

A Review on Online Voting System using Face Recognition and Blockchain

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Abstract: Online voting systems represent a transformative approach to modernizing electoral processes, offering benefits such as increased accessibility, security, and efficiency. This paper explores the design, implementation, and challenges of online voting systems, with a particular focus on the integration of biometric authentication, encryption, and blockchain technology. These systems aim to address the critical issues of voter identity verification, fraud prevention, and the integrity of election results. The methodology for creating an online voting system involves a multi-stage process, including requirement analysis, system design, development, security implementation, testing, deployment, and post-election auditing. Despite the numerous advantages, challenges such as cybersecurity threats, privacy concerns, and digital accessibility remain. This paper discusses the importance of addressing these challenges to ensure the security, transparency, and inclusivity of online voting. By adopting robust security measures and considering the legal and technological landscape, online voting systems can enhance voter participation and transform electoral practices, providing a reliable and efficient alternative to traditional voting methods.

Keywords: election integrity, digital accessibility, biometric authentication