

# ONLINE VOTING SYSTEM

#### ANUP KUMAR<sup>1</sup>, RAHUL GUPTA<sup>2</sup>, K.C. TRIPATHI<sup>3</sup>, M.L. SHARMA<sup>4</sup>

<sup>1</sup>UG Student, IT & Maharaja Agrasen Institute of Technology, Delhi

<sup>2</sup>UG Student, IT & Maharaja Agrasen Institute of Technology, Delhi

<sup>3</sup>Associate Professor, Department IT & Maharaja Agrasen Institute of Technology, Delhi

<sup>4</sup>Professor, Head Of Department IT & Maharaja Agrasen Institute of Technology, Delhi

**Abstract:** First, take a look at a traditional voting system. Large space and manpower are required to set up voting booths in multiple areas around a city or village. High security has to be maintained on the date of an election. Voters have to visit the voting booth and need to stand in a long queue. Again, manpower is required for volunteering and assistance of voters at the place of voting. The Voting process is done on a manual voting machine. Vote counting is done with the manual process. Then there is a gap of a few days for results to be displayed. So if we see, here in a traditional voting system, we need a lot of manpower, energy, and time to conduct this process. Now to overcome the above-mentioned problems, we are going to develop an application called Online Voting System. Like Money transfer, Shopping, Booking, Teaching, Data sharing, Admissions, Job search, etc. So with the easy access 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. The main responsibility of this project is to give simple and easy access to the election process for both the election committee as well as participants.

Keywords: Voter, Platform, Web application, Online, Election, Voting, Results.

#### **1. INTRODUCTION**

This project mainly focuses on a system that uses login credentials to conduct Online voting on your mobile, 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 any physical presence to vote like a traditional system. The process is time-consuming as well. The whole web-based system enables people to cast their votes from any corner of the world. The main responsibility 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.

#### 1.1 Problem Background

India being a democratic country, that is too large, still conducts its elections by Secret Ballet Voting or Electronic Voting Machines (EVM) both involve high costs, manual labor and are inefficient. So, the voting system must be optimized. The current voting system needs the physical presence of every voter which is inconvenient for many people. 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.

#### 1.2 Research Objective

The main objective is to develop a highly secured web application for online voting. An application can be defined as follows:

i. Admin will add candidates to a panel if they qualify for verification criteria.

ii. Voter verification will be done by Admin. After verification, every voter will be given a unique code for registration.

- iii. Admin will initiate the election process through a panel.
- iv. Voting will be done by voters. Before voting of every voter, OTP will be sent by email.
- v. After completion of voting, results will be generated in an excel sheet in the Admin panel.

#### 1.3 Scope Of Study

As we know, In these days elections are held in many organizations. This system can be used personally like for institutes, schools, etc., and on a larger scale such as government elections. To save time, energy, money, and effort which are



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wasted in a traditional voting system.

#### 2. METHODOLOGY

The problem is that when elections are to be conducted, a lot of money, physical space, manpower is required. And there are so many people who are qualified to vote like old ones, but due to age factors or medical illness, they are not able to visit the voting Booth. Another problem is that voting machines could be manipulated by some bad people which result in fake voting or one-sided voting. To get rid of this we develop an online voting system using PHP which helps us to conduct elections from any corner of the world. This application contains admin which authorizes the candidate and voter eligibility just like the Election Commission of India.

#### 2.1 Admin

Admin who is responsible for conducting the overall process of election. Admin is like an election committee or authority. Admin can approve voters as well as candidates. Approving means voter and candidate verification, like they should be qualified for taking part in the process.

Features and functions:

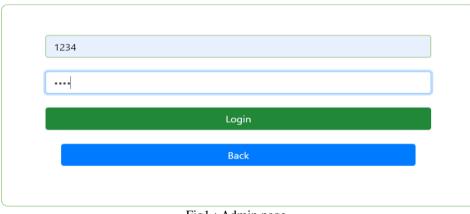
- o Login
- Dashboard
- Candidates section
- Unique code generator
- Voting start/stop/reset
- Voting status monitor
- Results in excel sheet
- o Logout

#### Client-side details:

- Login ID
- o Password

### Online Voting System

#### Admin Login



#### Fig1 : Admin page

**2.2** System: The system is an online platform where the election process is held. So the voters and groups are registered here. And with the help of the system, voters can do voting and track their status, and Admin can also monitor the election process through the system.

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#### 2.3 ER Diagram

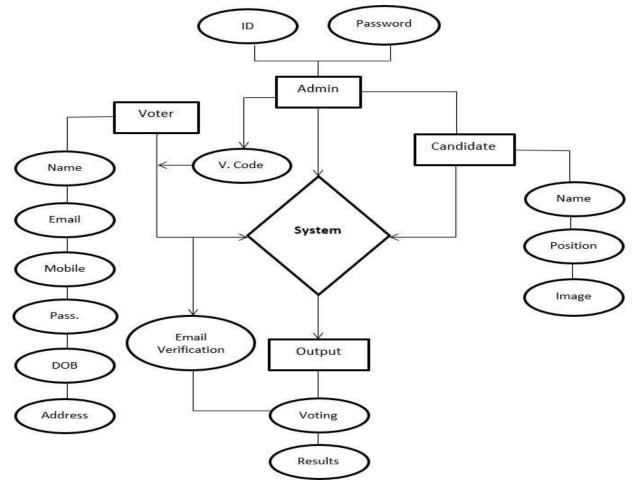


Fig 2 : ER Diagram

#### 2.4 Features and modules :

- Homepage
- Admin module
- o Login
- o Dashboard
- o Logout
- Voter module
- Registration
- o Login
- o Dashboard
- o Logout
- Forget password
- Email verification

#### 2.5 Voters

Voters are the people who will first get approval from Admin whether they are qualified or not. Then they will sign up on an online voting panel. And then at the time of voting, they will sign in and do vote to their respective party or candidate via the system.

In this online voting System, any voter can cast/give their vote from any part of the world with help of any mobile/computer/laptop. Online voting is as easy as shopping from amazon/flipkart. This application provide convenience to the voter for voting without going polling booth. ECI(Election Commission of India) working on how to conduct voting through online.

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Impact Factor 7.39 ∺ Vol. 11, Issue 4, April 2022 DOI: 10.17148/IJARCCE.2022.114171 Online Voting System Logout \varTheta Dashboard Reset Voting Status Generator Generate verification code 0/5 Votes done 757502 **Remaining votes** Please do not share this code with anyone! Name Mobile Sr.no. 1 Anup kumar 7982480606 2 Rahul 8860198815 3 Shahbaz 9958020160 RahulGupta 8076566268 4 7210076685 5 Manju

Fig 3 : Voting Status

#### 2.6 Features and functions:

- Registration
- o Login
- o Dashboard
- Profile info
- Candidates list
- Email verification
- Voting
- o Logout
- Forget password

#### **3.FLOW DIAGRAM**

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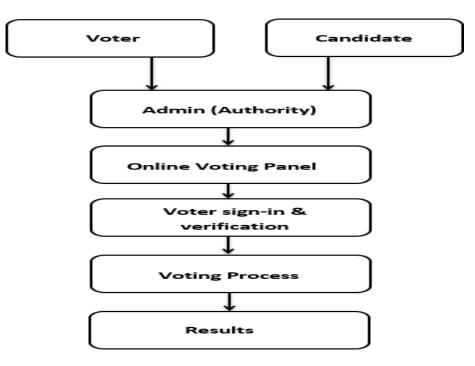


Fig 4 : Flow Diagram of Online Voting System

#### 4. **RESULTS AND DISCUSSIONS**

By doing this undertaking I have the capacity to bring another framework for online national voting in favor of our nation. With the incoming of innovation and the Internet in our everyday life, we had the capacity to offer propelled casting a ballot framework to voters both in the nation and outside through our web-based casting a ballot framework.

- i. Unique Code generated by admin during registration of voters.
- ii. For security purpose, Email OTP is used before giving their votes.
- iii. If any voter forget their password they can change it.
- iv. Election result generation in excel sheet.
- v. Online voting system is hosted on Online server Hostinger.
- vi. More than one voters can vote at a time.

#### 5. CONCLUSION

So the conclusion we make here is that our new online voting system is much better and easy to use than a 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 a different system.

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