ONLINE VOTING SYSTEM

MINOR PROJECT SYNOPSIS

BACHELOR OF TECHNOLOGY

 ${\bf Information\ Technology}$

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1 Introduction

Online Voting System/Electronic Voting is voting that uses electronic (online) means to either aid or take care of casting and counting votes. In an online voting election, votes can only be cast by eligible voters. They are then encrypted on the voter's computer or smartphone, just after they are created, and are kept protected until they are counted. Also, no vote can be added, modified or removed from the ballot box in order to alter the final election result. In fact, a state-of-the-art online voting mechanism should offer higher security measures than regular paper voting, as well as any postal voting system. With online voting, every voter is guaranteed an accessible and secure voting method, their votes remain private and confidential, and they can participate in an election from anywhere, at any time. A worthy e-voting system must perform most of these tasks while complying with a set of standards established by regulatory bodies, and must also be capable to deal successfully with strong requirements associated with security, accuracy, integrity, swiftness, privacy, auditability, accessibility, cost-effectiveness, scalability and ecological sustainability.

Rationale:

Online Voting System tools and online election voting systems help you make important decisions by gathering the input of a group in a way that's systematic and verificable.

Often times, these decisions are made on an yearly basis - during an event or at a particular time of the year. Or might run ongoing polls amongst any group.

Just like leadership elections, expect group members to react strongly toward changes to organizational processes. To colect individual responses to these changes in a systematic manner.

2 Objectives

The Online-voting system provides a voting service that allows people to vote from any poll site in the country Online/electronically. This system encompasses legal, regulatory, behavioral, and sociological aspects of the current voting system, while adding additional convenience and security to the overall voting process.

This system is designed to improve the current voting process in the following ways

- 1. Allow voters to vote from any poll site in the country without the use of absentee ballots
- 2. Reduce the number of legitimate votes not counted by reducing the number of over-votes, and eliminating vote tampering
- 3. Improve the registration process by allowing voters to check their registration status prior to voting and centralizing registration databases
- 4. Increase voter confidence and improve the voting experience

3 Feasibility Study

✓ Technology strengths: The system will utilize the technology and make benefits of it. New infrastructure will be added, and the system will reflect the effect of technology on the public live and will encourage innovation.

✓ Political: In spite of the abovementioned shortcomings, there are many opportunities for E-Voting/Online-Voting to grow. The political willingness of leaders to build and automate the voting process creates an opportunity for businesses to show their commitment to E Voting, and government may help in planning, designing and implementing such a system.

✓ Economic: People with IT proficiency have better opportunities for employment since computer literacy is a requirement for most industries. Thus, people are motivated to learn computer skills. Time constraints are another motive to urge the public to adopt e-Services.

✓ Social: The system provide opportunities for the society as it direct their attention to the technology and how it can they help them in their live to improve, provide opportunities for voters to get rid from their fairs of frauds by all its means or affecting their opinions.

✓ Technology: The development of new technology applications presents opportunities for better, cheaper and more efficient e-services.

4 Methodology

The topic allocated to us for the Minor project is "Online-Voting System". Here, the client establishes a connection with the server, this implies that the TCP protocol is being used. The Server should allocate a new thread for every new incoming Client, to accomplish this feature we took care of concurrent thread, that is, when the number of connections are made with the server, that time each thread doesn't interfere with one another. Therefore, we synchronized the threads.

- ❖ Design and Implementation:
- 1. A secure server that only allows clients with authentic names and passwords to cast votes.
- 2. Server checks for authenticity of the client & also checks if client has already voted. It returns a message to the client according to the security check.
 - 3. Voters are registered by admin and the voter list is stored in a csv file.
 - 4. Server can take the client name and password and match it with the txt file.
 - 5. If details match, then the voter is redirected to the secured Voting page.
- 6. The voters will then cast the vote by mentioning the poll symbol of the candidate from the candidate list provided by the server.
 - 7. The system (server) can handle multiple clients and creates a new thread for each of them.
 - 8. One client can cast a vote once and only once.

5 Facilities required for proposed work

Software Requirements for the project

- → PHP/Mysqli
- $\boldsymbol{\rightarrow}$ MySQL Database
- → HTML, CSS, Javascript (jQuery and Ajax)
- \rightarrow Bootstrap

6 References

- $\hbox{ [1] M. Shell. (2007) IEEE tran webpage on CTAN. [Online]. Available: $http://www.ctan.org/tex-archive/macros/latex_latex$
- ${\bf [2]}\ www.blogspot/shah-deep/Online-Voting-System/blob/main/Report$
- [3] https://getbootstrap.com/docs/5.0/getting-started/javascript/
- $\textbf{[4]}\ \ \text{https://www.php.net/manual/en/book.mysqli.php}$