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## Biometric Voting System

*Pooja V. Gawade , Rajesh Tayade*

ASM's Institute of Management & Computer Studies MCA Institute, Thane (W) – 400604.

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### ABSTRACT

The problem of voting is still critical in terms of safety and security. This paper deals with the design and development of a web-based voting system using cloud computing and aadhaar card in order to provide a high performance with high security to the voting system. We also use web technology to make the voting system practical. The proposed Online Voting System allows the voters to authenticate using aadhaar no which is then matched with an already saved within a database that is retrieved from aadhaar card database of the government. The voting system is managed in a simpler way as all the users must login by aadhaar card number and password and click on his/her favorable candidates to cast the vote. This will increase the voting percentage in India and reduces the cost of voting process. By using aadhaar card identification it provides enough security which reduces the false votes.

**KEYWORDS:** Adhar, Biometric, Electronic Voting, Fingerprint verification, Offline voting

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### Introduction

In India there are two types of voting procedure which are used to be followed during an election. The first one is Ballot Paper System and the second one is Electronic Voting System (EVM). In the Ballot Paper system people need to cast their votes on a piece of paper issued by Election Commission of India. After casting the vote they need to drop that paper in the Ballot Box. The Electronic Voting Machine consists of two units, Control Unit and Ballot Unit. In the Electronic Voting Machine system people need to cast their vote by pressing a button against the candidate and the political party in the Ballot Unit. The vote will automatically be updated against the candidate in the Control Unit of that machine because they are interlinked with a cable. This control Unit is operated by the presiding officer.

But both the systems cannot achieve and attain proper security and authenticity. Antisocial activists can easily cast false votes by threatening people and creating terror in the locality. They sometime force genuine voters to cast their votes to a specific party by threatening them. As there is lack of security and authenticity in both systems so election procedure is not becoming transparent too much.

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### Problem Statement

To design a system

1. Allows the voters to login with aadhaar no, which is then matched with an already saved within a database that is retrieved from aadhaar card database of the government.
2. The voting system is managed in a simpler way as all the users must login by aadhaar card number and One Time password and click on his/her favorable candidates to cast the vote.

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### Goals and Objectives Goals

Identify intended voter using aadhaar card number. System is used for avoid fake voting. System provides high security for voting system. Use secured database using UID. Objectives: This is a voting system by which any voter can use his/her Voting rights from anywhere in the country. Voter can cast their votes from anyplace in the country, in highly secured way. Various drawbacks such as time consuming, consumes large volume of paper work, no direct role for the higher officials, damage of machines due to lack of attention, mass update doesn't allows users to update and edit many item simultaneously etc

## System Architecture

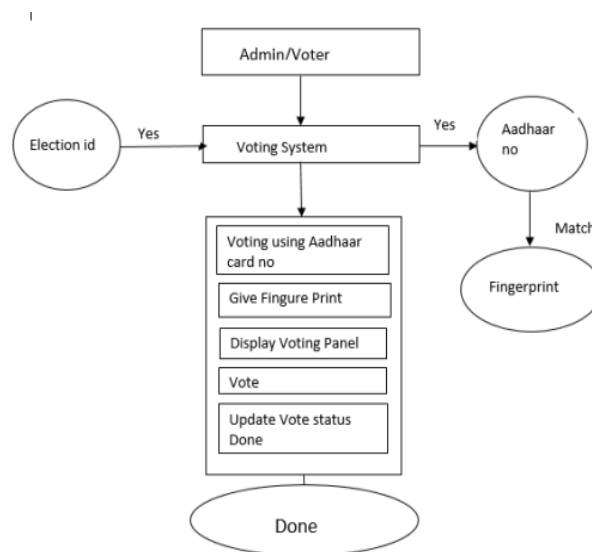


Fig -1: SYSTEM ARCHITECTURE

## 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.

## Conclusion

By using the aadhaar card we implemented the system which increases the voter's privacy. The system also managed in simpler way as well as secure to voting system. The aadhaar will provide the unique identification to each voter so the breach of privacy is get avoided. Aadhaar numbers will eventually serve as the basis for a database with which disadvantaged Indian residents can access services that have been denied to them due to lack of identification documents. In future scope, we want to implement the system for election system in India.

## References

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