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Online Voting System

Prateek Kumar Singh
M.Tech Scholar
Department of Computer Science & Engineering
Al- Falah School of Engineering & Technology
Faridabad, Haryana

Shamshad Ali
Assistant Professor
Department of Computer Science & Engineering
Al- Falah School of Engineering & Technology
Faridabad, Haryana

ABSTRACT
The project "Online Voting System" aims at making the voting process easy in cooperative societies. Now voting is performed using ballot paper and the counting is done manually, so it consumes a lot of time. There can be possibility of invalid votes. All these make election a difficult task. In this proposed system voting and counting is done with the help of computer system. It saves time, avoid errors in counting and there will be no invalid votes.
While developing we have been inspired by the phrase and absorbed it throughout the make of our project. While developing software we tried our level best to get close to the output required by the user. The existing systems in the Online Voting System are handled manually and are therefore lengthy and inefficient in operation.
This software is developed in Visual Studio 2010, it has a simple but attractive user interface and its future implementation is widely opened. This has put us into challenging phases of programming and ups and down of the system development. Working on this project was a good experience. We understood the importance of planning and designing as a part of software development. Over all, it has been an adventurous activity and we enjoyed doing it to reach our best of capability.

Keywords — the project "Online Voting Software" aims at making the voting process easy in cooperative societies. Presently voting is performed using ballot paper and the counting is done manually, so it consumes more time. There can be possibility of invalid votes. All these make election a tedious task. In our proposed system voting and counting is done with the help of computer. It saves time, avoid error in counting and there will be no invalid votes.

1.1 INTRODUCTION

Traditional voting system:
A voting system includes the practices and associated documentation used to identify system components and versions of such components; to test the system during its development and maintenance; to maintain records of system errors or defects; to determine specific changes made after initial certification; and to make available any materials to the voter (such as notices, instructions, forms, or paper ballots).
Traditionally, a voting machine has been defined by the mechanism the system uses to cast votes and further categorized by the location where the system tabulates the votes.

Voting machines have different levels of usability, security, efficiency and accuracy. Certain systems may be more or less accessible to all voters, or not accessible to those voters with certain types of disabilities. They can also have an effect on the public's ability to oversee elections...be. Done fast.

1.2 Limitations in Manual System

Electronic voting system has the potential to produce the election result with much greateraccuracy than traditional paper-based voting systems achieve. They also have the potential to stimulate higher voter turnout, as well as reduce the logistical and administrative costs of an election, by allowing citizens to vote from their homes instead of channeling all voter participation through public polling sites. Electronic voting also creates several major risks that are either less severe or nonexistent in traditional voting system.

Requirement for online voting system

Three key criteria for a successful voting system are often cited in relation to electronic polling: security, anonymity, and transparency. The security criterion entails that votes transmitted through the system can not be altered, or that votes cannot be added or removed illegitimately. Anonymity refers to the protection of voters from having their votes traced to them so that they will not be exposed tocoercion due to their political views. Transparency entails that the election process can be independently audited in order to ensure that all procedures are followed faithfully and as prescribed.

This report will examine several high-profile proposals for voting systems, how each of them addresses the three requirements mentioned above, and how (if at all) an electronic system could satisfy these criteria to the same degree that traditional voting systems do.

2. Proposed online voting system

2.1 Abstract:

The project "Online Voting Software" aims at making the voting process easy in cooperative societies. Presently voting is performed using ballot paper and the counting is done manually, hence it consumes a lot of time. There can be possibility of invalid votes. All these make election a tedious task. In our proposed system voting and counting is done with the help of computer. It saves time, avoid error in counting and there will be no invalid votes.

2.2 Functional Requirements:

•To count the total number of votes. •To calculate the percentage of total votes. •To calculate votes for each candidate. •To calculate percentage of votes for each candidate. •To check for duplication. •To find the winning persons in each section. •All the process above mentioned should be done fast.

Details:

Modules we have devised the following modules according to the requirements of the organization. •Administrator Module •User Module Administrator has the whole authority of the organization .He is the one who maintains all the aspects of voters and candidates. His functionalities include insertion, updating, deletion of both the voter and the candidate. He is responsible for allowing persons to vote. User's have the provision to view the list of voters' candidates and results and to vote for their desired candidate.

WORKING-:

In "ONLINE VOTING SYSTEM" a voter can use his\her voting right online without any difficulty. He\She has to fill a registration form to register himself\herself. All the entries is checked by the DATABASE which has already all information about the voter. If all the entries are correct then a USER ID and PASSWORD is given to the voter, by using that ID and PASSWORD he\she can use his\her vote. If conditions are wrong then that entry will be discarded.

2.3 About online voting system

"ONLINE VOTING SYSTEM" is an online voting technique. It is based on the other online services like "ONLINE RESERVATION SYSTEM" .In this system people who have citizenship of INDIA and whose age is above 18 years of any [censored] can give his\her vote online without going to any polling booth. There is a DATABASE which is maintained by the admin in which all the names of voter with complete information is stored.

An online voting system will help to increase voter responses. Low response rates are often due to a lack of time or motivation in having to complete forms and make the effort - or remember - to post them.
A secure online voting option allows voters to access any ballot via the internet wherever they are, whenever they like. Because most people are online at some point during the day, they would be more inclined to complete a simple, three-minute online form than pick up a pen, manually complete a set of questions, put the form in an envelope and take it to the post box.
When choosing a system, look for one that can be tailored to your specific needs and seamlessly integrated into your own website so that voters will not feel their online security is being jeopardised by being pulled away to an external website.
Additionally, make sure that any system you consider has been consumer tested and is flexible enough to fit your required format. Choose a specialist supplier with experience in elections administration and preferably one who can also help you with the print and mailing side of your project too so that the entire election project works flawlessly.
Other benefits of online voting systems are that they considerably cut back on the manpower and facilities needed for manual response handling, as well as providing a modern image for the institution conducting the election.

2.4 Advantage of online voting system

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3. ONLINE VOTING SYSTEM INCORPORATES A NUMBER OF UNIQUE CHARACTERISTICS

The main objectives of system for **Online voting system** are:

- The objective of **Online voting system** is to help the organization in automating the whole manual processing of the existing system.
- The main objective to develop the system is to make the accurate & efficient decisions in different tasks at different time at different situations. The existing system is manual so members of the unit generally face a lot of embarrassing situations many times. Now they need to automate the whole process so as to make it more easy and accurate.
- System should support multi-user environment.
- System should be fully automated.
- System should provide concrete security.
- System should be capable to keep track of all the detailed descriptions of the user and the whole details of services offered by the voting system.
- Various outputs (reports) should be available online any time.

3.1 Scope

The scope of the project that is hosted on the server. There is a DATABASE which is maintainer by the administrator of voting system in which all the names of voter with complete information is stored.

3.2 Technologies to be used

This project will be a Web application to be developed in .NET having

- Database Design (My SQL)
- Form Design (ASP.NET 4.0)
- Coding (ASP.NET,C#)
- Testing()
- Reporting Tool (Data Report.

4. OVERALL DESCRIPTION

4.1 Goals of proposed system

1. **Planned approach towards working: -** The working in the organization will be well planned and organized. The data will be stored properly in data stores, which will help in retrieval of information as well as its storage.

2. **Accuracy: -** The level of accuracy in the proposed system will be higher. All operation would be done correctly and it ensures that whatever information is coming from the center is accurate.

3. **Reliability: -** The reliability of the proposed system will be high due to the above state reasons. The reason for the increased reliability of the system is that now there would be proper storage of information.

4. **No Redundancy: -** In the proposed system utmost care would be that no information is repeated anywhere, in storage. This would assure economic use of storage space and consistency in the data stored.

4.2 Background

ONLINE VOTING SYSTEM is a voting system by which any Voter can use his\her voting rights from anywhere in India. ONLINE VOTING SYSTEM store detail -:

- Voter's information in DB.
- Voter's Name with ID.
- Voter's vote in a DB.
- Calculation of total number of votes obtain by candidates.

Main Module in this project

- Administrator
- Voters detail
- Candidates detail

INPUT /OUTPUT FORM DESIGN

Input Design

In this design, user originated inputs are converted to a computer based format.
It also includes determining the record media, method of input, speed if capture and entry into the system.

Output Design

Computer output is the most important and direct source of information to the users.
Efficient, intelligible output design should improve the system's relation with the user
And help in decision making.

TESTING OBJECTIVES:

The main objective of testing is to uncover a host of errors, systematically and with min. effort and time. Stating formally, we can say,

1. Testing is a process of executing a program with the intent of finding an error.
2. A successful test is one that uncovers error.
3. A good test case is one that has a high probability of finding error, if it exists in voting system.

How to Implementation:

System implementation is the stage when the user has thoroughly tested the system and approved all the features provided by the system. The various tests are performed and the system is approved only after all the requirements are met and the user is satisfied.

The new system may be totally new; replacing an existing manual or automated system, or it may be a major modification to an existing system. In either case, proper implementation is essential to provide a reliable system to meet organizational requirements. Successful implementation may not guarantee improvement in the organization using the new system (that is a design question), but improper will prevent it.
Aspects of Implementation

The two aspects of implementation are:

- Training Personnel
- Conversion Procedure

TRAINING

When designed and technically elegant systems can succeed or fail because of the way they are used. Therefore the quality of the training received by the personnel involved with the system in various ways helps or hinders, and may even prevent, the successful implementation of an information system.
Since, Human Resource Recruitment Process is web-based and user friendly, not much effort was required in training process.

CONVERSION:

Conversion is the process of changing from the old system to the new system. There are two methods of handling systems conversion:

- Parallel Run
- Immediate cut-off

IMPLEMENTATION TOOLS:

The project was implemented using Visual Studio 2010 .The implementation work was carried out in Windows 7 server platform etc.

- Visual Studio 2010.
- SQL Server 2008,C#,ASP.NET using SQL server.

SYSTEM SECURITY

One might think that there is a little reason to be concerned about security in an intranet. After all, by definition an intranet is internal to ones' organization; outsider can not access it. There are strong arguments for the position that an intranet should be completely open to its users, with little or no security. One might not have considered ones' intranet on any other light.
On the other hand, implementing some simple, built-in security measures in ones' intranet can allow one to provide resources one might not have considered possible in such context. For example, one can give access to some Web Pages to some people without them available to one entire customer base, with several kinds of authentication.
Intranet security is, then, a multifaceted issue, with both opportunities and dangers, especially if ones' network is part of the Intranet.

Need for Security:

Many people view computer and network security in a negative light, thinking of it only in terms of restricting access to services. One major view of network security is "that which is not expressly permitted is denied." Although this is a good way of thinking about how to connect other organization to the internet, one can, and possibly should, view intranet security from a more positive angle. Property set up, intranet security can be an enabler, enriching ones' intranet with services and resources one would not otherwise be able to provide. Such an overall security policy might be described as "that which is not expressly denied is permitted."

Security Features of an Intranet:-

First, one can take steps on ones' Web server to set up security.

Second, one can take steps with the other TCP/IP network services one has set up on ones' intranet to enhance their security.

Third, one can secure customers' Web browsers themselves to limit what they can do with them.

a)Web server Security
b) An Important Warning About Hostname/ IP Address Authentication
c) Secure/ Encrypted Transactions
d) Intranet and the Internet
e) Firewalls

CONCLUSION

"THE ABILITY TO DREAM, THE WILL TO DO"

While developing we have been inspired by the phrase and absorbed it throughout the make of our project. While developing software we tried our level best to get close to the output required by the client. The existing systems in the E-Commerce are handled manually and are therefore lengthy and inefficient in operation.

As this software is developed in Visual Studio 2010, it has a simple but attractive user interface and its future implementation is widely opened. This has put us into challenging phases of programming and ups and down of the system development. Working on this project was a good experience. We understood the importance of planning and designing as a part of software development. Over all, it has been an adventurous activity and we enjoyed doing it to reach our best of capability.

FUTURE SCOPE

Everything requires modification and new implementation according to need or due to other reason. In the following proposed project following areas can be implemented in future.

- It is connected with the network for easily retrieved data and many location or many districts or cities in different states.
- All the information can be easily accessed the Voter like their details, voting status, poll result.
- Report on the different basis will be easy created on the demand.
- It can be modify and the others details can be easily provided to administrator.
- Option for customizing environment.
- New security features.

With its emphasis on a more strategic decision making process is fast gaining ground as a popular outsourced function. The return on immediate result, simply because of the reduced time and increased ease of processes. The technology is skill-based with automated pre-screening features which is the next step.

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