

International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

Volume 2, Issue 4, May 2022

Biometric Voting System

Shrushti Sankhe¹, Pratiksha Kute², Mayuri Kokane³, Runali Dhaygude⁴, Prof. Sujay Pawar⁵

Students, Department of Information Technology^{1,2,3,4} Assistant Professor, Department of Information Technology⁵ Dr. D. Y. Patil Institute of Engineering, Pune, Maharashtra, India

Abstract: The word "vote" means to choose form a list, to elect or to determine. The main goal of voting (in a scenario involving the citizens of a given country) is to come up with leaders of the people's choice. The project is mainly aimed at providing a secured and user-friendly Biometric Voting System. The problem of voting is still critical in terms of safety and security. The proposed voting system with biometric authentication is an electronic voting system which seeks to make use of the uniqueness of the minutiae of the human fingerprint to further enhance the level of trust and confidentiality of the voters in the system as well as making the actual process as universally accessible as possible which would be achieved through the deployment on the Internet. It is expected to solve the critical issues faced due to elections. For the voter registration and authentication processes which are performed on the desktop module, the voter is expected to have his or her fingerprints captured and the minutiae extracted that is stored on the database. This is done to prevent the occurrence of multiple registrations or identity. Thus, during the authentication period, voters are expected to undergo a matching verification of their fingerprint samples against the values stored in the database which is identified through the use of a unique voter identification number assigned during registration. Voters can thus proceed to the online module of the project to cast their votes through any internet – connected device using the voter identification number, security answer keyed in during the registration process as well as a token key that was generated automatically for each voter per election on the online module. The token is sent by the administrator to each voter through his or her associated email. Worthy to note is that though voting is now done ubiquitously, it must carried out during the stipulated period as contained in the email message sent to the voters. Conclusively, Online Voting System with biometric authentication project, has been able to deliver an electronic voting system that solves all the highlighted challenges of the traditional system of conducting elections, offering voters a trusted and credible means of exercising their franchise with great ease. It is therefore recommended to be deployed fully in subsequent elections.

Keywords: Voting

REFERENCES

- [1]. Alaguvel R., Gnanavel G., Jagadhambal K. "Biometrics using Electronic Voting System with Embedded Security", pp. 1065, 2013.
- [2]. O.M. Olaniyan, T. Mapayi & S.A. Adejumo "A Proposed Multiple Scan Biometric-Based System for Electronic Voting", African Journal Comp. & ICT Volume 4. No. 2. Issue 1pp. 12, 2011.
- [3]. Kashif H.M., Dileep Kumar and Syed Muhammad Usman, "Next Generation A Secure E-Voting System Based On Biometric Fingerprint Method" 2011 International Conference on Information and Intelligent Computing IPCSIT vol.18 (2011) pp .26-27.
- [4]. OASIS Election & Voter Services Technical Committee "Requirements for common data formats and standards for e-Voting", NIST Paper. 18 August 2009 (Retrieved October 10, 2014).