# E-VOTING WITH HYBRID ENCRYPTION RSA ALGORITHM

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*ABSTRACT*

*E-voting system based on and improved from our previous work .E-voting system, referred to as Enhanced note is enhanced with a new protocol design and watchdog hardware device to ensure voter confidentiality and voting accuracy. The watchdog device records all voting transactions to prevent voter frauds.The RSA cryptography algorithm ensures that votes casted are secured, thus maintaining the privacy of votes.The system is such that when the votes are cast on the nodes, the RSA technique encrypts the vote that is sent to the server system using both node and vote identity number.*

*KEYWORDS*

*voting,citizen, style, styling, insert (key words)*

## 1. INTRODUCTION

Lifestyle E-voting is recording, storing and processing of electoral data of a voting system as digital information. E-voting system is employed to enable stress-free election and increase the attendance at polls.The application is initialized, it does not access the Internet until the vote is completely encrypted and digitally signed and ready to be cast. The various schemes have been proposed to improve the security and accuracy of Electronic Voting (E–Voting), many disputes happened in past elections still have not been resolved and new challenges have emerged. In addition, with paper ballots or machine–readable ballots, the tally results suffer from the unavoidable delay and ballot feeding errors work .

## 2. PROBLEM STATEMENT

Electronic voting technology intends to speed the counting of ballots, reduce the cost of paying staff to count votes manually and can provide improved accessibility for disabled voters. Also in the long term, expenses are expected to decrease. Results can be reported and published faster. Voters save time and cost by being able to vote independently from their location. This may increase overall voter turnout. The citizen groups benefiting most from electronic elections are the ones living abroad, citizens living in rural areas far away from polling stations and the disabled with mobility impairmentsE-Voting system use the hybrid RSA algorithm which encrypts and decrypts the data.In the registration phase the user request pair keys by send hash of

his identity with the random key generator to include in his certification in order to prevent covering the voter's proof in next phases.The voter can obtain only one pair private key because the voter have one identity and password.

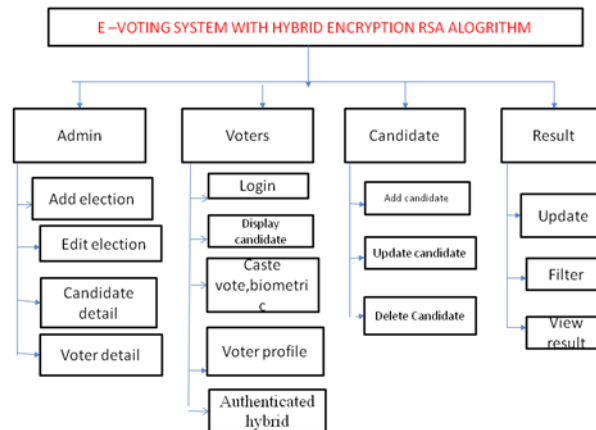**Architecture Diagram**



Fig-1 Architecture Diagram

## 3. EXPERIMENTS AND RESULTS

**Module**

**A.Admin**

The admin emailid and the password has to be gathered if it's a replacement admin and if it's already existing admin they will use their name and password to log in with their account to manage the user's account.This module also has the responsibility of adding new users and allowing them to cast their votes and release their voting results.It's a login session for the administrator voter and exist

**B. Citizen**

In this module we enter the details of the candidates who participate in the given selected election.And We can update the details of the candidate for the election

**C.Voting**

In this module we enter the information of the voters and we can view the details of voters

**D. Result**

In this module we can view the final results of the Participating candidate. And it can also reset database after all process is completed
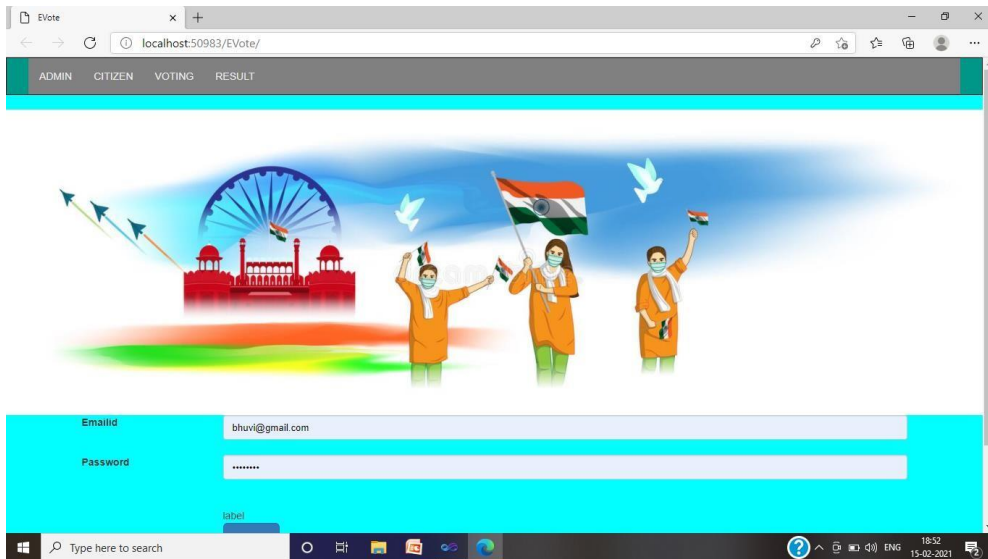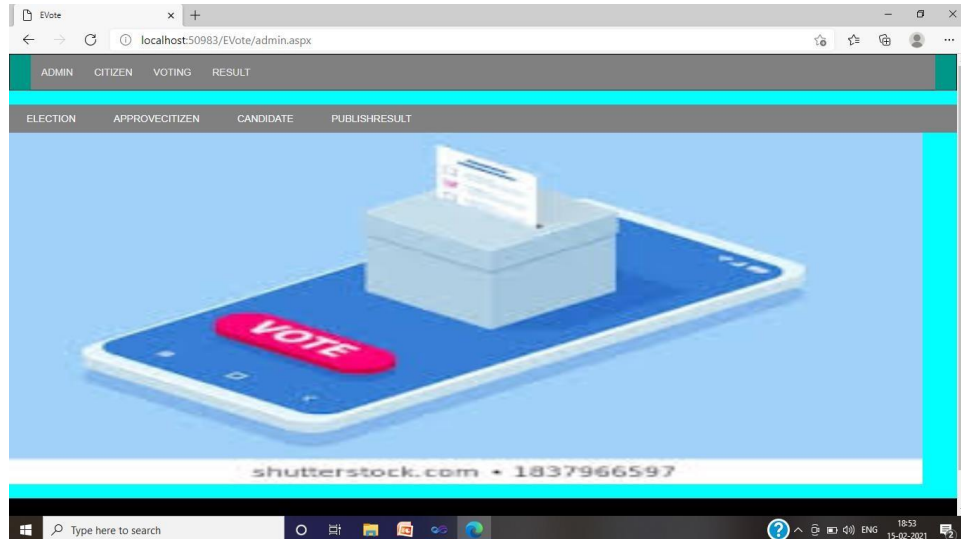
**Output Screen**



Fig- 2 Login Page
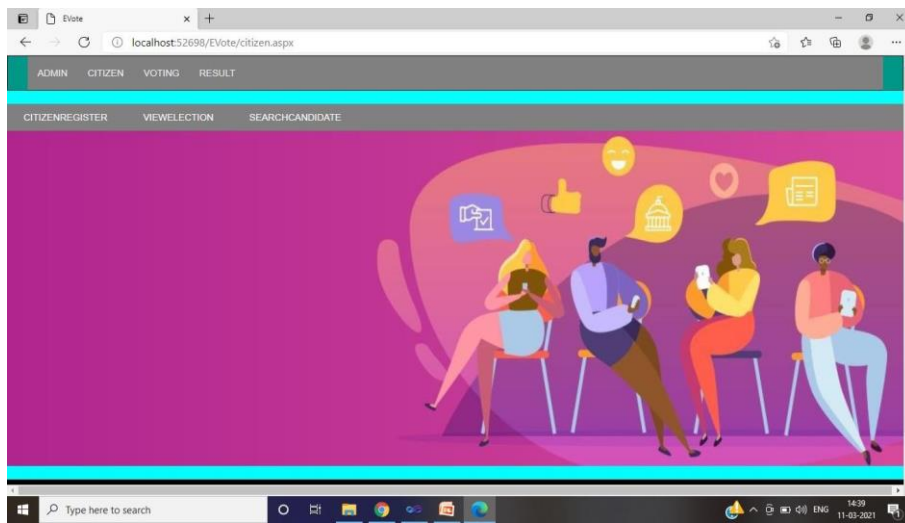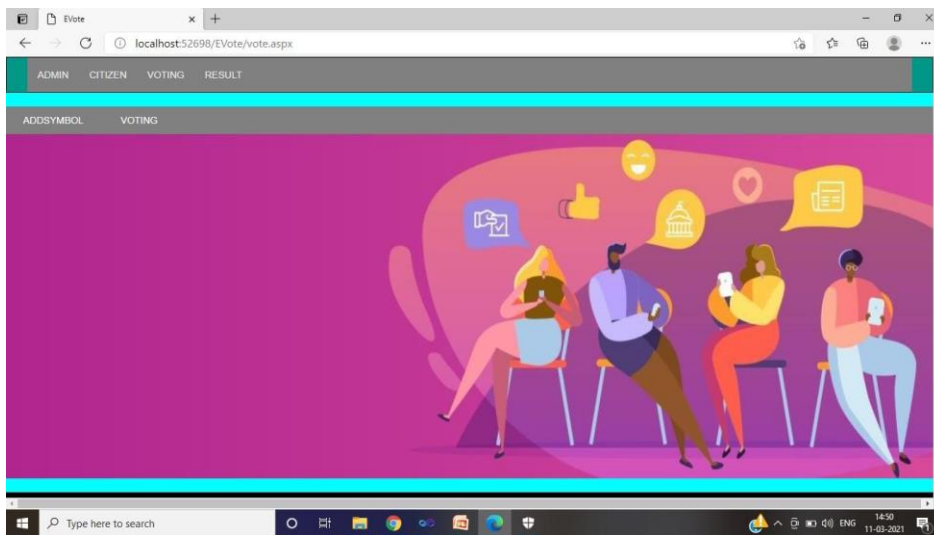


Fig-3 Admin page

Fig-4  Citizen Page



Fig-5  Voting Page

Fig-6 Citizen Page



Fig-7 Voting Page

## PERFORMANCE ANALYSIS

The Existing  and proposed system are analysed. In existing system reduce the cost of paying staff to count votes manually and the proposed system  random key generator to include in his certification in order to prevent covering the voter's proof in next phases.Nearly 70% performance has been increased.

## 4. CONCLUSION

This model proposed helps in achieving the authenticity, nontraceability of vote cast and security with confidentiality also being enforced.Security models such as the voter-verified audit trail allowed for voting systems that produce a project trail that can be seen and verified by a voter could be a future work.In such a system, the correctness burden on the voting terminal's code is

significantly less as voters can see and verify a physical object that describes their vote and are allowed to vote in terminal only after their identity is proved and lifestyles.

## 5. FUTURE ENHANCEMENT

Physical The password used by the user to vote is provided by the administrator. In the future the user can be given the privilege of changing the password. So it helps to increase the security of the system.The other two methods that can be used are cornea detection and fingerprinting. But here the problem is that it decreases the scope of the platform because these systems need some electronic components to implement.So it will avoid the users privilege to cast the votes at their fingertips. But it can guarantee that fake voting will be impossible.

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## REFERENCE

[1]  Tadayoshi Kohno, Adam Stubblefield, Aviel D.Rubin, Dan S. Wallach,"Analysis of an Electronic Voting System", Johns Hopkins University Information Security Institute Technical Report, TR-2003-19, July23,2003

[2]  http://newindianexpress.com/states/andhra_pradesh/Maoistsstrike-fear-make-off-.

[3]  with-poll-papers-in-agency/2013/07/ 15/article1684243.

[4]  M Executive Summary of "Genesis and Spread of Maoist Violence and Appropriate State Strategy to Handle it", Bureau of Police Research and Development, Ministry of Home Affairs, NewDelhi

[5]  http://en.wikipedia.org/wiki/Electronic_voting

[6]  David L. Dill, Bruce Schneier, and Barbara Simons, "Voting and technology: Who gets to count your vote?", Communications of the ACM, vol. 46(8), Aug. 2003, pp.29–31

[7]  David Evans and Nathanael Paul, "Election security: Perception and reality", IEEE Security & Privacy, vol. 2(1), Jan. 2004, pp. 24-31

[8]  David Evans and Nathanael Paul, "Election security: Perception and reality", IEEE Security & Privacy, vol. 2(1), Jan. 2004, pp. 24-31

[9]  Rebecca                    Mercuri.                    "Statement                    on electronicvoting"http://www.notablesoftware.com/RMstatement.html, 2007

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