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BIOMETRIC VOTING SYSTEM USING AADHAR REFERENCE

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Abstract - This system designs the prototype of biometric voting system based on Aadhaar card database. We have proposed an election voting system which is based on the fingerprint of voter which is saved as an Aadhar card number in a central government database. In the Aadhar's centralized database, the government collects biometric and demographic data of citizens and provides a 12-digit unique identity number to individuals. Fingerprint biometric provides secure authentication because the fingerprint is unique to each individual. The fingerprints available in the Aadhaar database are used for the candidature verification, which will be stored in the computer through which the further process is carried out. A fingerprint module is used for accessing fingerprint Once the user gives the finger print it will be compared with the existing data and if it is a genuine user it will be verified else the user is barred from voting and also if a user attempts to vote for the second time it will not be allowed

***Keyword's*: Election, Democrcay, Thumb impression, Aadhar Database, Voter Authentication,**

1. INTRODUCTION

As we know, in every country Election is a basic process of democracy which allows people to show their opinions by selecting their candidate. India is spending huge money to improve our whole voting system to provide a better government to citizens. In India, the voting system should be honest, translucent and fully secure for better democracy. To allow the exercise of this right, almost all voting systems around the world include the following steps: voter identification and authentication, voting and recording of votes cast, vote counting, publication of election results.

In this paper we have used thumb impression for the purpose of voter identification or authentication. As the thumb impression of every individual is unique, it helps in maximizing the accuracy. The thumb impression of all the voters is collected from Aadhar Database. Illegal votes and repetition of votes is checked for in this system. Hence if this system is employed the elections would be fair and free from rigging.

1.1 Existing system

From 1998, Ballot boxes were replaced by Electronic Voting Machine in India. A Control Unit and a Balloting Unit, these two units are a part of Electronic Voting Machine which is connected by a five-meter cable. The Control Unit is located with the Polling Officer and therefore the Balloting Unit is located inside the voting compartment. Instead of supplying a ballot paper, the Polling Officer can press the Ballot Button. Rather than issuing a ballot paper, the Polling Officer will press the ballot Button. This will allow the voter to cast his vote by means of pressing the blue button on the voting Unit against the candidate and symbol of his choice.

1.2 Dis-advantages

The very commonly known problem is illegal voting, which is faced in every election procedure. One candidate casts the votes of all the members or few votes of the members in the list illegally. This results in the loss of votes for the other candidates who are participating and also increases the number of votes to the candidate who

performs this action. This can be done externally at the time of voting.

2. Proposed system

With the aim of conducting democratic elections, we proposed the system to Endeavour to improve the easy usage of voting machines with fingerprint authentication using Aadhaar database. The officer in the polling booth will enter the Aadhar number of the voter. Then the details of the voter will displayed and verified by the officer. Then the voter will places finger on the fingerprint scanner and the voter will gets authentic that he/she is genuine or not by checking with the aadhar database and with the voter database as if there is chance of voting a person for 2nd time. If the voter is genuine then the voter is proceed to vote or there will be message displayed as the voter is already vote in a particular time.

Advantages

- Proposed system works on a time consuming mechanism, which reduces the time taken for every single vote, so there is no need to queue on a long lines, as a result voting rate increases
- Hence the proposed biometric voting is equipped with high security and consistency which makes the system more secure from rigging.
- Each & every person's biometric details stored in aadhaar database, which will be utilised as a two-step authentication by the election commission

2.1 Final results

3. Conclusion

This system provides best solutions to problems related to the Indian voting system. This system helps to increase voting percentage. In our voting process authentication can be done using fingerprint recognition to cast voter's votes, it ensures that vote casting cannot be altered by an

unauthorized person. It requires Computer, Fingerprint scanner, and electricity.

4. Future scope

Due to time constraints, we restrict ourselves only to a minor part of the major idea that was thought. The system developed, though can perform most of the operations mentioned in this report In the project the future enhancements are to provide more security to the existing like scanning the iris and the finger stamp of the public get registered in the site, where by this we can get the 100% voting. Therefore, "the right to vote "is utilized by the public.

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