

E-Voting System

RTMNU University of Engineering and Technology, Nagpur, Maharashtra

Smt. Radhikatai Pandav College Of Engineering Nagpur.

Under the Guidance: Prof. Durga Wanjari

Corresponding Author: Pranit Dewase, Nalini Darode, Amar Dhoble,

Urmila Dhakate, Shubham Nandpure, Omkumari Netam

ABSTRACT

Electronic transactions over the Internet, particularly using the World Wide Web have become a largest platform of economic life. Recently the public sectors also have started to use the same platform for their business purposes or as per the need. Nowadays Highly advanced security methods are needed for election with the conventional system. The additional feature of the system is that the voter can confirm if his/her vote has gone to correct candidate/party. In this system a person can also cast their vote from any location of India. In the proposed system the tallying of the votes will be done by automatically there is no need of physical interaction, thus saving a huge time and enabling Election Commissioner of India to announce the result within a very short period of time & very conveniently.

KEYWORDS: E-Voting, HTML, MYSQL, OTP based voting system. AADHAR ID based online voting.

INTRODUCTION

Online Voting is a web-based voting system that will help you manage your elections easily and securely. This voting system can be used for casting votes during the elections held in colleges, etc. In this system the voter do not have to go to the polling booth to cast their vote. They can use their personal computer to cast their votes.

There is a database which is maintained in which all the name of the voters with their complete information is stored. In this system people who have citizenship of India and whose age is above 18 years of age and any gender can give his\her vote online without going to physical polling station. There is a database which is maintained in which all the name of voters with complete information is stored. He\She has to be registered first for him\her to vote.

Registration is mainly done by system administration for security reasons. The system administrator registers the votes on a special site of the system visited by him only by simply filling a registration form to register voter. After registration, the voter is assigned a secret voter ID with which he\she can use to log into the system and enjoy services provided by the system such as voting.

PROPOSED WORK

1. Project is related to online voting system.
2. The project maintains two levels of users:-
 - Admin Level
 - User Level

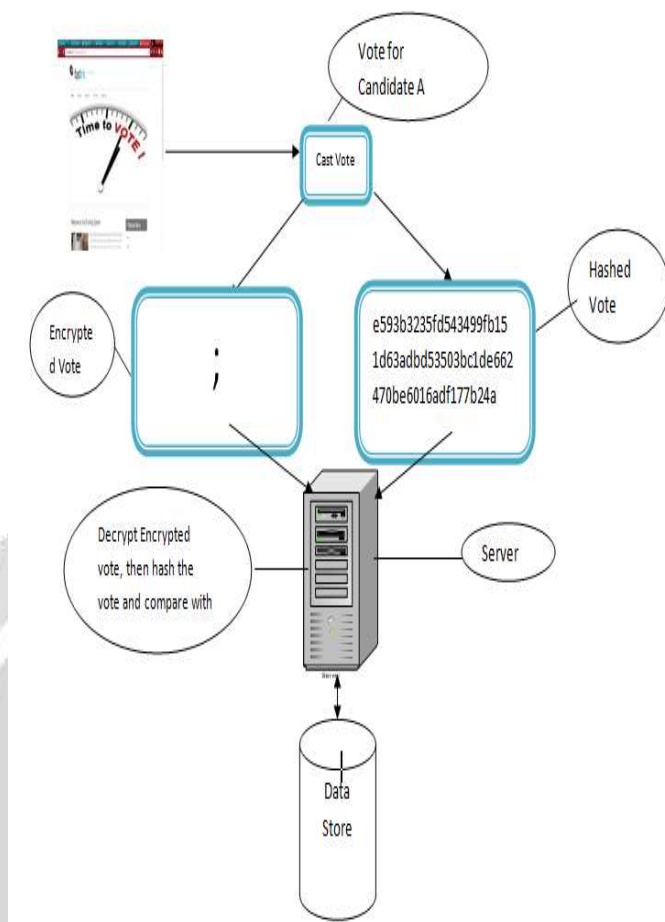


Fig.1 System Architecture of online voting system

Using these system the citizen’s database is maintained by election commission of india where citizens information is maintained. Whenever citizen is using online voting system his/her information is authenticated with the data present in database if user is not in the list the he/she will not be able to conduct their vote for any candidate.

Users are provided with an online registration from before voting user should fill online form and submit their basic detail in database and after the registration the user will get an User ID and Password for further process, like to apply as a candidate or to vote for any particular candidate. The most important thing which to be remember that the user must be above 18 years.

Advantages of using this application is time saving and voting percentage can be increased and high security can be implied for preventing false voting. This application contains two level of user’s administrator’s level and User level where each level has different functionality. Election commissioner of India will update voter’s details to database.

Online voting system project is implemented in ASP.Net platform using MySql database as back end. Main aim of online voting system is to develop an online application like online reservation system, for citizens who are above 18 years of age to vote through online.

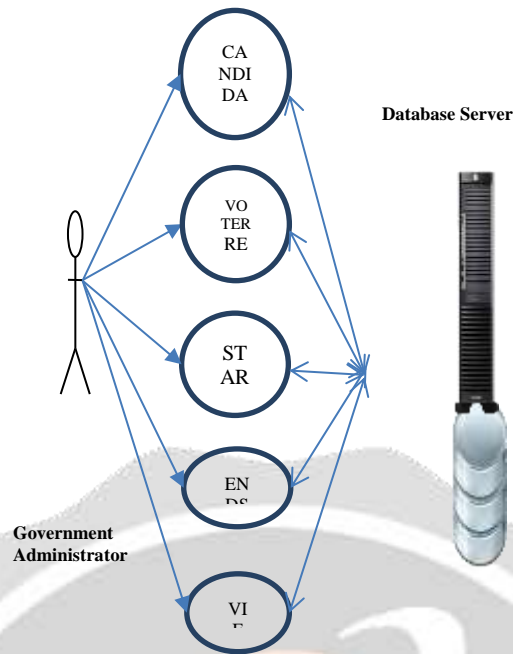


Fig.2 Administrator DFD

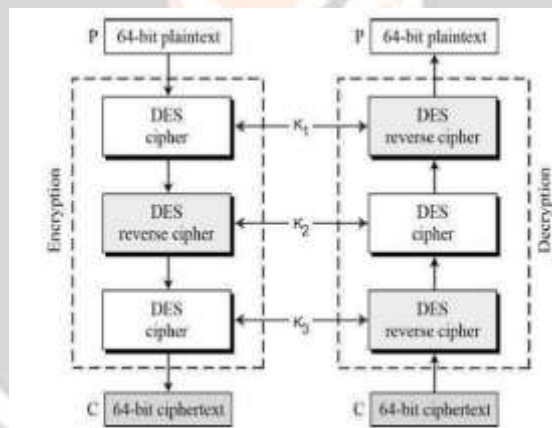


Fig.3 Triple DES Algorithm (3-Key Triple Des)

The encryption-decryption process is as follows

- Encrypt the plaintext blocks using single DES with key K_1 , i.e. Key 1
- Now decrypt the output of step 1 using single DES with key K_2 , i.e. Key 2
- Finally, encrypt the output of step 2 using single DES with key K_3 , i.e. Key 3

The output of step 3 is the cipher text.

- Decryption of a cipher text is a reverse process. User first decrypt using K_3 , then encrypt with K_2 , and finally decrypt with K_1 .

OTP Generation E-Voting

- We are Using thetexting.com API For OTP Generation.

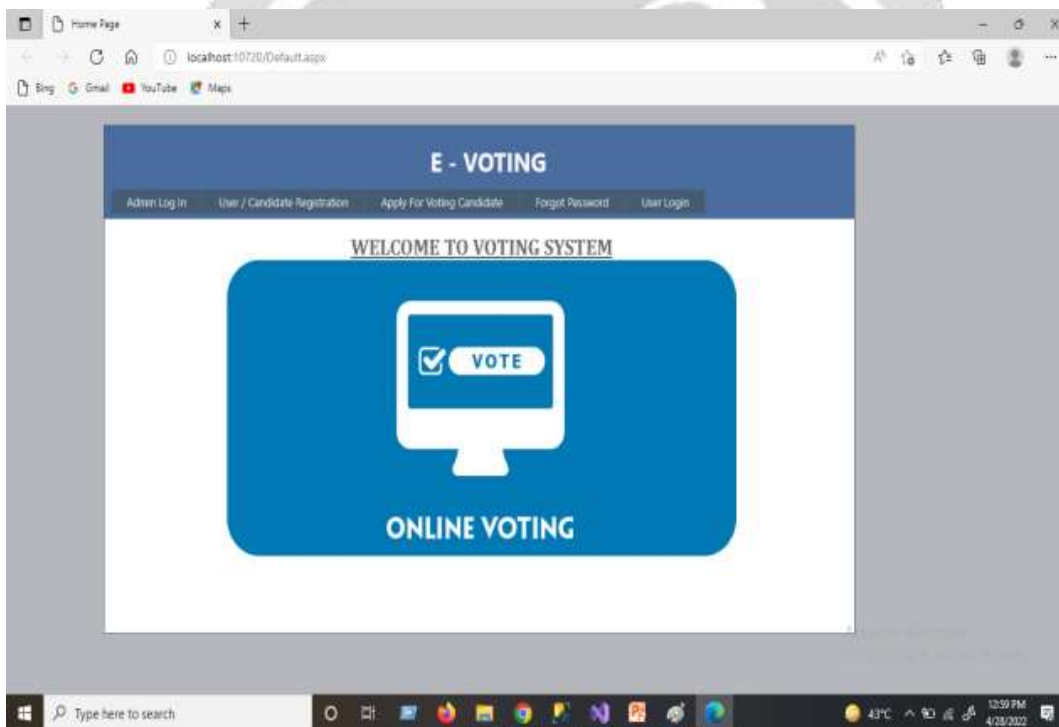
- This command can be used to send text messages to either individual numbers or entire contact groups.
- Resource
URL (<https://www.thetexting.com/Area/>)
Parameters.

Sender	*Sender text must be unique alphanumeric characters.
Message	It contains the message content.

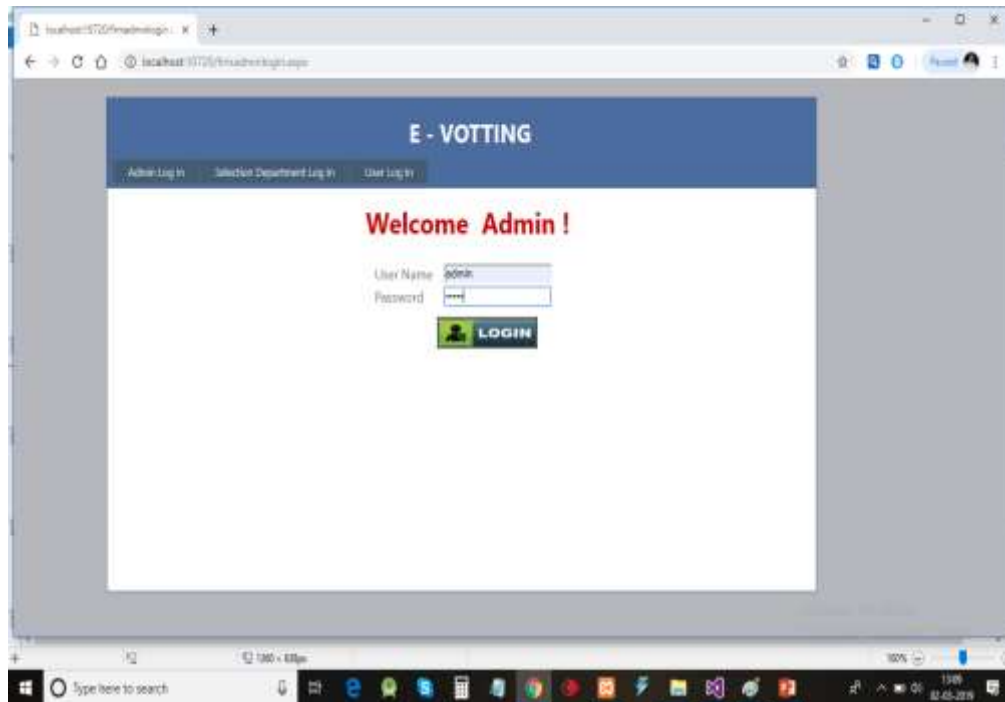
MODULES:-

1) **Home Page:-**In this welcome page of the website, which has all the feature options of the website.

i.e, Admin login, User/Candidate Registration, Apply for voting candidate, Forget password, User and User login.



2) **Admin Login:-**In this admin login page which was authorized for all election activities, Such as selection of candidate, fixation of election symbol, selection of voting date with time and display of result.



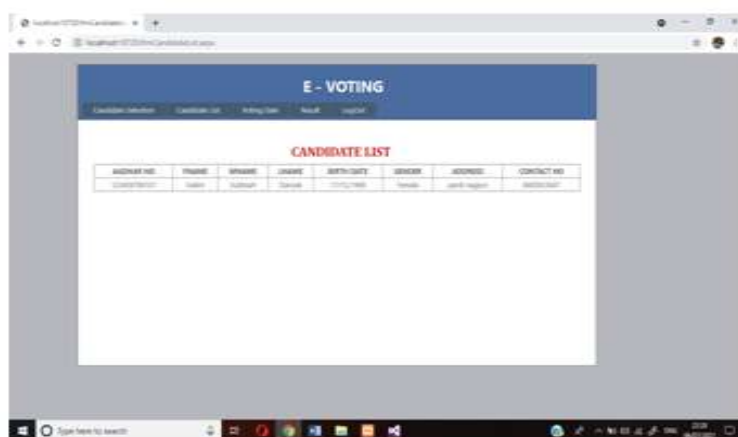
3) User Login:-After registering in the website, this information is saved in the database and sent to the Election Commission. User can login to the website with his/her unique username and password generated through registration. There is an option to forget the password, if the user forgets his password then he/she can go with the forget password option.



4) User Registration:-This encourages the voter to enter the register structure Submit the details at the end Check the details in the manager so that your specific details will actually accept the nomination. Generally cross check the subtleties, these subtleties are false, get your nomination rejected Quickly.



5) Candidate List:-In this Candidate Selection Page, if the admin can find the applied candidates list and authorized to select the candidate and confirm them for the election.



voting can handle multiple modalities, and can provide better scalability for large elections.

Software&Hardware Requirements

- 1. Software Requirements:-**
 - Visual studio
 - SQL Sever
 - Browser
- 2. Hardware Requirements:-**
 - RAMM-2GB
 - Hard Disk500 GB
 - I3 INTEL
 - Wi-Fi

SOME OF THE ADVANAGES FROM THE ABOVE RESULTS

1. Eligibility: Only eligible user can vote in voting and every user having criteria can cast only one vote.

2. Uniqueness: Voter should not be able to vote more than once.
 3. Accuracy: Voting systems should not be uploaded the votes incorrectly.
 4. Integrity: Votes should not be able to be modified without effects.
 5. Verify: Voter should able print their finger prints in certain place.
 6. Audit-ability: There should not be unreliable and non demonstrably authentic election records.
 7. Reliability: Systems should work correctly, even in the face of numerous failures.
 8. High secure: Everyone should able to vote their own vote without others.
- Non-forcibility: Voters should not be able to prove how they voted.

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