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PROJECT PROPOSAL
PF-LAB

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“ONLINE VOTING SYSTEM”

Background:

The idea of an Online Voting System stems from the persistent need to modernize and streamline traditional voting methods. As technology advanced, so did the ambition to make voting more accessible and convenient. This project is all about using our coding skills to create a voting system that's not just easy to use but also super secure. We want you to think about the big picture like how this can change the way we do democracy. What about security? What if someone tries to mess with the votes? These are the kinds of challenges you'll be tackling.

Introduction:

Our project "Online Voting System" is a computer-based C++ program project which we developed to facilitate the voting process for users. The system allows users to cast their votes for different political parties in an election.

The Online Voting System project is an innovative solution that aims to streamline and modernize the voting process. It leverages technology to provide a secure, reliable, and convenient method for voters to cast their votes remotely using the internet. This project seeks to enhance accessibility, increase voter participation, and ensure the integrity of the voting process.

Voting Casting Process:

Users enter their personal details such as name, father's name, CNIC, mobile number, and age. The system ensures the uniqueness of votes by validating CNICs. Users can cast their votes for their preferred political party which are:

1. TLP (Tehreek-e-Labbaik)
2. PTI (Pakistan Tahreek-e-Insaf)
3. PMLN (Pakistan Muslim League)
4. PPP (Pakistan People Party)

The system records the votes and also prevents duplicate voting. User can check the total number of votes cast. Detail information about votes for each political party is available. The system displays the number of votes for each political party. The system provides an option to exit when the user is done. Our project's aims to provide an efficient and secure way for users to participate in the voting process, contributing to a more streamlined and transparent election experience.

Problem Statement:

Traditional voting methods often suffer from various challenges such as limited accessibility, long queues, geographical constraints, and the potential for errors or fraud. Paper-based systems are time-consuming, resource-intensive, and prone to inaccuracies. The Online Voting System addresses these issues by providing a user-friendly digital platform where eligible voters can cast their votes remotely, increasing convenience and participation.

Goals and Objectives:

1. Enhance Accessibility:
   The system aims to make voting accessible to a wider population, including those with physical disabilities or residing in remote areas.
2. Ensure Security and Authentication:
   The Online Voting System project focuses on implementing robust security measures to ensure voter authentication, data

integrity, and protection against unauthorized access or manipulation.

3. Improve Efficiency:
   By digitizing the voting process, the project aims to streamline operations and eliminate manual handling of ballots. This improves the overall speed and accuracy of the voting process, leading to timely and reliable election results.
4. Maintain Voter Privacy:
   The Online Voting System project prioritizes the privacy of individual voters. It ensures that votes are cast anonymously.

Benefits:

1. Improved accessibility, enabling more citizens to participate in the voting process.

2. Enhanced efficiency and reduced costs associated with traditional voting methods.

3. Increased transparency and accuracy in the recording and counting of votes.

4. Minimized errors and reduced potential for fraud or tampering.

5. Timely and efficient election results.

Contribution:

Our contribution to this project involves:

- Coding a secure and user-friendly Online Voting System, enhancing the accessibility of the democratic process.
- It improving efficiency, ensuring participation, transparency, providing timely result, and driving technological innovation.

Scope:

The scope of an online voting system project includes designing a secure platform for voters to cast their votes remotely, implementing authentication measures, ensuring data integrity, and incorporating user-friendly interfaces. Consideration of legal and privacy aspects, scalability, and accessibility are also crucial components within the project scope.

Limitations:

I am using C++ for months and my grip on C++ needs bit more concentration some features of C++ are very important in precising the making easy and understandable the “Program”.

For me those features and functions are needed to be more furnished and flourished.

- *C++ doesn’t support the garbage collection feature which were difficult to handle.*
- *It means all the allocated memory will directly go into the developer’s hands, which is not efficient and professional for the programmer.*
- *Cannot support built-in code threads.*
- *It demands object-oriented programming concepts which were beyond our knowledge.*
    - *Hope so in future C++ will have more and more features to overcome these problems*
    - *Also INSHA-ALLAH I’ll be much able to understand and to make good and unique Error-Free programs.*

CONCLUSION:

“Online Voting System is a simple and unique program used to record votes in place of ballot papers and boxes which were used earlier in conventional voting system. It is a great idea as it is current issue and these days are also supporting this unique program because of Election Days.

It is built to take user options and to cast vote of chosen party and to see the Final results. Hope you’ll like this little bit effort”