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"ONLINE VOTING SYSTEM"

Akash Verma, Vijay Kumar Jaiswar, Arun Kumar Singh, Guddu Kumar
Research Scholar, Delhi Institute of Engineering and Technology (AKTU),
Meerut , UP, India

Dr. Praveen Kumar
Research Guide, Delhi Institute of Engineering and Technology (AKTU),
Meerut, UP, India

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

ABSTRACT

All types of organizations, including large and small businesses, cooperatives, associations, sports clubs, and neighborhood communities, as well as union elections, state elections, and the approval of a professional association's accounts, must periodically come to legally binding agreements. Traditional methods of decision-making have involved time-consuming in-person meetings,at best with the possibility of voting by mail. Electronic voting, on the other hand, is a proven technology that is widely used. Remote e-voting over the Internet, often known as i-voting or online voting, allows voters to cast their ballots from anywhere and have them counted electronically. The level of automation could be as simple as marking a paper ballot, or it could be a whole system that includes vote input, vote recording, and data encryption.

Keywords: Digitalization, Automation, Encryption, Cryptography, Consolidation, Vote Recording.

1. INTRODUCTION

An online voting system is a software platform that allows groupsto conduct votes and elections in a secure manner. Voting is a method by which a group, such as a meeting or an electorate, can come together for the purpose of making a collective decision or expressing an opinion, usually after discussions, debates, or election campaigns. According to the most recent survey conducted by the International Institute for Democracy and Electoral Assistance (International IDEA), an intergovernmental organization based in Stockholm that supports and strengthens democratic institutions and processes around the world, 8 countries currently allow voters to cast ballots online.

However, the manner in which these countries use internet voting varies greatly. Internet voting systems, such as the vote system used in Australia.

In the given flowchart is described around the process of online voting system, the similar system which was adopted in offline voting system with offline vigilance the process starts from the nomination and voter eligibility test from the election office of the local grounds to every districts.

Estonia is the most prominent example of a nation using online voting in parliamentary elections. It was the first country to use online voting in a national election in 2007 and has since incorporated online voting as an optional voting mechanism (besides regular paper ballot voting).

2. UNDERLYING CONCEPT

An ONLINE VOTING SYSTEM is a platform that allows organizational members to cast their votes electronically, which can be through a website, mobile app, or any internet-connected device.
You can conduct various types of elections through an online voting system. For example, you can use it for a simple majority vote, where the option or the candidate with the most votes wins. You can also use it for a more complex voting system like proportional representation, where each vote holds weight according to the voter's preference.

Everyday use cases for an online voting system include:

Board of Directors elections
Shareholder meetings
Homeowners Association (HOA) board elections
Union leadership votes
Student government elections
A typical online voting session goes like this:

First, the voter logs in to the voting system using their unique username and password.
Next, they select the candidates or options they want to elect.
Finally, they submit their vote, and the system tallies the results.
Online voting can be extremely practical and easy to implement thanks to the versatility of novel online voting platforms. Option offers election organizers a variety of tools to customize the voting experience for unions, associations, government elections, or even reality TV shows.

While most people are familiar with municipal and national state elections, there are many other instances where voting is necessary. Several organized groups of people use online voting systems to make decisions and organize their administrative affairs.

The principal requirements of an online voting platform are safety and reliability. Voter anonymity is incredibly important for the development of fair elections, but registration of every participant is also necessary to eliminate chances of fraud.

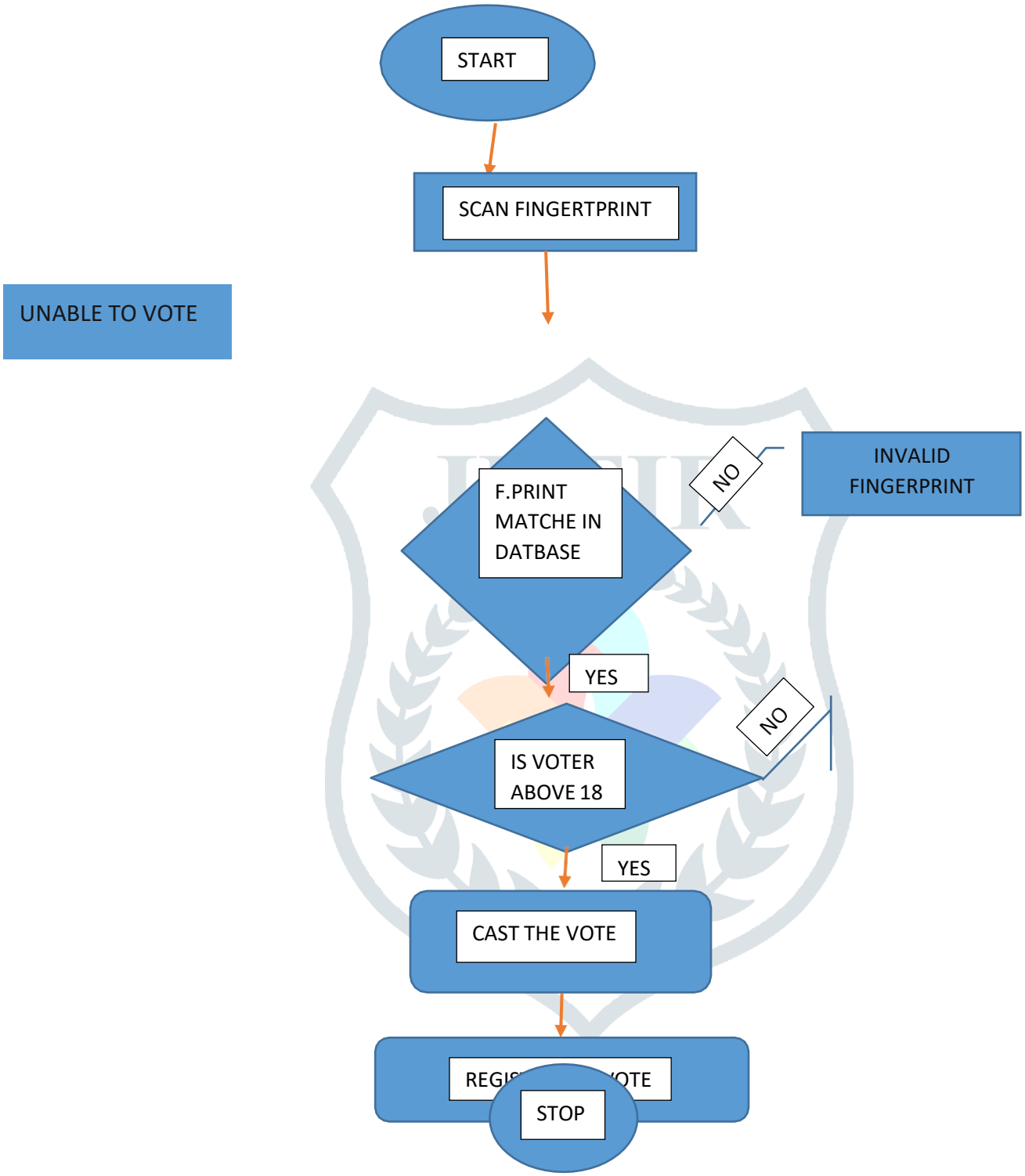

Fig.1 – Determining Voting Process

3. WORKING SYSTEM

A high-quality online voting system or online election system will offer these core capabilities:

Create what is to be voted on. Build ballots that let your group vote on things or elect people.

Upload your list of voters. The individuals in your group who are eligible to vote on ballots need to be uploaded into the voting system. Often, you'll have the option of grouping these individuals into different segments (e.g. region, department).

Notify and follow up with your voters. You'll need to let your voters know about upcoming votes and elections. And you'll probably want to remind those that haven't voted.

Gather and report on your results. After you vote, you'll want to determine who or what won out over others. This may be an internal review or you may want to immediately share the results with your group.

4. PROBLEMS ASSOCIATED

The Phishing scams are nowadays are occurring more and more because of unawareness, The online voting system can somehow to some extent prevent and stop the phishing one must be aware of the scams are happening nowadaysto them so they can prevent them from phishing. System is out dated and up to some extent obsolete, it can also occur from emotion and etc. Trojan horses are computer programmers that download to a computer while it isconnected to the internet. They may be innocuous, yet they might cause damage.

Cybersecurity reasons why the election security may be too significant to make online voting a reality:

Reason 1: Election security cannot be guaranteed

This reason, essentially, summarizes the next seven points. It's safe to bet that quite a few the readers of this article have had their credit card hacked while shopping online or know someone who has.

Reason 2: No computer or system is 100% "unhackable"

The complexity of the systems, computers, and applications that would be required for online voting contain bugs and errors that can be leveraged. This complexity and need for corresponding cybersecurity protection are growing faster than the methods to keep up with them.

Reason 3: Internet voting increases cybersecurity risk

National voting via the Internet expands the opportunity for an attacker to engage in damaging disruption and denial-of-service attacks. The ability to track and audit online elections would be exceeding difficult without an auditable information trail that couldn't be falsely manipulated. secure voting is understood to be about methods, software and systems that aim to protect an election from fraud and disruption. It a question of correctness and integrity. A voting system is secure in the sense that we can trust that the results of an election are fair and correct.

5. FUTURE SCOPE OF ONLINE VOTING

Truely, the implementation of the electronic voting system requires a lot of resources, such as a competent computer network infrastructure and computingmachines, knowledge of information systems and the internet technology, good human resources to manage the network system and "culture" for computer usein society. Information quality in developing countries the communication infrastructure is not very good and only available in certain regions. Governments yet you have to spend a lot of money to develop communication infrastructure and provide qualified people resources to manage it. In addition, the level education is not very high in society. Many people also do not know how to access internet.

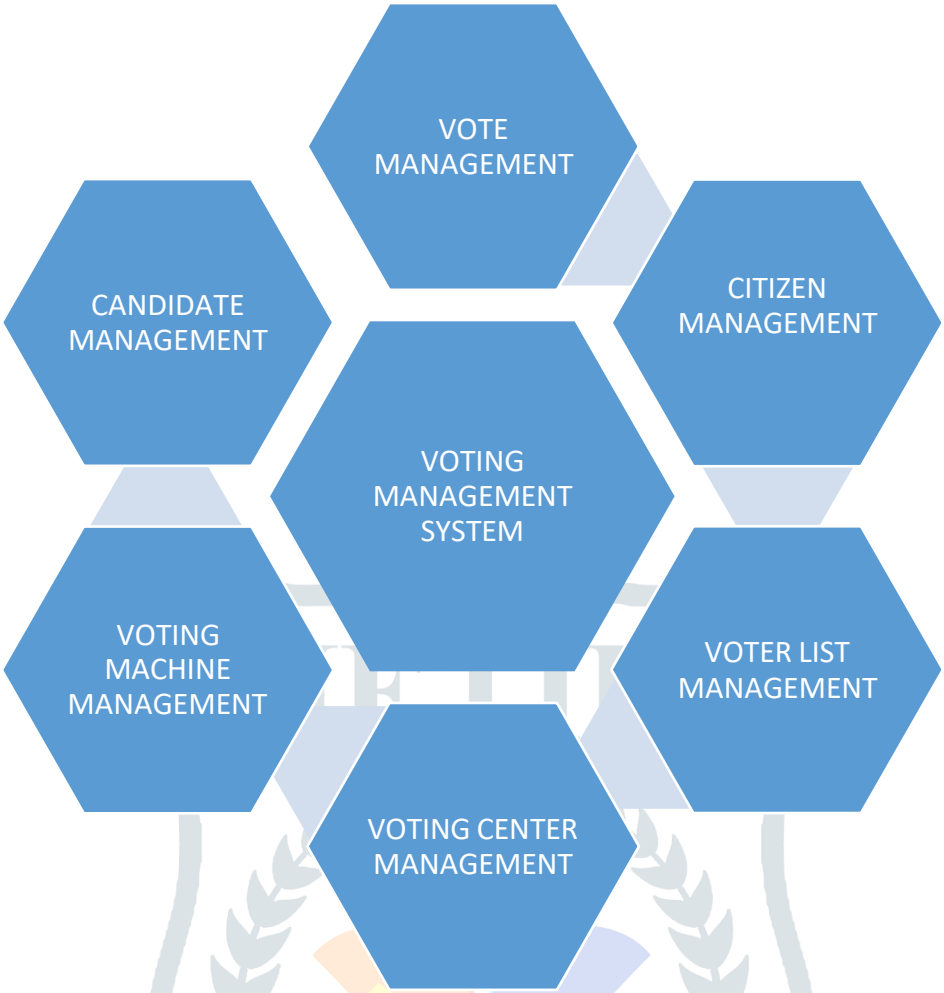

Fig. 2 – Determining voting management

6. CONCLUSION

During the last year, there has been a lot of buzz about E voting as a method tomake voting more accessible and, perhaps, boost participation in the electoral process. E-voting systems are among those being developed. It is being explored to replace the existing voting method. Availability, integrity, confidentiality, non-repudiation, and authentication are critical aspects of computer security; by combining these areas of security, theymake a coherent whole.

The computer and the internet. In reality, a large proportion of them are unfamiliar with computers and the internet. In such instances, the internet canbe utilized to increase voter turnout. Yet, if just internet voting is used to facilitate the election, technology will become a barrier to voter participation.

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