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Wireless E-Voting System

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Abstract: In the era of technology, the voting machine, which is present today, is highly unsecured. The present electronic voting machine is not intelligent that is it cannot determine the person came for the voting is eligible or not. That mean the whole control is kept in the hand of voting in charge officer. One more risk with the present voting machine is that anybody can increase the vote count, since the count is present in the machine itself. In proposed machine that is "Global Wireless E-Voting"machine is made intelligent which can determine the eligibility of the voter by scanning the eye pattern. Here there is no chance of increasing the vote count of machine. Even in case of damage to voting machine there will not be harm to continuity of the election process. The overall concept of "Wireless E-Voting System" is explained.

Keywords: E – Voting, Retina, WAP, DBMS

I. INTRODUCTION

Now a days voting system is replaced by electronic machine to carry out voting. Now in a present system each and every section is given an electronic machine which stores the votes of the people how have voted for the particular candidate.

Control of present system is given to the in charge officer. He only check for the eligibility of the candidates and allow for the voting. Finally we collect all the voting machine at a place and go for counting.

After voting if any technical problems or damage occurs with the machines it may leads to the reflection. The machine is not able to recognize the eligibility of a candidate, so the corrupted officers may misguide the people.

The corrupted officers may increase the count of the voting. During transportation of the machines the in charge person can change the status of machines and even may destroy.

This system is not a cost effective one. Since we need security, in charge officers, secured place for counting and election place.

The person from any other region cannot vote in for a candidate of other region. The voting take place where the machine is located.

II. PROPOSED METHOD

In our system we are trying to keep counting of votes in to a remote secured system. In this system we are using a electronic circuit which enable the voter to vote and transfer this vote to the remote system by converting it to radio wave through the mobile towers. Our machine can check the eligibility of the candidate by itself, so there is no question of corruption. Machine itself is automated to check the eligibility of the candidates. Here we need not to go for the reelection even if the machine is damaged. A person even can vote from a mobile system and also from Internet. We can vote from anywhere even though being a voter of another region.

III.REQUIREMENTS IN E-VOTING

A voting system should satisfy these requirements.

- Eligibility and authentication – only registered voters must be admitted.
- Uniqueness – no voter may cast his vote more than once.
- Accuracy – voting systems should record the votes correctly.
- Verifiability and audit ability – it should be possible to verify that all votes.

A. Machine

The voting machine is actually a device which generates the different voltages for different votes these voltages are fed to the **(ADC)** which is then converted to digital bits then can be converted to radio waves. Have been correctly accounted for in the final tally, and there should be reliable and verifiably authentic election records.

IV.. EYE RETINA SCANNING

The eye retina machine be a simple web cam or device which can capture the images effectively. Fig.2 shows eye retina. The capture image will be represented in the form of a matrix where each pixel represents 24-bit (RGB,8+8+8 format).

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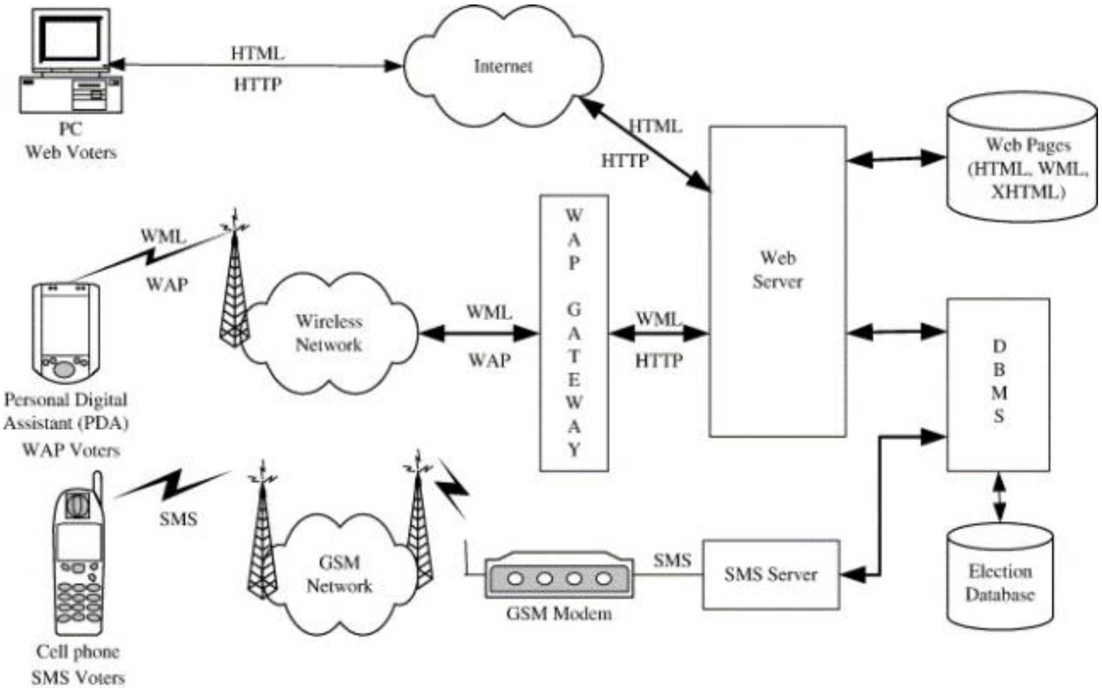

Fig. 1. Block Diagram of proposed method

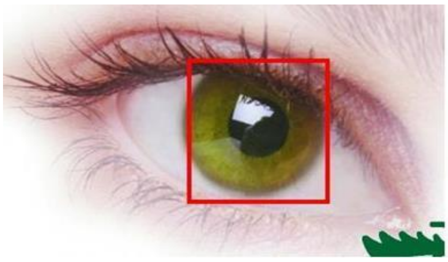

Fig:2 Eye retina scanning

V. WORKING OF WHOLE SYSTEM

Whenever voters enter to voting booth then he will be instructed to directly look at retina scanning machine at this time the machine scans the retina. Fig.1 shows the block diagram of the proposed system. Once retina scanning properly confirmed then it sent signal to the voting machine as to accept the vote it will be powered on .then voter is made to vote.

Now the whole data including the retina pattern is sent to interfacing device which is convert into radio waves of mobile frequency range and these radio waves are sent to mobile tower and then to the remote server, where the authentication and voters identification is stored into a secured database. The received data is first converted into digital format from the radio waves through the interface device kept the server side, and then retina pattern and vote separated.

Next the retina pattern is matched against the existing database. If match is found then flag is check which indicates its voting status i.e. if the voter is not voted yet then positive ack is send to the mobile tower and then to the corresponding voting machine. This ack is recognized by the receiver kept at the voter side and machine is made to scan next retina pattern and vote, otherwise if–ve ack then alert alarm is made to ring.

VI. CONCLUSION

Thus this machine can be used for any level voting purpose. The machine provides high level of security, authentication, reliability, and corruption - free mechanism. By this we can get result within minute after a completion of voting. Minimum manpower Utilization, hence mechanism is error free. This project can be enhanced to work over the mobiles that is voting is made possible through the mobile through SMS. This machine can be made vote through the INTERNET.

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