

Ipeity Based Voting System

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Abstract - QR scanning of Aadhaar database serves to identify that the person authenticating is who he/she claims to be. Aadhaar identification is popular technique due to easiness in acquiring, availability of plenty sources for collecting data and their established use. This paper summarizes the research work carried out in aadhaar based authenticating technique, recognition methods and their performance analysis.

Key Words: QR Scanner, Aadhaar Authentication, Aadhaar Database, Cloud Database, Voting Console, OTP Registration.

1. Introduction

Ipeity Based Voting Project is an application where the user is recognised by his/her aadhaar authentication. Since the aadhaar authentication of each voter is different, the voter can be easily authenticated. The system allow the voter to vote through his aadhaar card. Aadhaar details is used to uniquely identify the user.

The aadhar features are different for each voter. Aadhaar database is used as an authentication of the voters. Voter can vote the candidate only once, the system will not allow the candidate to vote for the second time. The system will allow admin to add the candidate name and candidate group icon who are nominated for the election. Admin only has the right to add candidate name and group icon who are nominated. Admin will verify the voter's identity by checking Aadhaar UID. The number of candidate added to the system by the admin will be automatically deleted after the completion of the election. Admin has to add the date when the election going to end.

The user can vote for the candidate who are nominated by using Aadhaar & biometry. The system will allow the user to vote for only one candidate. The system will allow the user to vote for one time for a particular election, more than one vote by voter will be notified to the authorities and system will give alert message .Admin can add any number of candidates when the new election will be announced. Admin can view the election result by using the election id.

1.1 Existing System

The Council of Europe recommendations defined electronic voting (e-Voting) as "the use of electronic means in at least

the casting of the vote" (Krimmer, et al., 2007). Electronic voting is a term encompassing several different types of voting, embracing both electronic means of casting a vote and electronic means of counting votes. Electronic voting systems are complex distributed systems, whose components range from general-purpose PCs to optical scanners and touch-screen devices, each running some combination of commercial off-the-shelf components, proprietary firmware, or full-fledged operating systems.

1.2 Draw Backs of Existing System

- Chance for fake vote is more
- Time consuming
- Manpower for election duty is more

2. Design

2.1 Dataflow Diagram

A data flow diagram (DFD) illustrates how data is processed by a system in terms of inputs and outputs. As its name indicates its focus is on the flow of information, where data comes from, where it goes and how it is stored.

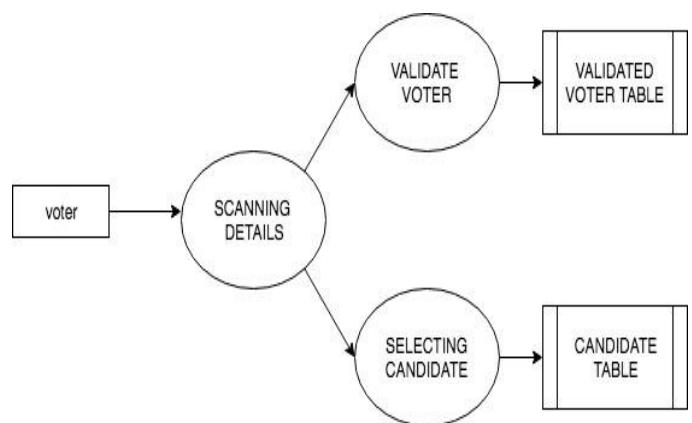


Fig 1: flowchart of voter

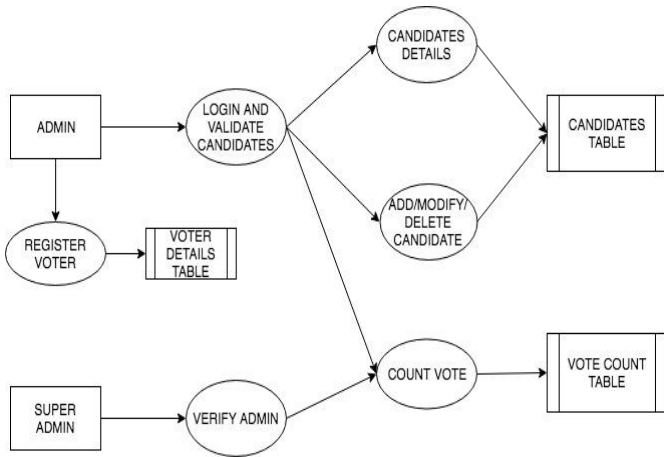


Fig 2: data flow diagram for super admin and admin

2.2 Architecture Diagram

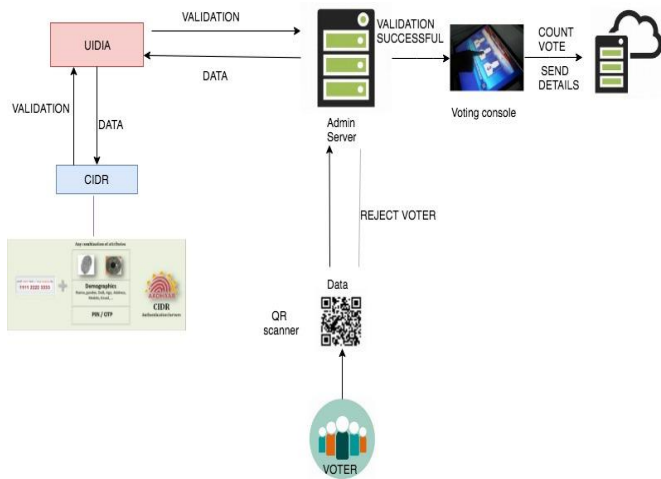


Fig 3: system architecture for ipseity based voting system
 System architecture consist of an interface for voter to register the QR. The data of the voter will be stored to the admin server, from server the voter details is validated from the data repository of aadhaar. Aadhaar data authentication permits the voter to proceed to the voting console, if authentication fails the data and the voter will be rejected from the admin database.

3. CONCLUSION

The project “IPSEITY BASED VOTING SYSTEM ” assumes ultimate solution for the existing inconveniences. After being tested and being found to be achieving what is meant for the system is 100% error free. After looking into the project we come to a better developed voting system to overcome the conventional way of voting methods and a user friendly interface, voters find it easy .By aadhaar UID, the false entries for voters can be detected. For next election the candidates names and group icon can be added and deleted from the voting machine by the super admin. This gives a secure, efficient and accurate way for the developing voting system methods. Even though initial investment of these

machines are high, This system reduce much expense by eliminating use of ballot papers transportation and storage of these ballot papers after voting, work force employed in counting of these votes and so on saves up a lot of money. Currently so many identification documents are using for the voter’s authentication, through this system we can switch into aadhaar card for secure and efficient voting process. Therefore to conclude the project “IPSEITY BASED VOTING SYSTEM” improves overall performance of voting process, and the system has been found to work efficiently , securely and effectively.

REFERENCES

- [1] Yue Liu, Ju Yang, Mingjun Liu, “Recognition of QR Code with mobile phones,” Control and Decision Conference, CCDC 2008. Chinese, pp. 203 - 206, 2-4 July 2008.
- [2] J.Neuman, "Security Criteria for Electronic Voting," Proceedings of 16th National Computer Security Conference, Baltimore USA, 1994 .
- [3] Anida Sarajlic, Narcis Behlilovic, Inna Sokolovic," A Modular Concept of E-Voting System that Protects User Privacy Using Random Password Distribution", accepted under communication.
- [4] Aidong Sun, Yan Sun and Caixing Liu, “The QR-code reorganization in illegible snapshots taken by mobile phones,” International Conference on Computational Science and its Applications, 2007. ICCSA 2007, pp. 532-538, 26-29 Aug. 2007.