a stored digital version of a fingerprint. Electronic fingerprint scanners capture digital "pictures" of fingerprints, either based on light reflections of the finger's ridges and valleys, ultrasonic's, or the electrical properties of the finger's ridges and valleys. These pictures are then processed into digital templates that contain the unique extracted features of a finger. These digital fingerprint templates can be stored in databases and used in place of traditional passwords for secure access. Instead of typing a password, users place a finger on an electronic scanner. The scanner, or reader, compares the subsist fingerprint to the fingerprint template stored in a database to resolve the identity and validity of the person requesting access.

FingerprintIdentificationAlgorithm: Theenrollment processthisprocess consists ofcapturing aperson'sfingerprint usinga fingerprint capturingdevice.During theenrollment process, thesystemsavesthe personsfingerprintintodatabase. The authentication process: It is used toauthenticatetheclaimedperson. This process consists ofcomparingacaptured fingerprint to anenrolled fingerprint inorder to determine whether the two match. If thetwofingerprintsmatch, thenit allow user to make transaction.

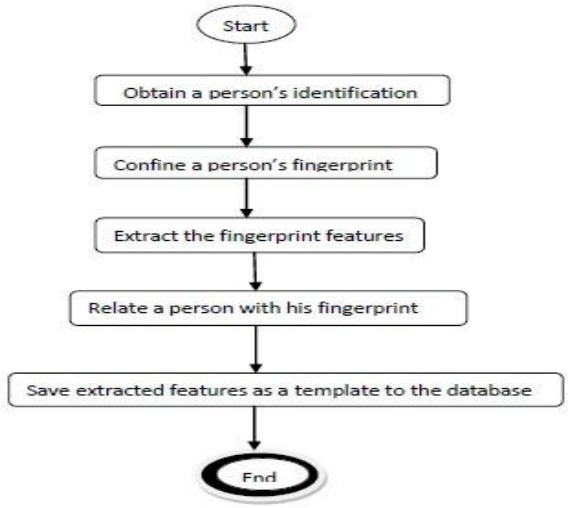


Figure 1: The Enrollment Process

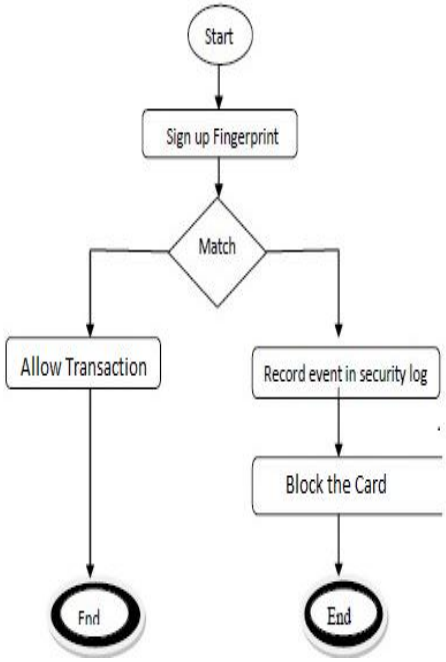
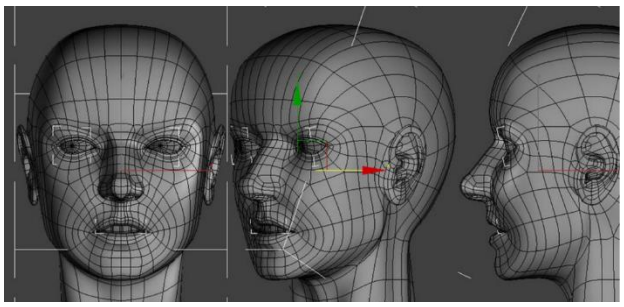


Figure 2: The Verification Process

2.2 Face recognition-A facial recognition system is a computer application capable of identifying or verifying a person from a digital image or a video frame from a video source. One of the ways to do this is by comparing selected facial features from the image and a facial database. Advantage is that it does not require the cooperation of the test subject to work.



Face recognitionIdentificationAlgorithm-

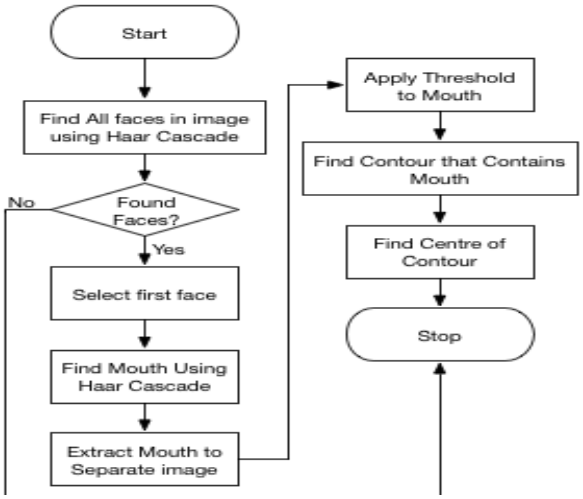


Figure 3: The Verification Process

2.3 Iris Recognition

Iris recognition is an automated method of biometric identification that uses mathematical pattern-recognition techniques on video images of one or both of the irises of an individual's eyes, whose complex random pattern are uniqe,stable and can been seen from distance.

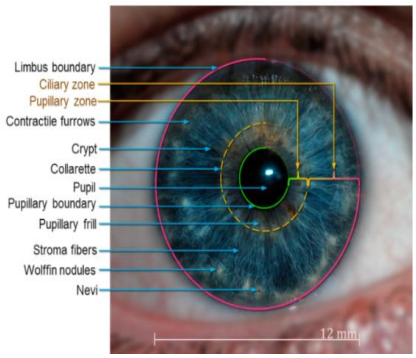


Fig: Iris Scanning

3. Conclusion

Once the system is designed the software is tested in order to see the validity of the system is established. This is the method by which functionality of components is checked. After the system is tested then a trial run of the system is done so that errors if any can be eliminated.

4. Acknowledgement

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