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SMART VOTING SYSTEM USING BLOCKCHAIN

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ABSTRACT: Paper ballots are mostly utilised across the world. Only int the last ten years are electronic voting systems popular and unresolved. Evoting schemes pose mainly safety, credibility, openness, reliability and functionality challenges. Estonia is the pioneer and the state-of-the-art in this subject. But with the blockchain there are few solutions. Blockchain can offer a response to all of the difficulties above and also offer certain benefits such as immutability and decentralisation. The key challenges with blockchain technology for e-voting includes focusing on just one subject or the absence of testing and comparison. We describe in this paper a blockchain-based e-voting infrastructure that may be utilised for any voting purpose. The blockchain is fully used and all the process can be processed. After the vote starts, the platform is entirely independent without any chance of affecting the voting process and is decentralised. The data are completely transparent, but homomorphic encryption ensures the identity of the voters. In three distinct blockchains, we tested and compared our solutions. The results reveal that public as well as private blockchains are available at a little velocity difference. The primary innovation of our approach is the complete decentralisation of management of the e-voting platform via blockchains, transparency and, owing to homomorphic encryption of voters, security and privacy.

Key Word: Blockchain.

I. INTRODUCTION

Electronic voting methods are currently at an early development phase. We choose this sector not just because of its recent developments, but because there are not many answers to e-voting challenges. In e-Government development, too, popularity is growing today.However, such a system is not practical if basic services such as elections are not digitised for citizens. E-voting is one of the most important public areas that blockchain technology can transform. New issues also arise, which must be solved, hand by hand e-voting. One of them is, for instance, safeguarding the elections that must be least as secure as conventional voting systems. Therefore, we determined to develop secure elections in which electorates should not worry about someone who abuses the electoral system.

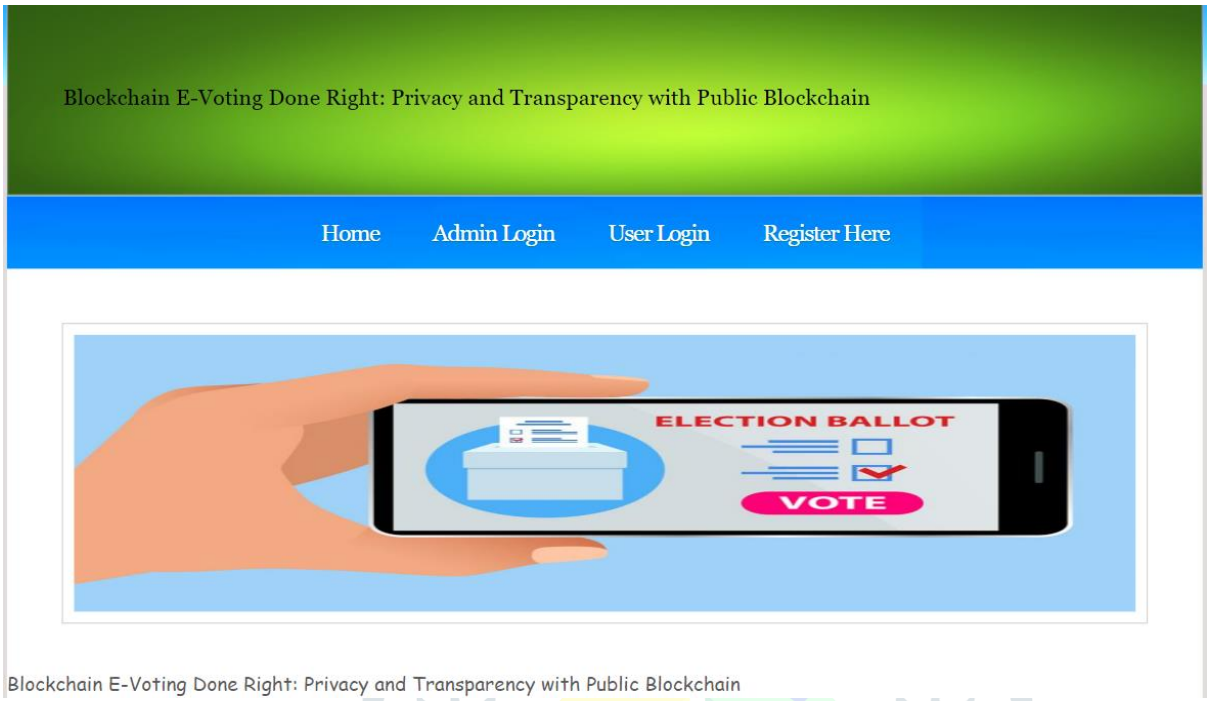
II. METHODOLOGY PROPOSED SYSTEM

In this proposed system, one can cast their vote even without visiting the polling booth. In our proposed system, we have altered level of safety in the voting process which provides reliable and secure voting. The

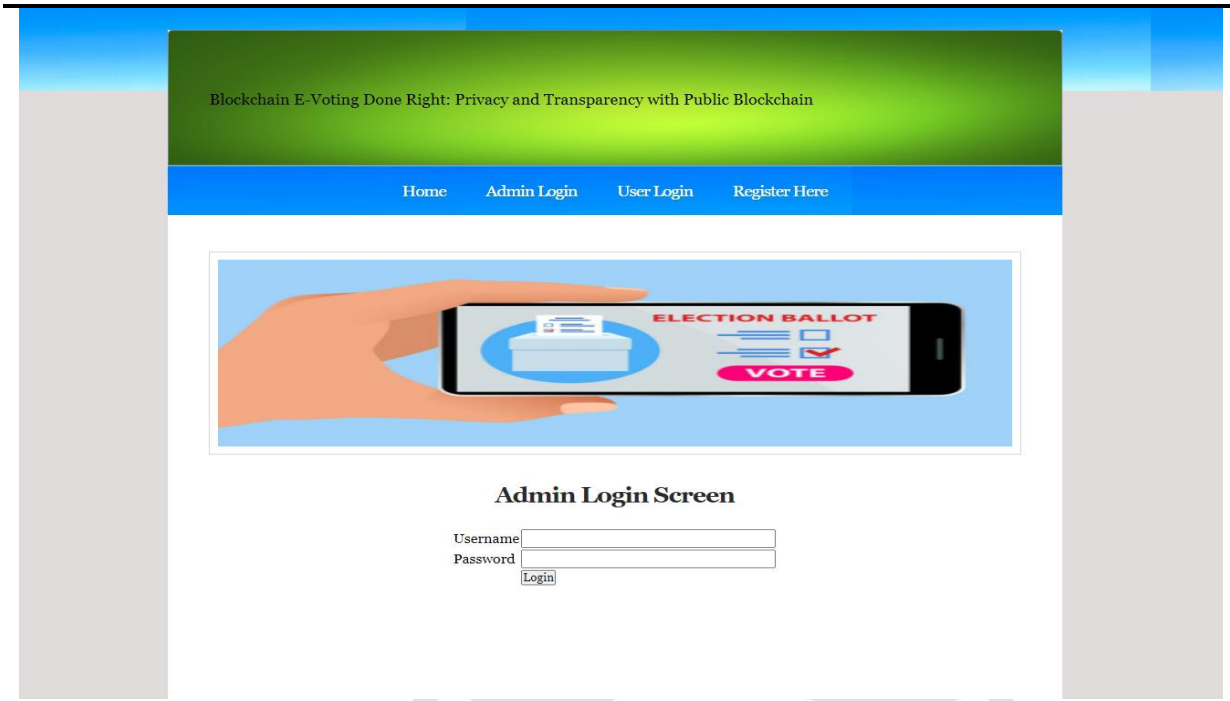
suggest blockchain voting system takes account of all voting needs and is typically suitable for any elections. The approach enables more round elections and uses a public blockchain preferable. The public blockchain can be substituted with alternative blockchain kinds, but every user simply check the recorded data(votes).

User will register as a new user. And admin will login and add party details for the users to cast their votes. Now user will login using username and password. After login user uploads the image and then enters OTP to cast their vote, then there will be a message that vote is accepted. After the votes are casted by users admin will login and view the count.

III.RESULTS

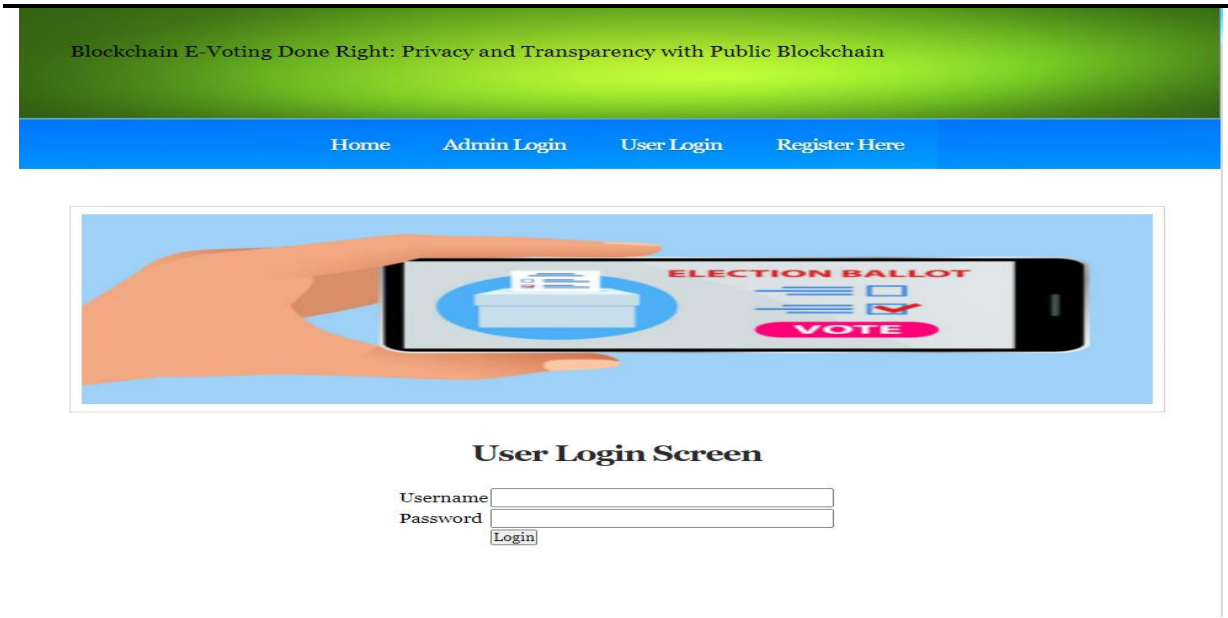


- A new user will register. By clicking on register here.

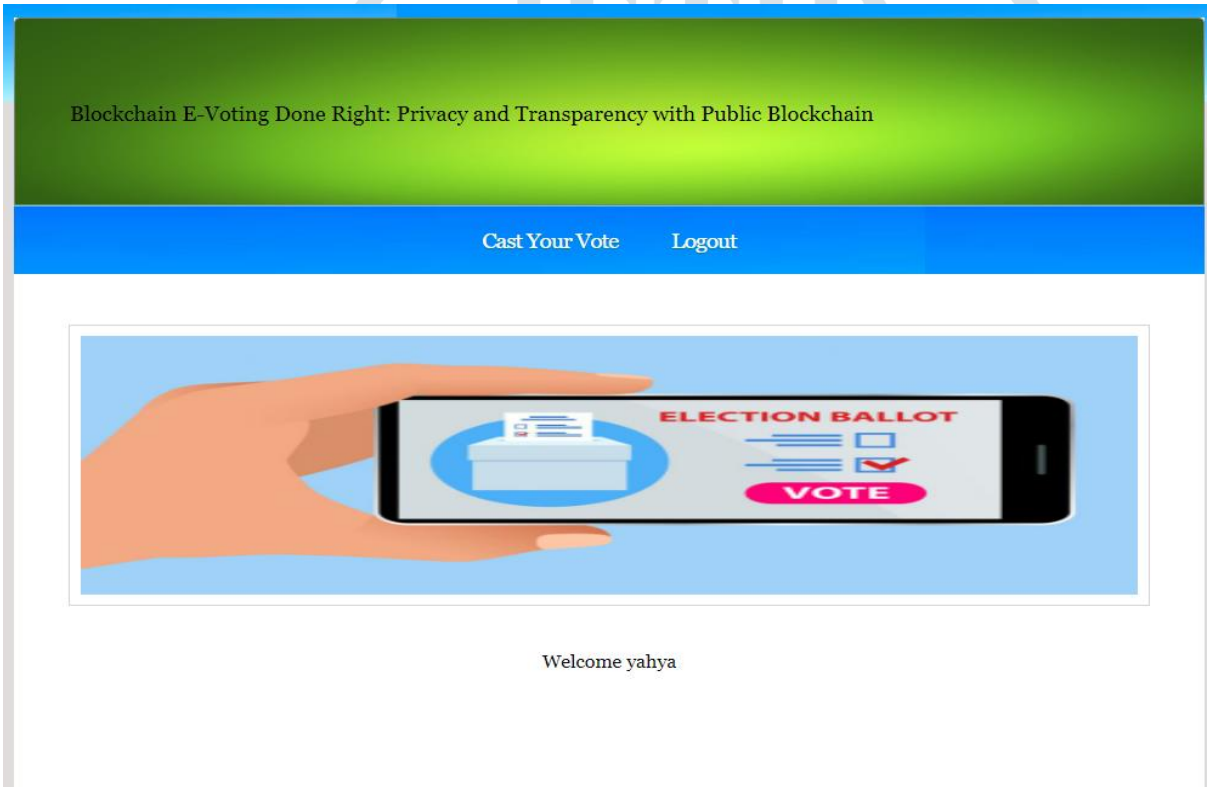


- Admin will login.

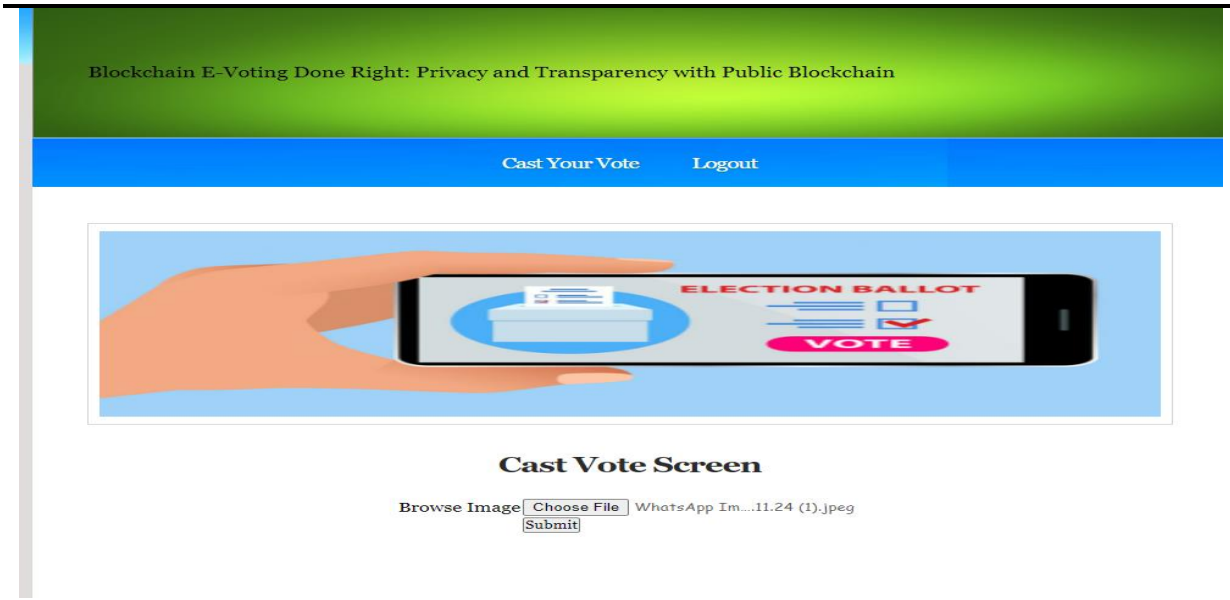
- Admin will login and add party details.



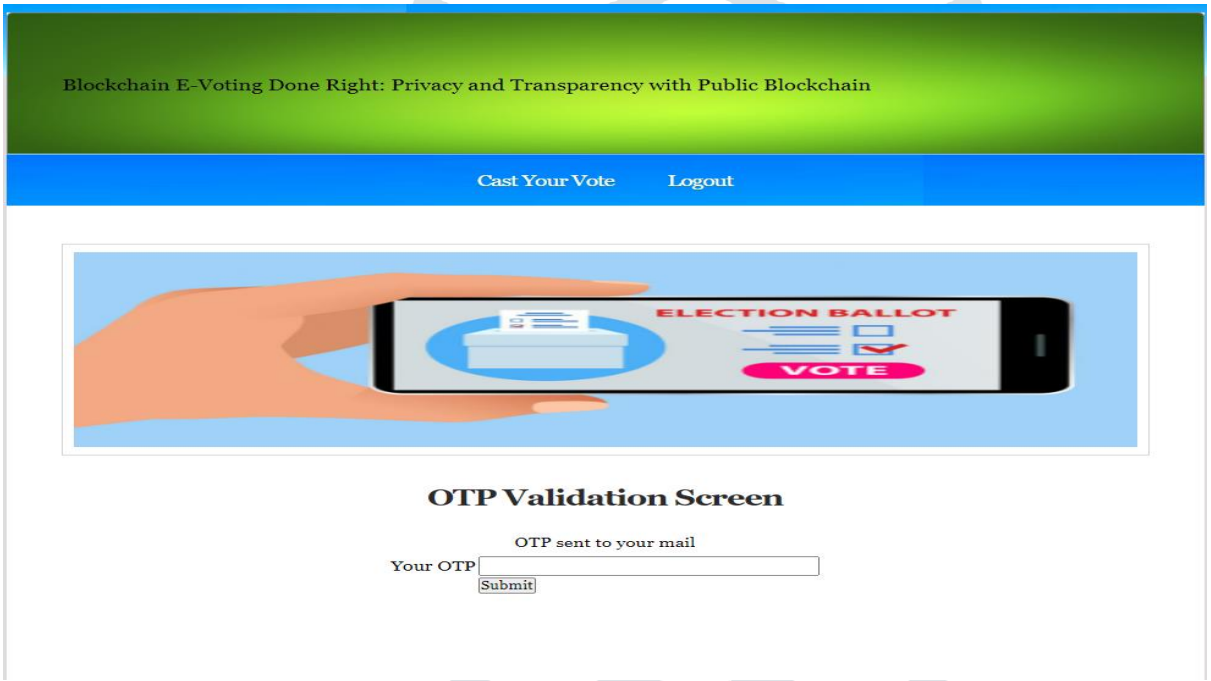
- User will login using username and password.



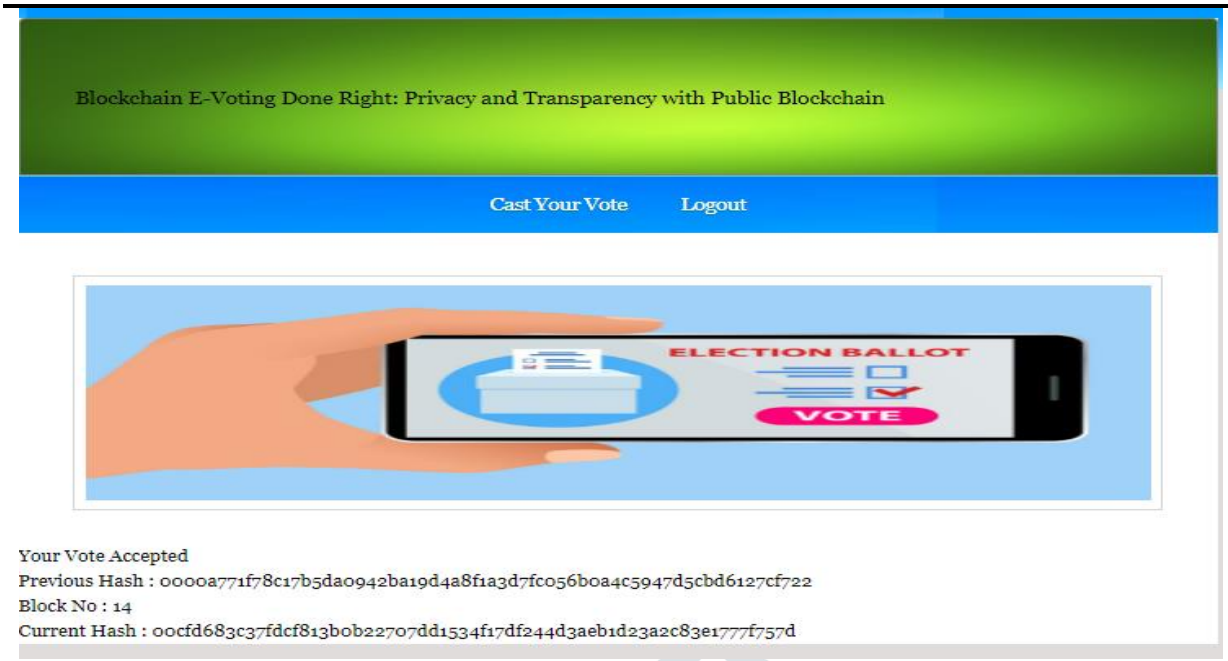
- Then a welcome user window opens.



- User will click on cast vote and then choose the image and submit.



- Then user gets OTP for Email.



- After user cast the vote, a message is displayed your vote accepted.

IV.DISCUSSIONS

The future work consists of two aspects. Basically the proposed system is a prototype to get an idea of functioning of blockchain. First thing is add more attributes like email, OTP, phone number, address, image etc. Also count admin adding details and at last finding the count which cannot be manipulated.

V.CONCLUSION

While detecting somewhat different network times, they are so small that in an election system, because of its data transparency, public blockchain has more advantages, which can be observed in real time. A private blockchain is a bit quicker, but it weakens the system's trustworthiness by being largely centralised, since only the authority operates where it wants to. Here the potential of the technology and its quality within the e-voting theme. The blockchain are going to be in public verifiable and distributed during a manner that nobody are going to be able to corrupt it. The idea of adapting digital selection systems to create the general public electoral method cheaper, quicker and easier, could be a compelling one in trendy society.

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