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ONLINE VOTING SYSTEM USING EMAIL VERIFICATION AND UNIQUE ID

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Abstract: Online Voting is an inclination that is achieving encouragement in modern society. First, take a look at the traditional voting system. Large space and manpower are required to set up voting booths in multiple areas around the city or village. High security has to be maintained on the date of the election. The voter must visit the place where the voting booth is arranged. Sometimes, the voter needs to stand in a queue for a long time. Again, manpower is required to volunteer and assist voters at the place of voting. The voting process is done manually on the voting machine. Vote counting is done with the physical process. Then there is an intermission of a few days for results to be displayed. if we see here in trade national voting system, we need a lot of manpower, energy, and time to conduct this process.

Now to get control of the above-mentioned situation, we are going to initiate an application called Online Voting System. Now as we all know, almost everything can be done online. Like Money transfer, Shopping, Booking, etc. And so many other activities are done with the help of the internet. So, with the effortless approach and use of the internet, we are going to take this existing voting system to an advanced level. We are going to develop an online platform with high security so that the same process could be done easily without the waste of time, afford, and energy.

Keywords: Voter, Group, Candidate, Web application, Online, Election, Voting, Results, Mobile.

I. INTRODUCTION

Voting is a procedure of gathering a group, such as meetings to make a mutual and collective decision. Electoral integrity is a necessity not only for democratic nations but also for state's voter assurance and liability. Parliamentary voting methods are critical in this regard. The role of this project is to save time, energy, and affords of the election committee as well as participants that are wasted in conducting the process as well as casting votes. Notes for the studies, getting their doubts cleared over the internet in the case where the staff is unavailable.

The main management of this project is to give simple and easy access to the election process for both the election committee as well as participants. Every step which is required for voting can be performed as it is on this system. Just the difference is that, traditionally, the election committee has to set up a venue for participants to cast votes and participants have to visit that venue physically, but here, no one needs to move anywhere. Everything can be performed online from the comfort of home. This project focuses on a system that uses login credentials to unlock the voting system just like in your phone, and it also uses a high-security email verification method so that no one can vote for someone else, and this system does not require physical presence to cast a vote as the traditional system does. The process is time-consuming as well. The entirely web-based system enables people to cast their votes from anywhere in the world.

Using unique identity credentials, the chance of duplicating a vote is less, and those who are registered before the election and are recognized by the system will be allowed to vote. Currently, voting systems are Electronic Voting Machines (EVM) and Secret Ballet Voting which require manpower and are time-consuming processes. Individuals above age 18 are eligible to vote. Voter's Id and others details are validated manually and only after confirmation he/she will be allowed to vote.

II. EXISTING SYSTEM

In, The Existing system of Election is running manually. Currently, voting systems are Electronic Voting Machines (EVM) and Secret Ballet Voting which require manpower and are time-consuming processes. Individuals above age 18 are eligible to vote. Voter's Id and others details are validated manually and only after confirmation he/she will be allowed to vote

The EVMs have to be checked and transported to different parts of the country wherever the election is taking place. It also needs manual power and security. The counting of the votes cast in EVMs also needs manpower and takes an entire



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day and ballet voting is entirely manual. So, there are a lot of ways the counting and the voting to not be clean. Hence the current system can be made a lot better, more accessible, and more efficient.

Large space and manpower are required to set up voting booths in multiple areas around the city or village. High security has to be maintained on the date of the election. The voter must visit the place where the voting booth is arranged. Sometimes, the voter needs to stand in a queue for a long time. Again, manpower is required to volunteer and assist voters at the place of voting.

The voting process is done manually on the voting machine. Then there is a gap of a few days for results to be displayed. So, we see here in the traditional voting system, we need a lot of manpower, energy, and time to conduct this process.

III. PROPOSED SYSTEM

The system we are proposing is a solution that addresses all the above concerns mentioned. Now as we all know, almost everything can be done online. Like Money transfer, Shopping, Booking, Teaching, Data sharing, Admissions, Job search, etc. And so many other activities are done with the help of the internet. So with the easy approach and use of the internet, we are going to take this existing voting system to an advanced level. We are going to develop an online platform with high security so that the same process could be done easily without the waste of time, effort, and money.

The main objective of this project is to develop a web application with high security for online voting. The application can be defined as follows:

- 1. Admin will add candidates to the voting panel if they are eligible for the voting.
- 2. Voter authentication will be done by Admin. After the voter verification is done, every voter will be given a unique code for registration into the panel.
- 3. Admin will start the election process through the admin panel.
- 4. Voting will be done by voters. Before voting of every individual, an email verification will be done.
- 5. After completion of voting, results will be generated in an excel sheet in the Admin panel.

The system we are proposing is a solution that addresses all the above concerns mentioned in Existing System. Now as we all know, almost everything is digitalized. Like Money transfer, Shopping, Booking, Teaching, Data sharing, Admissions, Job search, etc. And so many other activities are done with the help of the internet. So with the easy approach and utilization of the internet, we are going to take this existing voting system to an advanced level. We are going to develop an online platform with high security so that the same process could be done easily without the waste of time, effort, and money.

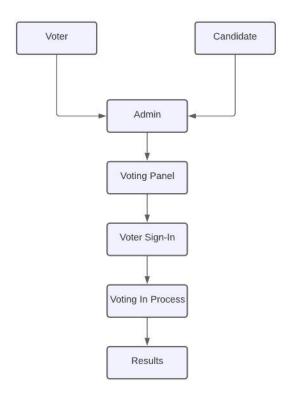


Figure 1. Flowchart of the proposed system.

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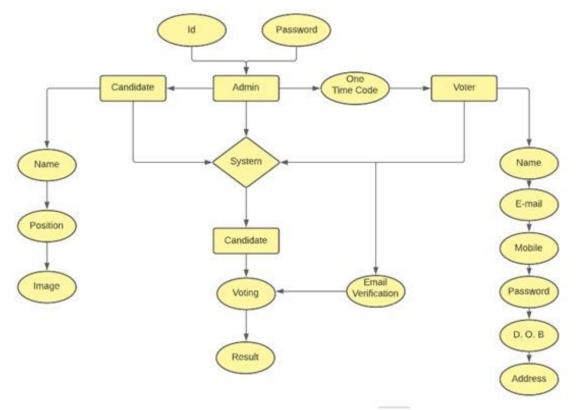


Figure 2. ER Diagram of the proposed system.

V. CONCLUSION AND FUTURE SCOPE

So, the conclusion we make here is that our new online voting system is much better and easy to use than the traditional voting system. Almost all the problems that we have discussed in the problem definition section are resolved with the help of this application. So, the launch of this application would create many opportunities for those who are frequently involved in conducting elections for different purposes.

In the future, with further implementation or changes in the system, the platform can be expanded such as in government elections.

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