

SIMPLIFIED TIME AND COST EFFECTIVE VOTING SYSTEM WITH AUTHENTICATION

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Abstract:-India is known as one of the biggest democratic country in the world. To run this democratic system the "Election Commission of India" (ECI) conducts the election in a different manner such that they select a perfect candidate who will lead the nation efficiently. Our purpose is to be change the voting system in an effective way with the help of aadhar card system (UIDAI - unique identification authority of india).Voting is the bridge between the voter and government. The last few years have brought a renewed focus on to the technology used in the voting process,The current voting system has many security loopholes .The premier reason for a government to use an electronic system is to increase election activities and to reduce the elections expenses. However there is some scope of work in electronic voting system because there is no way of identification by the electronic voting system whether the user is authentic or not. This paper provides a better security along with time and cost effectiveness in such way that voter can vote from anywhere in the country with proper security. This paper is an analysis of various online and EVM voting research where there are some loopholes regarding security of a person as well as security in terms of authentication.

Keywords:-Voting System, Aadhaar Card ID, Voter ID, Election Commission Of India, Unique Identification Authority Of India(UIDAI)) and Authentication.

1. INTRODUCTION:-

Electronic Voting Machine (EVM) is a simple electronic device used to record votes in place of ballot papers and boxes which were used earlier in conventional voting system. The existing system have some flaws of security but apart from that the main drawback of this system is we have to be present at exact location where government have allocated **(For example the voter of Mumbai zone currently present at Bengaluru so he or she cannot vote by going to Mumbai and giving their precious vote, so in this system will make sure he or she can also able to vote at Bengaluru or anywhere in the India)**.Due to this people are unable to vote if they are other place so to increase voters we have to make use of technology along with security to vote on time. Centralized system of voting is better solution because at one go all voting can be done; this will avoid the conflict of dates. In this process there should be pre-link of Aadhar and Voting card which can be done by Unique Identification Authority of India (UIDAI). As we all know the current system doesn't have any biometric authentication so we are going to use or provide biometric authentication to avoid double/duplicate voting of individual with more secure way.

2. LITERATURE REVIEW:-

During this research development we have referred various papers to analyze the problems in the existing system and figure out solutions that are economically and timely viable.

[1]"ANALYSIS OF ELECTRONIC VOTING SYSTEM IN VARIOUS COUNTRIES" Mr. Sanjay Kumar Dr. Ekta Walia (Professor & Head) This paper has presented the comparative study of voting techniques in various countries which highlights the scope of improvement in them.

[2] "ONLINE VOTING SYSTEM LINKED WITH AADHAAR CARD" Tabish Ansari¹, Brijesh Chaurasia², Niraj Kumar³- This paper deals with the online voting system that will make the voting system smart, more secure and easy to vote. This paper illustrates a system which can be linked with Aadhaar card.

[3] "AADHAR CARD BASED SMART E-VOTING SYSTEM" K. Lakshmi¹, R. Karthikamani², N. Divya³ This System deals with number of issues, for example, counterfeit voting and extortion either by actualizing misbehaviors while voting or by doing breaking down with the voting machine

3. PROBLEM STATEMENT:-

The analysis of EVM machine comprises of major security flaws in the voting system (According to certain papers that has been observed). The current voting system is very time consuming and there is no freedom of mobility due to which the ratio of voters are decreasing. In some papers there is a use of aadhar card alone with no voter ID. As well as in an existing system there is a chance of double or duplicate voting. There are number of paper where online voting can be done but the main problem of online voting is no privacy and security of person is maintained.

4. PROPOSED METHODOLOGY:-

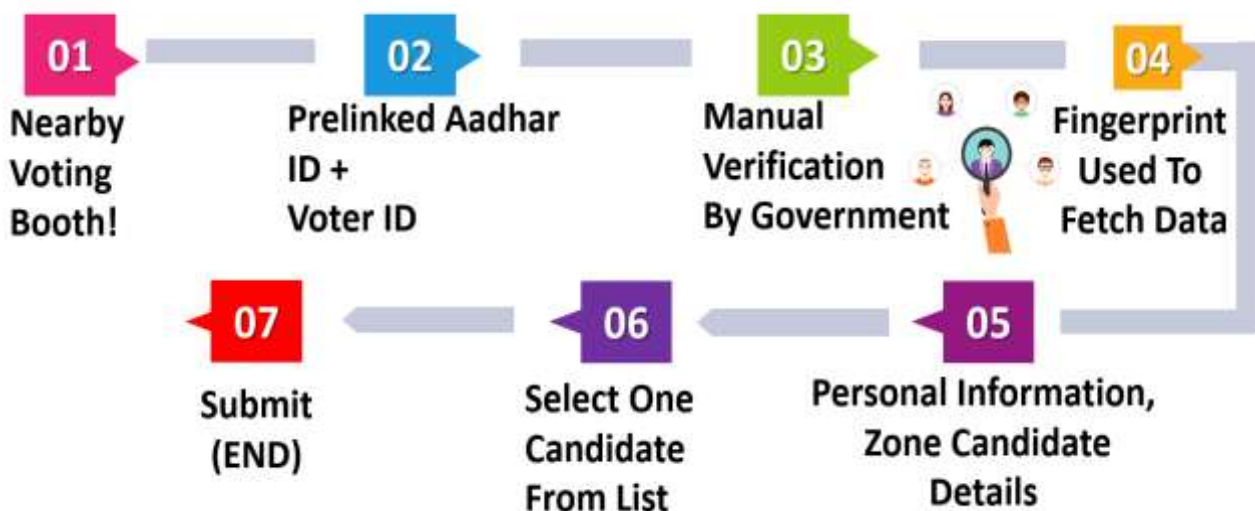


Figure -1

The Workflow of Our Proposed System:-

1. Anywhere in the country we have to find the nearby voting booth.
2. It is necessary to link your Aadhaar Card and voter ID which is done by UIDAI.
3. Manual verification by present election commission officer or staff like PAN card aadhar card or any other personal ID proof.
4. Then we will move to our actual voting place or site where will give our biometric that is fingerprint to fetch the data and for authentication.
5. On the basis of fingerprint that person's personal information displayed on the screen along with the candidate list will be shown.

- This Is The Flow Of Fetching Zonal Information For Election Data

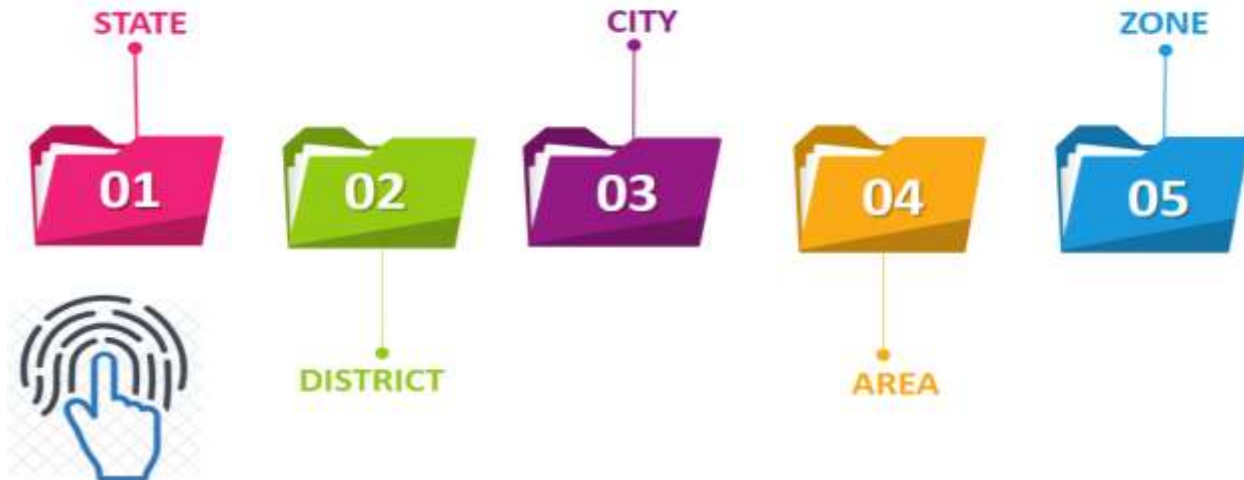


Figure - 2

6. Then voter will select the one name from the candidate list.
7. Then submit.

For this system we will use "FIREBASE" database for storing votes and it has inbuilt security.

For the analysis of all votes we use firebase inbuilt analytics tool FIREBASE ANALYTICS.

5. CONCLUSION:-

- ✓ This proposed system will increase the ratio of voters.
- ✓ Ease of voting from anywhere in the country.
- ✓ Centralized system for all the elections.
- ✓ Security is maintained with biometric authentication.

REFERENCES:-

- [1] Sayali Shinde, Nikita Sherla, Sampada Zadgaonkar, Sapna Hulsurkar, S. P. Mone - Department of Computer Engineering, Marathwada Mitra Mandal's College of Engineering, Karvenagar, Pune, Online Voting System Linked with AADHAR Card India (ijrcce-Vol. 6, Issue 3, March 2018)
- [2] "Aadhar Based Election Voting System" - Ankita R. Kasliwal, Jaya S. Gadekar, Manjiri A. Lavadkar, Pallavi K. Thorat, Dr. Prapti Deshmukh (MGM's Dr. G. Y. Pathrikar College of CS and IT, Aurangabad, MS, India) IOSR Journal of Computer Engineering (IOSR-JCE)
- [3] Dinesh Kumar P; Akshay Hareendran; Askar Ali S; Bharanidharan K "Online Voting System Using Aadhaar Card and Biometric" - Department of Computer Science and Engineering, VSBCETC, Coimbatore (IJCSMC, Vol. 9, Issue. 1, January 2020)
- [4] Ankit Anand; Pallavi Divya (Department of Computer Science Engineering, BITS Bhopal/ Rajiv Gandhi Technical University, Bhopal, India) - "An Efficient Online Voting System" International Journal of Modern Engineering Research (IJMER)

[5] Online Voting System Using Biometric Verification - Prof. M.N. Annadate; Shreyans Sunil Gandhi; Nivita Ravi Kaniampal; Pushkar Satish Naral; Electronics and Telecommunications Engineering, MIT COE, Pune, India – IJARCCCE

[6] "Analysis Of Electronic Voting System In Various Countries" Mr. Sanjay Kumar & Dr. Ekta Walia (Professor & Head) - Department of Computer Engineering, M. M. University, Mullana (Ambala) 133207, India -International Journal on Computer Science and Engineering (IJCSSE)

[7] "Aadhar Card Based Online Voting System" - Gujrathi Arpita A; Shirsath Mai R; Ahire Megha D; Prof A.S Chandgude - SND COE & RC, Yeola, Maharashtra, India (International Research Journal of Engineering and Technology Dec-2018)

[8] Mr. S. Gladwin Moses Stephen, "AADHAR Based Voting System Using Biometric Authentication and IOT", March 2017.

[9] Smita B. Khairnar P. Sanyasi Naidu, ReenaKharat, "Secure Authentication for Online Voting System" International Journal of Computer Science and Information 2015.

[10] "Tabish Ansari, Brijesh Chaurasia, Niraj Kumar, Nilesh Yadav, Sonalii Suryawanshi - "Online Voting System linked with AADHAAR Card - Computer Department, Rizvi College of Engineering, Mumbai, Maharashtra, India

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