MODERN ERA VOTING SYSTEM

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ABSTRACT

E Voting is mostly observed as a special technique so that the voting system gets improved, also at the same time mutual trust be maintained between everyone. True functioning of online voting will prosper the security at various levels of the ballot, processing result speed and process of voting become easier. Sometimes, the challenges are considerable. If their is lack of planning and designing, it help to regain faith in entire system. This content guides us to all the issues which can cause the success and failure of this solution and gives them proper look before choosing to introduce new voting technologies. The development in mobile devices, wireless, android technologies and data communication results in easier and enhanced e-voting system where we can cast votes and gets result with higher convenience and efficiency which even reduces mistake rate of ballot examination. Web technologies improves growth of the new application which will result in proficient voting process. This is a convenient way, to not only capture but to count the votes in end. This project describes about e-voting using an Android platform. Without using pooling booth voting can be completed. Authentication is provided to restrict false vote. The results will be available in minutes after entire process. Proper Encryption and storage of all the votes is done in database to avoid any interference from anyone other than Administrator.

KEYWORDS: *E-Voting, Camera Access, One Time Password (OTP)*

LITERATURE SURVEY

During Covid Pandemic as the entire world was stuck in their home. New Concepts like Work from Home and Classes from became a day to day part of our life. Inspired by them another concept of Voting from our home came into our mind. Also Indian Government started working on this idea. Various countries Switzerland and France etc. already have well establish online voting base. Various organisations have put forward their ideas along with models but the government is very careful and needs a total surety and security.

We have taken ideas from various research paper and journals available on Internet. Ideas of various organisations were also covered by us before taking by us.

In India itself, Telangana became the first to claim having developed country's first Smartphone-based e-voting solution. Various news sites like the hindu , news18 , times of india wrote about them which are available to know more about the concept.

INTRODUCTION

Two phases are part of this entire e-voting technique- the "registration phase" and the "login phase". As part of registration phase required information is provided by user in order to get secure password. As part of second phase user can login and cast vote from any place of his choosing. Administrator is managing the entire operation. The results will be announced by admin after completion of entire session. Encrypted votes are stored in database for administrator to manage and maintain. Thus, Resulting in safe and secure functioning of process. All the fears and dangerous threats have prohibited online voting to grow further. While most countries are still conceptualizing or testing e-voting systems, three cantons in Switzerland have pioneered the development of e-voting to its full technological maturity Our Country should also go toe to toe with rest of world to gain benefit from new improvement. Long queues are a main reason for Voters leaving without voting.

- Some ballots are lost as well as stolen. Others are sometimes miscounted.

- Presence of invalid ballots limited and no arrangement for disable people.

- Weather conditioning might become barrier in some people way.

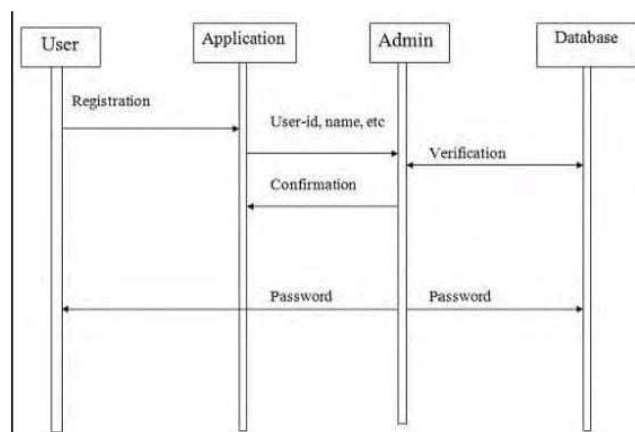- Party agents and workers can threat common people.

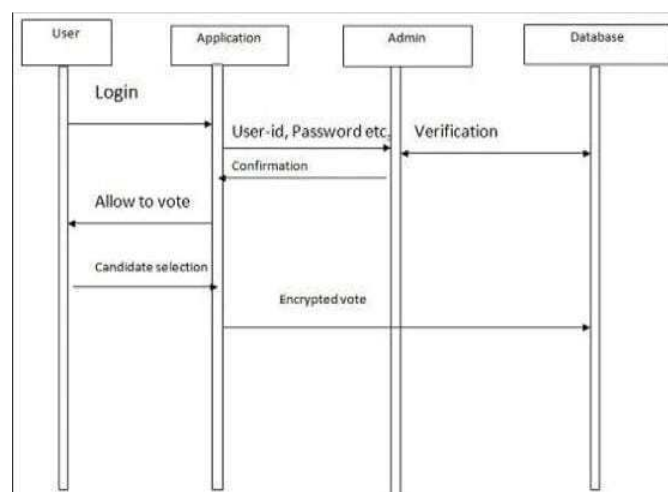**Figure 1: Sequence Diagram of Registration.**

Figure 2: The Voting Process.

METHODS

Proposed System

- Colleges, schools and other institutions have conducted an exhaustive survey.

- To identify and rectify various limitations and problems existing in traditional voting systems used in elections and prepare a document specifying requirement for advanced and safe process.

- Analysed various open source databases available at present. Performed a strategic comparison with the traditional databases and finally Google Firebase database was selected to store app's data. Firebase is an efficient platform to build mobile backend services.

- Spread sheet is used to store collected data. Both college roll number and Gmail id is needed to be collected from student. Spread sheet will also include post of candidate.

- In the next step data is imported in Google Firebase.
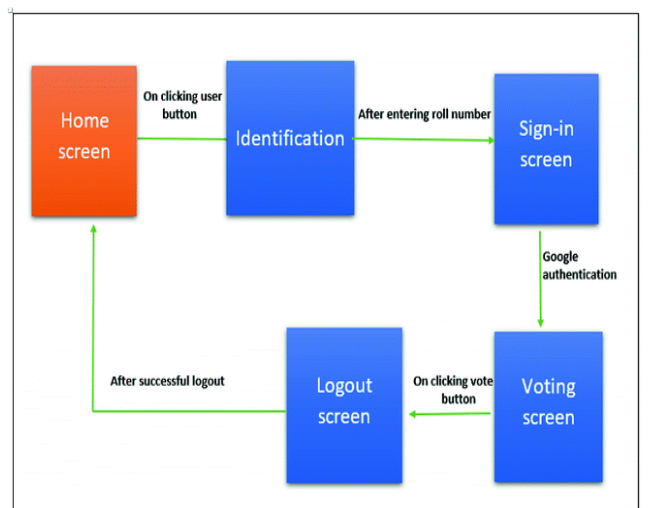
- JSON format files are only supportive for import

Figure 3: Block Diagram.

Existing System

In today's system, individual physically go to the booth to cast their respective vote. Voters have no past details as well as future ideas of the particular candidate.

Implementation

- Smart devices users can cast vote which will be monitored by user.

- Every Voter will have to initially register. Hence system will contain their details.

- This entire process will keep every safety criteria in mind. No right any voter is violated.

- The application will successfully run in any Smart device irrespective of OS and version

Three Phases on which it will Work –

- REGISTRATION PHASE

- LOGIN AND VOTING PROCESS
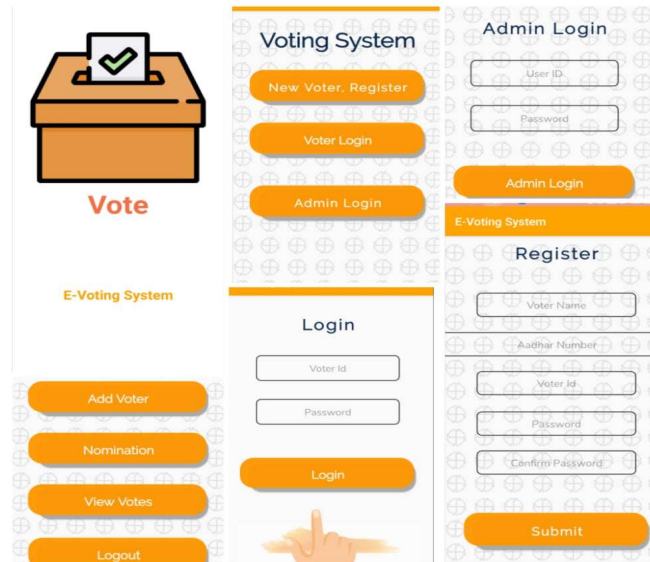
- E-VOTING SYSTEM SECURITY LEVELS

Figure 4

RESULTS AND DISCUSSION

This voting app will help the users to cast vote from the comfort of their home so this can lead to higher voting percentage. It is a remote system so can be easily accessed from anywhere. The app helps in managing the things sequentially. Duplicate voters can be avoided. A major problem is that each individual should have a smart phone or device with proper internet connection and the second major problem with the system is that the validation cannot be 100% accurate there is always some point of figure left uncovered.

Figure 5

CONCLUSION

People involved in E-Voting are increasing day by day because of benefits it provided. Security is primary criteria in such services which result in either success or failure of the project. Voter ID and Card based security might not work if not checked with total concentration. Hence, the use online voting should be preferred for this.

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