# **Online Voting System Using AI**

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#### **ABSTRACT**

Our article is about an online voting portal t hat makes it easier for users (voters), candida te, and admin (responsible and verifying all u sers and information) to get participate in onl ine elections. The Online Voting Panel has a simple, interactive userinterface and is more secure. The given onlineVoting Portal has hig hly secured features such as generating a uni que ID. This adds another layer by layers of securities (besides the login ID and passwor d) and allows administrators to verify userinfo rmation and decide whether to vote. No . It also creates and manages the details of onlin e voting and election as all registered users must log in with their username and passwor d and have toclick on a candidate to register to vote. Our system is also equipped with a Chat bot, that will play role as a support o r guide for online voters, which help users t o assist them in the process ofvoting. Keywords: HTML,CSS, JAVASCRIPT, PHP, MYSQL, PHP MY ADMIN, XAMPP.

I. INTRODUCTION

An online voting portal is an online secured and reliable voting software technolog y. With this system, administrator will approve people to cast their vote online without going to any physical polling booth. There are many voting methods used for voting purposes, such as voting, EVM machines, etc., but a ll of these methods contains more time mana gement and manpower. Convenience, flexibility, privacy and auditability. Our online voting system provides users with a platform to register to vote remotely. Our voting system is a voting portal that allows all voters to provide their right to vote from anywhere. Also, a

chatbot is integrated into the voting system for a smoother process. Make it accessible by guiding users through all stages of the proc ess.

## 1.1. Problem background

Recently, a lot of literature on the to pic online voting has been developed till toda y. While online methods of voting has been the subject of research in today era, efforts a re being made to make online voting systems more secure. There have been recent reports of insecure Internet usage and resulting security breaches. The main problem now is fixin g security breaches.

## 1.2. Problem Statement

The online voting system simplifies the entire voting process as it provides a chatb ot in this system to assist each user during the voting process. If the user faces any problem during the process, the chatbot provides an efficient solution to this problem. Our voting system makes the entire voting process costeffective. Our online voting portal provides instant, unbiased voting results. Our voting system helps monitor voters.

## 1.3. Research Objective

The main purpose of this survey is t o take a step towards an online voting platform by casting

votes in a safe and convenient environment. Online voting is voting software that allows anyone to exercise their voting rights from a nywhere. The online voting application include s:

- a) User details
- b) Username and his/her ID and password.



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- c) Users vote in the database.
- d) Sum of Total Votes.
- e) Results panel
- f) Chat bots to assist users
- g) Unique user ID given to administrators Th e various operational tasks suggested by the s ystem are: User's information in the database.

Verification of information submitted by user s. Erase false information. All information wil l be automatically sent to the administrator.

## 1.4. Scope Of Study

As you know, many organizations hol d elections for positions such as "group leade r, project leader, employee of the month," or even small changes in the work environment . In this case, online vote casting will be ve ry helpful in carrying out voting. People can cast their vote from anywhere. Since univers ities conduct elections for positions such as p residents, vice presidents, and other administra tive positions of students in many university corporations such as CSI, Trinity, online votin g systems can be used efficiently in such cas es, It can be customized according to custom er needs. various elections. Providing all basic security levels. The purpose of this survey i s to make the today's voting processes more simple, timesaving and secure. the Online v oting eliminate fake votes that oftenoccur in t raditional voting system

## II. LITERATURE REVIEW

This is a system that users can use to vote in elections. All voters must log in a nd click Vote for the candidate of their choi ce to cast their ballot. Research, development and testing phases are conducted on local n etworks. On the other hand, online voting portal has been studied for years, and inaccurat e implementation cases have recently been studied. These elements should be removed to a llow the public to express their opinions about the product.

This product is proposed as election t ool with a simple graphical interface and cha tbot. This system is highly developed using p hp. Although the product is independent. For that you need a XAMPP server.

Our system has an internal server that t provides user authentication and maintains n ecessarydata. A serverside user interface allow s selection to be made on behalf of the user. Users only need to log in with their ID and password to access the election module where they can vote easily and comfortably, and

their answers are saved and results are displayed.

Modules of the System Online Voting is a portal where voters can register and vo te on the onlinevoting platform. All informati on about users is stored into the databases, which will be used by administrators to verif y users. The database has different tables for Users, Candidates, Results and Admins. All voters are required to enter all basic informat ion such as name, gender, state, and emailID. This is the frontend of the website as a we lcome page. It has all the page options like Home, Election Day, Registration, Login, About Us, Contact Us, FAQ, etc.proposed a biomet ric secure cloud-

based electronic voting system for the electio n process. Researchers studied

ballot duplication problems and the high cost of producing ballots. The purpose of this st udy was to design, develop and test thesecure electronic voting system based on a biometri c fingerprint method.

used histogram equalization and Fourier transf orm for fingerprint and iris identification. The system has been successfully authenticated. p rovided theelectronic voting portal with biomet ric and cryptographic capabilities, securing the online voting with more efficient and highly secure user authentication. The motivation for t his research was to address fraud and improv e the efficiency of voting.

developed a system using biometric and stega nographic concepts. Researchers were motivate d by thelimited amount of paperwork and sh ort turnaround time for election results. The purpose behind this study was to develop and implement an online system that would facil itate remote participation and voting for a sp ecific candidate. The uses of OTP (One Time Password), IVR (Interactive

Voice Response) and password were used to explain a smart voting portal

which ensures effective voting procedures and voting counts. The researchers were highly m otivated by the problem of physical methods of checking the voter's authentication details f or identification. The objectives of this research were to design and implement a smart and a n efficient voting portal. Authentication was p erformed using a unique key and fingerprint ID, and the result was sent to the mobile ph one number of the Election Commissioner. Bio metric fingerprint data and a unique key wer e used for verification that allows voters to c ast their votes through a mobile app. The pu



rpose of studywas to develop and implement an Aadhaarbased voting system using a finger print method. The system design was to impl ement a voting system using the

Unique Fingerprint Identification Number (UID AI). Algorithm presented by combining voter fingerprints and Aadhaar numbers

The issues of ensuring confidentiality, complet eness, confidentiality, transparency,

convenience and verifiability of the functionality and security of electronic voting remain unresolved.

The main objective of Study

was the design and development of an online voting system based on Aadhaar cards. Aad haar card and

authentication fingerprint to implement voting system. Voters' fingerprints and their adhar ca rds were used for authentication.

Confidentiality, integrity, confidentiality transparency, expediency, and verifiability issues have not been addressed.

## 2.1 StartPage:

This is the welcome page of the portal with all the functionality of the portal. There are links toother pages such as the voter registr ation page, voter and aministrator login page, admin area, aboutus, chatbot area (support). This page also provides a brief description of the system and how it works. This page th erefore gives the user an overview of the ent ire system.



Fig 1: Home

**2.2** Registration: This is the overview of registration page where voters will get registered. On theregistration page, the user must enter

the details requested by the administrator. All data registered on the portal is stored in it s database. Administrators reserve the right to accept eligible users, otherwise reject registration indicating the reason for the denial.

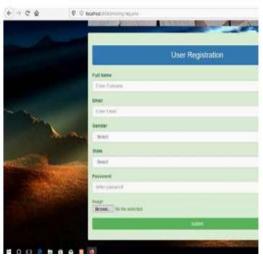


Fig 2: Registration

With your unique USERNAME and PASSW ORD generated during registration. There is a FORGOTTEN PASSWORD option. If a user forgets their password, the user can use the Forgotten Password option.

2.3 User login: After registering on the portal , the data is stored in the database and sent to the administrator. Users can log in to th e portal and manage the entire voting process , including adding new elections, creating use r IDs, verifying users, and generating results. Verify the user has permission to create an ID for user

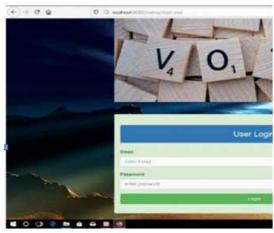


Fig 3: Login



#### 2.4 Admin Panel:

This is a module which shows a list of all lections, this module is accessible only to those online users who have been verified by admin. By this module user can cast their vote by selecting a candidate of their choice for a particular ongoing election.



Fig 4: Admin Panel

#### 2.5 Election:

From here admin can login to his account

#### Fig 5: Election panel

## 2.6 Result:

This module provides all completed election r esults. Users have the right to see the election r results. All results are generated by the ad min after the election is successfully complete d.

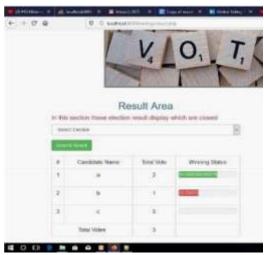


Fig 6: Result Panel

#### 3.6 Chatbot:

This is a special module of the onlin e voting portal. This is a chatbot specifically designed

and integrated into the system to act as an a ssistant or provide support to users. When a user registers or votes, if the system detects something, they can ask the chatbot to fix th e problem, and the chatbot will provide the best solution to the problem.



Fig 7: Chatbot

## III. TECHNOLOGY USED:

We have created this portal by using the foll owing technologies:

Frontend: HTML, CSS, Bootstrap Backend: - PHP, JavaScript Database:- MySQL, phpMyAdmin

Server: - XAMPP

Technology: - JSON, PYTHON,

DIALOGFLOW

## IV. CONCLUSION:

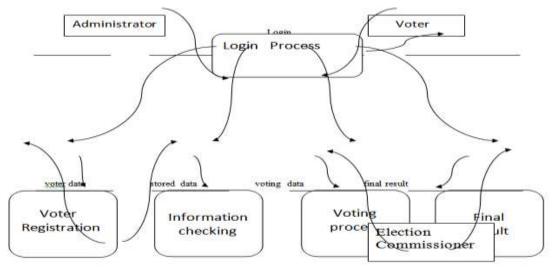
Our online portal gives voters the o pportunity to vote online without going to the e polling place. Our portal also has special chatbots that will solve any problems users face during the entire voting process. This system provides faster access, higher security, greater flexibility and efficiency. It also eliminates the possibility of fake votes or fake votes.

It also reduces human labor and unwanted human errors. It provides fast election results that are absolutely accurate. Our system aim s to reduce time and paperwork. Thus, the o nline voting system accelerates the entire voti

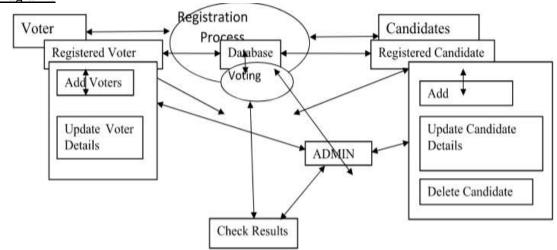


ng process and ensures the security of voting.

## **Data Flow Diagram-:**



## ER Diagram-:



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