ELECTRONIC VOTING MACHINE

A Report for the Evaluation 3 of Project 1

Submitted by

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BONAFIDE CERTIFICATE

Certified that this project report **"ELECTRONIC VOTING MACHINE"** is the bonafide work of **"RAVISH CHAUHAN (1713104029)"** who carried out the project work under my supervision.

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Abstract:

Electronic Voting Machine (EVM) is a simple electronic device used to record votes in place of ballot papers and boxes which were used earlier in conventional voting system. Fundamental right to vote or simply voting in elections forms the basis of democracy. All earlier elections be it state elections or centre elections a voter used to cast his/her favorite candidate by putting the stamp against his/her name and then folding the ballot paper as per a prescribed method before putting it in the Ballot Box. This is a long, time-consuming process and very much prone to errors. This situation continued till election scene was completely changed by electronic voting machine. No more ballot paper, ballot boxes, stamping, etc. all this condensed into a simple box called ballot unit of the electronic voting machine. Because biometric identifiers cannot be easily misplaced, forged, or shared, they are considered more reliable for person recognition than traditional token or knowledge based methods. So the Electronic voting system has to be improved based on the current technologies viz., biometric system. This article discusses complete review about voting devices, Issues and comparison among the voting methods and biometric EVM.

The Project is developed for the threat free and user oriented Online Voting System. The Online Voting system is made for the people of the country residing around the world and wants to vote for their representative. The election can be conducted in two ways the paper ballot election and the automated ballot elections.
The automated ballot elections are called the electronic voting. The online voting system is highly developed and the online polling system can be replaced by accurately and directly voting online and immediate results. The online voting system is done by the internet so it can be called the Internet Voting.

INTRODUCTION:

1.1 Background of the Study

In a democratic system of governance, election is very crucial and the integrity of the electoral process is sacrosanct. Election is a repetitive operation that occurs every specified period of time. Adding to that is the fact that there are different types of elections and/or different scopes of elections and the need to support multiple elections.

Democracy thus encourages individual freedom according to the rule of law, so that people may behave and express themselves as they choose. This not only gives people a chance to choose their leaders, but also to freely express their views on issues.

Voting through an election forms an important part of democracy and for democracy to be sustainable, the voter's participation is a key consideration. Apart from voters being eencouraged to exercise this democratic right, the election that facilitates the function must be ecredible, watertight and free of bias. In addition to providing for the orderly transfer of power, it also cements the citizen's trust and confidence in an organization or government when it operates efficiently. Society is becoming more and more web / collaboration oriented, and citizens, used to the high degree of flexibility in the services provided by the private sector and in the Internet in particular, are now beginning to set demanding standards for the delivery of services by governments using modern electronic delivery methods.

The key concerns of elections and essence of a voting system is Transparency: ordinary voters should be able to understand and observe the vote casting and counting process, even with relatively nominal education as well as Trust.

The implementation of electronic voting would allow increased access to the voting process for millions of potential voters. Higher levels of voter participation will lend greater legitimacy

to the electoral process and should help to reverse the trend towards voter apathy that is fast becoming a feature of many democratic societies. It is also recognized that more traditional voting methods will exist for some time to come, so a means is needed to make these more efficient and integrate them with the newer electronic methods. (The Oasis View)

Online voting is an electronic way of choosing leaders via a web driven application. The advantage of online voting over the common "queue method" is that the voters have the choice of voting at their own free time within the stipulated election voting period and there is no need to queue up. It also minimizes on errors of vote counting. The individual votes are submitted into a database which can be queried to find out who of the aspirants for a given post has the highest number of votes.

This system is geared towards increasing the credibility and ease of the voting procedure of staff elections in the University of Ibadan since it has been noted that with the old voting method (the Queue System), the voter turnout has been a wanting case

This online voting/polling system seeks to address the above issues. It should be noted that with this system in place, the users, citizens in this case shall be given ample time during the voting period. They shall also be trained on how to vote online before the election time.

The system is secured so that only registered voter may be able to vote and only once that means no ridging votes ,no double votes as well as no overvotes or undervotes system generate report

according to the number of student vote on each candidate and find the percentage of each candidate.

implementation of secure electronic voting systems is very critical in every student's electoral body. The main goal of e-Voting is to provide voters (students) a good environment so that students can cast their votes with minimum cost and efforts. There are so many properties that have been proposed to make the e-Voting secure process. The properties are: - Eligibility: Only eligible/registered students (voters) are permitted to cast and use the system. Secrecy: There is no association between student's identification and the system. Exceptionalness: No student can cast his/her vote more than once. Freeness: A student does not gain any information (a receipt) which can be used to prove to a coercer that she/he voted in a certain way. Justice: No incomplete result is obtainable before the concluding result comes out. Confirmable: Students can verify that their votes were computed correctly. Uncoercibility: No student can prove what he voted for others to prevent bribery. Effectiveness: The calculations can be achieved within a realistic amount of period.
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Aim / Objective:

The aim is to develop an application that seeks to use various stages of security authentication to enhance the electioneering process for staff elections using the case study, i.e. the University of India, ultimately providing an online platform which enables all eligible voters to exercise their franchise from any location during the election period.

The objectives are:

1.To create a secured online voting platform where authenticity of votes and voters are ensured with the use of mechanisms such as fingerprints registration and one – time password.
2.To improve Voter's identification since biometric features cannot be shared .
3.To ease the problem of queuing during voting period on elections.

Existing System

Electronic Voting (EV) comprises the use of a computer rather than the traditional use of ballot at polling centers or by postal mail . It involves the method for a group such as a meeting an electorate to make a decision or express an opinion, usually following discussions, debates or election campaigns. It incorporates various types of voting such as kiosks, the Internet, telephones, punch cards, and mark sense or optical scan ballots. India as world's largest democracy with a community of 1.1 billion , developed electronic voting machines (EVM). Embraced and supported by voters for elections enable to solve problems associated with the traditional paper-based voting system. The Estonian experience in deploying Internet voting in the United States (U.S) and about 3.4 percent voters were able to use the remote e-voting in 2003 and by 2007 the remote e-voting elections proved secure despite worries about hacker attacks, identity fraud, and vote count manipulation. Regardless of the benefits of E-voting, the variety of its use globally is still, though, partial as it has a shortcoming on many stages such as lawmaking, societal, partisan and technical levels. The paper underlines the radical and traditional aspects of Electorate body of Muni student's case for they are the main factors to influence the management's decision concerning the use of the E-Voting system at the university. The operation of the E-voting system raises numerous questions linked directly to votes such as lawful, societal, practical, partisan, managerial and monetary concerns. Though, profiting from the affirmative aspects of E-Voting desires the operation of security measures in order to repair the lack of transparency and to reclaim the trust of constituencies and liable Authorities

The Importance of E-voting:

According to the importance of e-voting are obvious; empowerment; it empowers members to have a voice in the leadership and direction of their organization. When allowed to vote in fair and open elections, members will feel a greater sense of value, ownership, and responsibility. Accessibility; With the surge of mobile devices, online voting is a convenient option for many members, allowing them to access ballots anytime, anywhere. Cost effectiveness; Elections are cost effective, especially when considering production costs of printing, postage, and mailing ballots. Security and confidentiality; A properly designed e-voting system will safeguard in place to assure the security of ballots and protection of voter identities. Transparency; e-elections, particularly those run by a third-party, eliminate the chance of election mismanagement or fraud. An audible trail helps increase voter confidence. Accuracy and expedience; since e-voting utilizes electronic ballots, there are no rejected, mismarked, or invalid votes and results are automatically calculated, eliminating the need for manual tabulation or dreaded recounts. Furthermore, point that e-voting promises an increase in participation and offers voters more options of convenience to vote, encourages more voters to cast their votes remotely, and has great potential to stimulate higher voter turnout. Casting and counting votes are much faster and more accurate with e-voting systems, by default there are no invalid or unclear ballots and the

automatic gathering and counting of ballots reduce the amount of time spent counting votes and delivering the results. In addition, pointed that e-voting reduced logistical and administrative costs. The system will reduce the materials required for printing and distribute ballots, the personnel required to assist in voting stations reduces and greater accessibility for the old and disabled people increase and allows to accommodate them as they cast their votes comfortably at their own homes.

existing System consist of methods like paper based voting,Lever voting machine,Punch card and Optical voting machine. The main problem with existing system was time consuming which used to take lot of time for voting.Paper based voting method were used in existing system which also gave the results of fake voting

The Existing System of Election is running manually. The Voter has to Visit to Booths to Vote a Candidate so there iswastage of Time. The Voter has to manually register into the Voter List. Also Vote counting has to be done manually. All the Information of the Voter or Candidate is to be filling in manually. Voter must be present in his/her Constituency to give his/her Vote. There are Electronic Voting Machines used which Takes More Cost. The voting system previously being used by the Government is a paper based system, in which the voter simply picks up ballots sheets from electoral officials, tick off who they would like to vote for, and then cast their votes by merely handing over the ballot sheet back to electoral official. Some of the existing systems are:

I.Paper-based votingii.Direct recording

2 electronic voting machineries.

3 Punch card

Proposed system

This Online Voting System will manage the Voter's information by which voter can login and use his voting rights. There is a DATABASE which is maintained by the ELECTION COMMISION OF INDIA in which complete data of voter with complete information is stored. At the time of registration voter will be asked for this: Full name, age,aadhar card no, mobile no. email id, finger prints and verified the details by administrator. At the time of requesting vote, voter will be asked to enter his aadhar id. Then voter will be authenticated, and he can give vote from one of the candidate from the list.If voter already has AADHAR Id then he/she don't need to register,else before voting he/she need register himself/herself in AADHAR database.

The system is very simple in design and to implement. The system requires very low system resources and the system will work in almost all configurations. It has got following features:

✓ Needs a lot of working staff and extra attention on all the records.

✓ Ensure data accuracy.

✓ Records are efficiently maintained by DBMS.

✓ DBMS also provides security for the information.

✓ Any person across the world, having internet can access this service.

✓ Availability of seats can be enquired very easily.

The new implemented voting protocol has two main players: The voter and administrator

sections. The voter(which can be found at home, in a working station, in a special polling station or any other device have the function of performing the Authentication and voting).The administrator performs the function of voter and candidate registration, authorization and validation of voter, database and counting and the result.

The main advantages of the new protocol are the following:

1. Public transparency by the administrator (publication of Voter ID key, etc.).

2. Inured to technical troubles like interruption of access, etc, uncomplicated recovery.

3. Possibility of configuration for different voting models by policies and Greater performance.

Implementation & Architecture Design

Now we write the main function of this project

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<h1 style="color: RED;font-family:chiller">India India India</h1>

</center>

<b style="color:magenta">Welcome To E-voting Machine

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<div>

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<legend> E-voting system for 2020

</legend>

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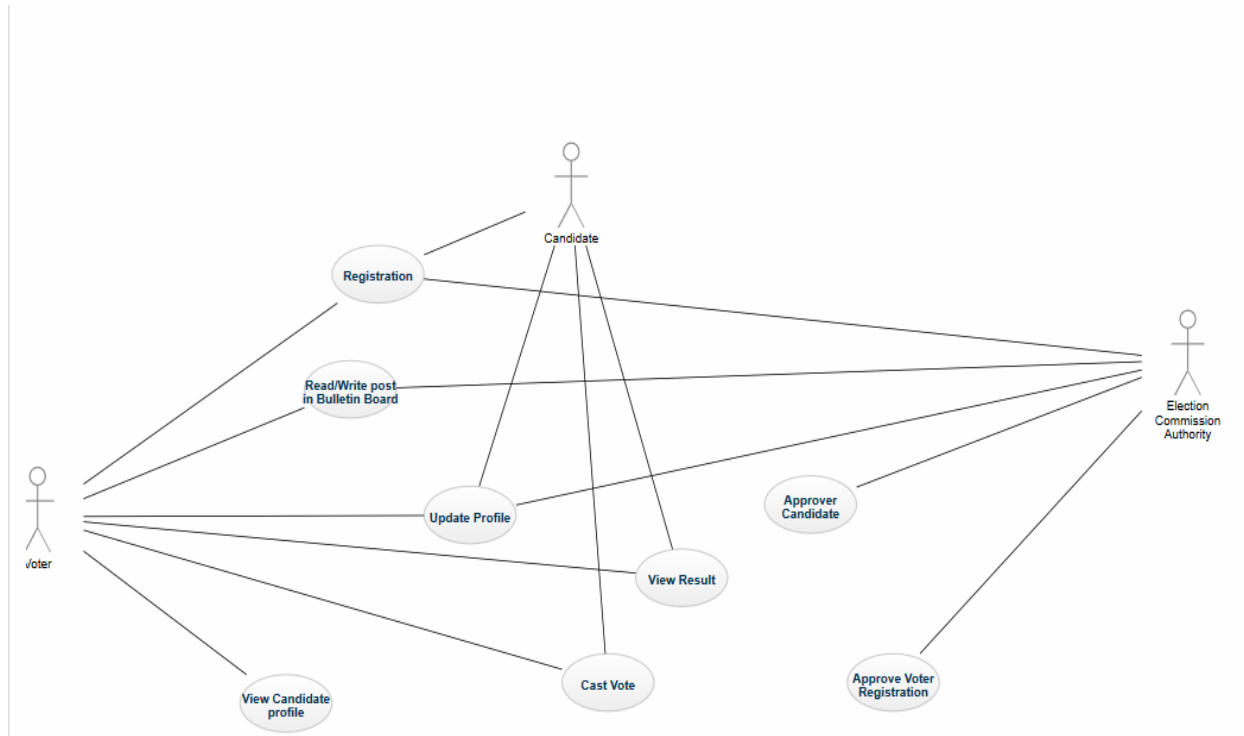
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<label>DOB :</label>&nbsp &nbsp

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<option value="BSP">BSP</option>

<option value="CPI">CPI </option>

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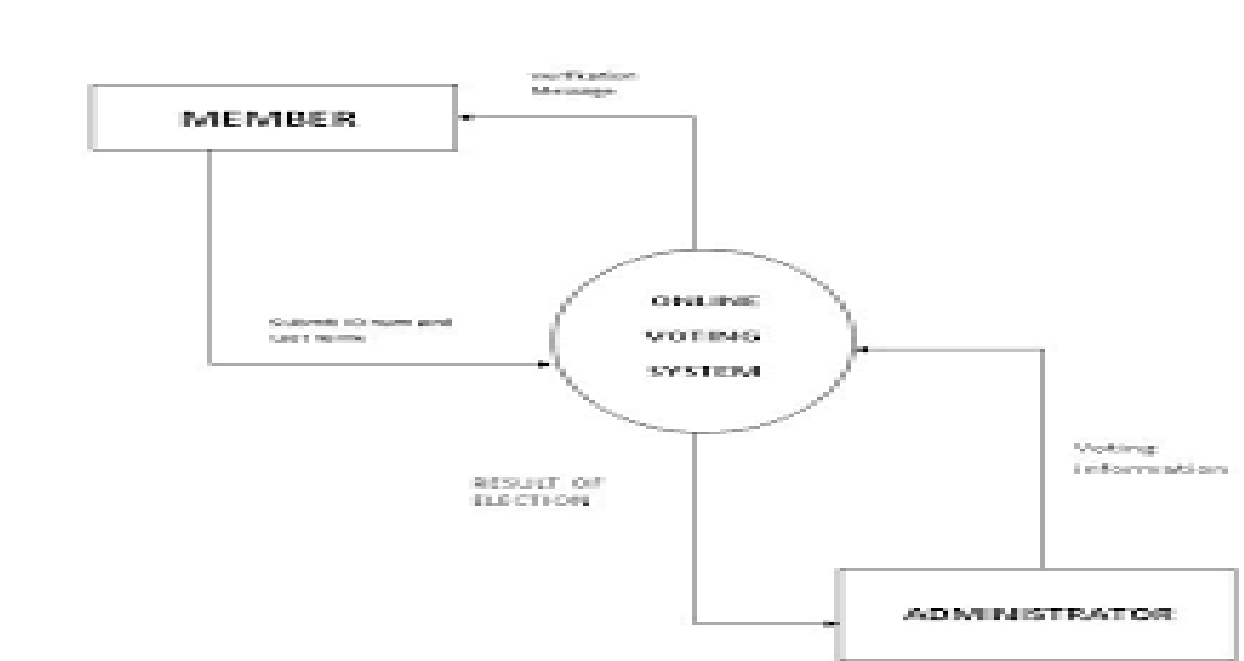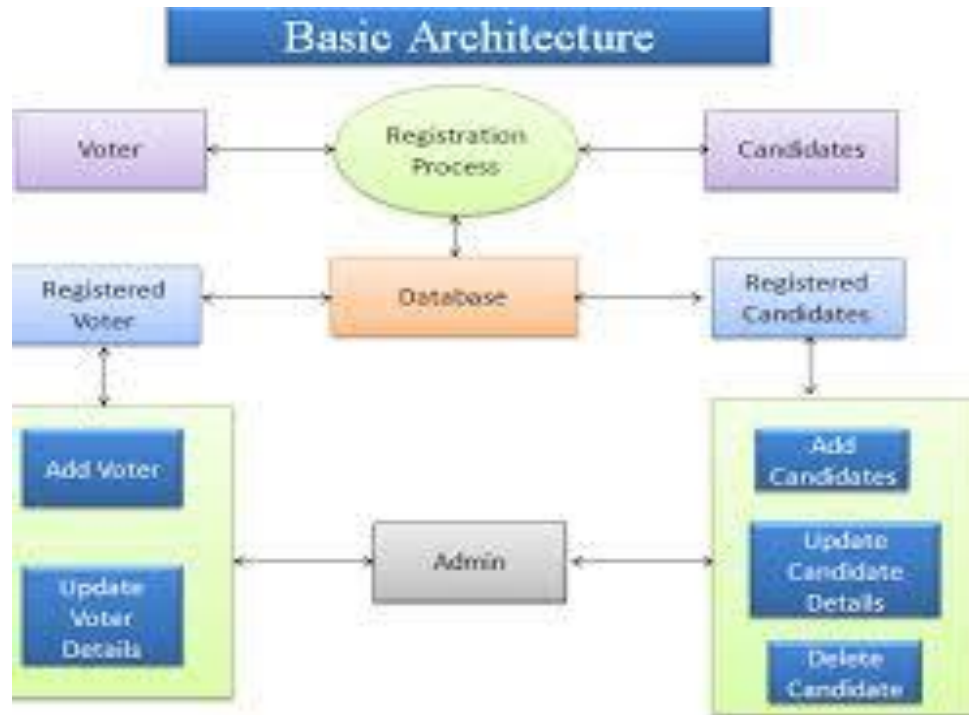
Use Case diagram

Data flow diagram

Architecture Diagram

Output / Result / Screenshot

Conclusion/Future Enhancement

This paper described the types of electronic voting systems and essential security properties of electronic voting systems. It aimed to design and implement a real application for an electronic voting system for Muni University. It satisfied the important properties such as receipt-freeness, verifiability, authentication, and integrity, efficient and easy-to-use graphical interface, saves money, time requirement. Furthermore, the integrated system would avail the electorates the opportunity of casting their votes using the most convenient medium among the e-voting. The adoption of the integrated system increased the level of participation in the institution because of the ease of voting and its tendency to eliminate electoral fraud. We, therefore, recommend that the Muni University should put the E-Voting technology at practice to phase out the traditional voting system. More rudiments to be focused on biometric technology to capture the real identity of the voter and broaden the security requirements of non-repudiation.

People always want to find the way to make their life easy and comfortable. Currently, we depend on the web pages much for everything such as- searching; purchase desire goods etc. as there are many web applications depend on various requirements. Today's web applications are rich internet applications and developers are much concerned about applications security issues while they are developing their products. A user friendly system becomes popular rapidly and thus benefits both the system developer and its users.

Future Enhancement

future we can add an SMS query also.ie we will get the result updates at the time of counting. To receive the SMS we need to register with our mobile number in the site**.**

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