

# ONLINE VOTING

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**Abstract** - This project aims to provide an online and easy-to-use voting-system. The problem of voting remains important in terms of security and security. The proposed online-voting-system allows voters to scan their fingerprints, and then compare them to an image already stored within the database obtained from the aadhaar government card database. The voting-system is easily managed as all users must log in with an aadhaar card number and click on those who choose to vote Using biometric fingerprints provides sufficient security to reduce the number of popular votes.

**Keywords** ——— online-voting-system, online-voting-system, AADHAAR ID based online.

## I. INTRODUCTION

India has a democratic government. Currently all Indian citizens are part of a growing digital India. They have an Aadhar digital ID card. Voting systems ranged from hand counting in the early days to systems such as paper, debit card, active voting The electronic voting system used these days offers a unique tech-nique voting feature for traditional, and also offers advanced voting-system features over the system voting-tradal voting with accuracy, c-simplicity, flexibility, privacy How-ever, Electr-onic voting systems have various constraints such as time c-onsuming, c-onsume large volume of work paper, no direct role of senior officials, mechanical damage due to the lack of status, major improvements do not allow users to update and edit multiple items gi simultaneously etc. This withdrawal can be overcome through an online voting system. This is a voting system in which any voter can exercise his or her voice rights from anywhere in the country. Voters can vote anywhere in the country without visiting the voting booths, in a very safe manner. it makes voting less violent and that increases the percentage of voting.

Secure -line voting-system is a voting system in which electi-on data is recorded, stored and processed primarily as a digital informati-on and requires the processing, retrieval, marking, submission and counting of votes electronically. -on and authenticati-on tech-niques are essential to secure platform operations to overcome the vulnerability of the client used by the voter to vote. The

voting process for registered users is very cumbersome.

The voting system is the basis of India's democracy in which voters elect their leaders to demonstrate their existence in the way they are treated. The voting system has emerged in recent days including a system that includes paper, bank card, optical scanner and machine lever i.e .. in the electronic voting system .. This trading system is a system for the continuation of the process so a large number of Indians cannot vote. which is due to the busy schedule and the voting system for registered users is very cumbersome

## II. LITERATURE SURVEY

To make the easier of giving the vote and more capable without wireless and tech-nologies. Online-voting-system has the opportunity to find a safe, easy and secure way to hold and count votes in the chosen elections.

"-online-voting-system based -on adhaar id" uses adhaar id as authenticati-on key, the system works well on time and provides security that the system is much more advanced than the traditional system but a big problem living in this system is that of authenticati-on, authenticati-on tech-nique used is not as effective as biometric can be used ..

"Secure Authentication for online-voting" demonstrates reliable tracking and authenticity of votes, a smart card is used to avoid multiple votes cast by users. The author introduced a smart card biometric authentication with the voter id card to be used during voting. They use a smart card and voter id card during an unlikely election as anything can happen to those cards so relying entirely on the cards is not a good idea. And the use of various cards makes the system call now every voter needs to have these additional cards .. And it can take a renewable time to make so many cards .. The whole voting-system has done the important thing despite having various features, a voting-system that may attack but the biggest problem I can find in these systems is "- online "small word, despite of all the techniques they have used to make the system stronger there is always the possibility of misbehavior when your system is online.

"online-voting-system powered by biometric security" the author used personal authentication or-r, thumb press-on and a completely secret key to ensure voter voting. Techniques such as cover creation, secret key expansion have been used to securely send data to servers and continue to verify voters .. This system is very robust; takes care of authentication and security of voter data stored on the server. The main problem with such systems is that server. The main problem with such systems is that without the use of various security technologies they will not be able to handle such a large amount of data that they may encounter at selected times their system is online and may during voting ..

### III. EASE OF USE

#### A. Voter turnout:

Online-voting has been able to consistently control 80% of voter turnout once while most other platforms strive to control 20-50% voting.

a..Easy to Use: Voters can give their by android application.This application is easy to use.

b..Simple Login: User authentication occurs via OTP (-oneone Password).

c .. User interface: Voting platform is not complex it is very easy to use and accurate regarding to give their votes and counting the votes ..Illiterate peoples, adults Comfortable use the app ..

#### B. Maintaining the Integrity of the Specifications

24 X 7 Customer support: -Online-voting team are always-call and email-to-support-voters who need help.

### IV.EXISTING SYSTEM

The current Election system operates manually.Voter must going the booths to cast their Vote for the candidate

and there are waste of time. The voter must register himself / herself in the voters' roll. Voter or Nominee must be completed by hand. Voters are to be present at his or her constituency to cast his or her vote.Some of the available programs are:

- i.. Cast votes on paper
- ii..Electronic voting machines are used
- iii..Scanning the card

#### A. SCOPE

- i.. Rising the number of voters who excited to give their vote using online mode receive.
- ii.. Less effort and less workforce, as in the first case cost and main focus - construction, management.
- iii.. Anyone can give their vote anywhere and anytime in india ..
- iv.. A single person cast only single vote
- v.. Save time and reduce personal interference ..
- vi.. The system is flexible and secure for use ..
- vii.. Different voter identification by Aadhar number
- viii. Interface is very easy to use
- ix.. Fraudulent not submitted.

#### B. PROPOSED SYSTEM

This system will contain Voter's details on which the people can enter , exercise his or her voting rights. full, age, aadhar card, mobile number .. email id, fingerprints and verification details of the manager. you can vote for candidates in the list. If the voter still the AADHAR then he or she does not need to register, otherwise you need to register in the AADHAR database.

#### C. IMPROVEMENT IN EXISTING SYSTEM

We look existing system, they offer on-line voting. Knowing that the Government of India is getting a lot of elections. In studying the current system we have seen that they do not provide smart voting providers.So even a voter can vote for candidates from his or her constituency. to enter / his ward .. We will show - only candidates in that constituency.This platform will also help in conducting minor elections like in the Village Mukhiya Election or other Election. We make the system easier.

#### D.Merits of Proposed system

- **Accessibility:-** Online-voting provides a secure and independent channel that allows all users to participate equally. Increased access for overseas citizens and for people with difficulty in mobility or reduced mobility. This also has a significant impact on the last vote and therefore legitimacy of election
- **Efficiency:-** Reduced costs on online planning and expenditure greatly significantly increases the efficiency of election management compared to voting paper trading.
- **Preliminary information:-** The electronic vote eliminates errors in the counting by hand, which provides accurate and quick information on the results, by obtaining a vote for each of the votes cast.
- **Security:-** When we talk about security we mean the variety of security measures used to ensure that the votes counted are in line with the will of the voters and that they are provided to eligible voters to participate in the election. official stakeholders, to provide all security guarantees equivalent to the electronic voting process through the traditional electoral system.
- **Audit:** With Civiciti voting technology the entire voting process is scrutinized. System development allows administrators to ensure that their votes are cast correctly and calculated according to the voting process. Additionally, voting receipt issued to each user.
- **Reliability:** The mathematical processes incorporated into Civiciti's technology allow for the participation of independent observers who prove that election and manipulation manipulations are avoided.

The agreements of Civiciti's technology encryption are the basis for the security, privacy and auditing we provide. lost control due to his vote ..

## V. SECURITY METHODS IN E-VOTING

- a. **Internet Voting :** Online-voting are done in the village areas such as computers and areas which has internet and the voting process is done. Officials who elect Board members, business organizations and user organizations use online-voting and access to proxy-votes. Independent voting methods have been used in many modern ways.
- b. **Hash Functions :** Hash is used in a voting-system that uses user data and convert data in a different format using mathematical functions. The process are identify malicious software methods that need to be installed.
- c. **Digital-Signatures :** Digital-signatures are used in online-voting and hash functions to convert information into signatures.
- d. **Homomorphic Encryption-** It is an encryption technique that uses function mathematics analysis to use data without obtaining keys so that the voter can access the data and the voting process is not available without permission.
- e. **RSA Algorithm-** A cryptographic algorithm is also popular - one .. It used basic cryptography which means that two different keys are used in this algorithm. It is a cryptographic algorithm based on modern cryptographic environments. The public key is used for this location. The private key is used for the accepted side. Exponentiation fields are calculated as modulo values. In this algorithm, data is encrypted. one and also has limited binary values n .. In the computational concept it is difficult to calculate the factorization process ..
- f. **MD5 ALGORITHM :** Message Digest algorithm is a very simple cryptographic algorithm for large file encryption process. This algorithm uses hash function..Hash value is usually 128 bit size..First signature process the signature is made in this algorithm. Four rounds are used in this algorithm and each cycle manages the process of validating data used in function..This results for each cycle repeated in the next cycle with hash function..MD5 is considered - one of the most efficient algorithm currently available ..

Features	RSA Algorithm	MD5 Algorithm
Methodology	Asymmetric Encryption	Cryptographic Hash function
Implementation	Public key, private key implementation	Hash implementation
Digital Signatures	Easy implementation	Very hard to implement
Rounds of implementation	1 round	4 rounds
Execution speed	More time	Less time
Block Size	1024 bits	128 bits
Security	Better	Slower when large text

### VI. IMPLEMENTATION AND DESCRIPTION OF PROJECT MODULES

online-voting-system implemented, login Id and password of the candidate..

#### A. SYSTEM IMPLEMENTATION AND RESULT ANALYSIS

System Implementation and Unit Testing This chapter describes the implementation of the e-voting-system for the system requirements document (SRS). Software Implementation and Unit Testing Section software is performed based on section configuration. Administrator dashboard is made with Electron js, a desktop application framework that extends HTML CSS and JavaScript. The software is built and integrated with the windows application.

Android voting-system is an Android application that provides new voting technology using mobile phones. We live in a world of many things. We measure everything according to their thinking, energy and quality. Software should be designed to be easy to use at the moment. Currently in all sectors there is a need for software to reduce workload and save time but too much and different software, because manual work can be catastrophic. An online-voting-system is a type of application application that gives the user a platform to calculate their opinion or voting for their product. -only to sign up users .. maybe, voting will be binary- and responsive .. Later it may be- it will come to institutions of higher learning etc .. Information about product, users and voting statistics will be stored ..

#### B. Required Tools

Code written with the help of following languages -on Eclipse IDE..

JAVA

ANDROID

Minimum Hardware Requirements..

4GB RAM Dual core 1..5GB free Space

Java Development Kit (JDK) 8

Software Requirements..

Operating System : Windows 10/8 (32- or 64-bit)

#### C. System Flow

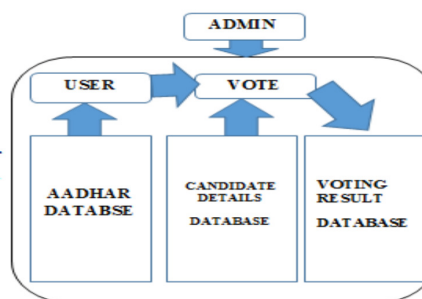


Fig. 1. System Flow

#### CONCLUSIONS

- Online-voting-systems have many advantages over the traditional voting-system. Some of these benefits are lower in cost, faster results, easier access, accuracy, and lower risk of human and machine errors. It is very difficult to develop an online-voting-system that can allow security and privacy at the highest level. Future development focuses on building a system that is easy to use and that will provide secure and secure voting - at an acceptable level by ensuring proper processing of section ..Easy to use and short consuming ..It is very easy to fix the error..

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