

Article

Android Platform using e-Voting System

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A B S T R A C T

The foremost motive of e-voting is to choose the leader or candidate of people's choice. Many countries face the difficulties in the procedure of voting such as rigging votes during election, insecure or inaccessible polling stations, insufficient polling materials and also not experience personally. To overcome the above drawbacks online voting or polling system is proposed. To get acquainted with the system, the users, citizens shall be trained on how to vote online prior to the election. The e-Voting system will permit the casting of electronic ballots from almost any location about the world. The first phase called ID2E is made for testing the viability for international voting by means of SMS protocol along with the tools such as web 2.0 to create a platform for discussion about election main theme. The second phase is construction of voting prototype using android Smartphone, submissions and databases to collect the vote that are obtainable on dynamic web page. Online voting system can be used to give the precise consequences of votes to reveal precise voter penchants.

Keywords: Android, e-Voting System, International Direct Digital Election ID2E, Web Services

Introduction

As technology has moved forward in several aspects of our lives, the increase in use of mechanics and electronics has also emerged. The use of mechanics in the area of e-voting was introduced as early as the 1890s with the invention of the Herman Hollerith punch card appliance for the US census and later developed into electronic voting. Automated voting, or e-voting, is a term encompassing several different types of voting, typed embracing both electronic means of cast the vote and electronically means of counting the votes. As the area of voting has evolved from public voting, in the early US, to the use of article ballots with mark choices, the area of electronic voting has also evolved. Electronic voting has changed from the practice of punch cards to the use of optical scan systems and specialized electronic voting. Electronic voting can also include remote transmission of ballots via telephones or private computer networks and the latest development is voting over the Internet. With the growing usage of

computers there is also an increasing amount of both private and governmental services available via the Internet. The Inter-net can be used for economic transactions, tax forms, university admission services, etc. and as a consequence a development into being able to provide voting via the Internet is also considered. Electronic voting technology at polling stations can speed up the counting of ballots and provide the improved access for the disabled voters. A voting system providing remote voting via the Internet could improve the accessibility and provide an even more convenient voting process. It might also lead to greater voter turnout in elections, as well as phase out existing cumbersome processes of absentee voting, which in US still is done by mail.

Literature Survey

All the computer researchers who have completed effort in or are involved in electronic voting seem to agree that online e-voting organizes not encounter the precise necessities for

public or college elections and that the present extensively organized e-voting systems need development. e-voting on the Internet has difficulties founded on the areas of secrecy and protection in contradiction of coercion and vote selling. It's such a truthfully the bad idea that there seems to no credible academic effort to deploy it. The Kenyan General elections of 2007 brought national courtesy to problems with present approaches of casting and counting the votes in public elections. Most people believe that the current system should be get altered; there is much alteration on how such variations must be done.

Kenyans in the Diaspora have started a petition in a new effort to force the electoral body to permit them e-vote online in the next General Election. They advocate using the OVS since it decreases case of not counted, not marked, spoiled ballots, cheating and the cost of travelling to polling stations. They are opposed the use of High Commissions authority and embassies as polling stations areas. The IEBC has in the past suggested that the Kenyans external vote at the delegations and embassies near to them. In the US or in other countries, for eg:-, Kenyans are predictable to e-vote in Los Angeles and New York. Their report even proposes an summary for a latest or new voting system with discrete, modular design.

Additional researchers consume done work in e-voting; though they do not openly reference voting from distant poll sites, their effort is of not at all use, pertinent to any effort at conniving or the applying a remote poll site e-voting system.

Lorrie Cramer acknowledges the issues characteristic in sympathetic of e-voting device, but does not make a reference on their site for one technology to over the rest. Approximately other academicians like Peter Neumann focus on the enormity of the subjects one faces when annoying to design and tool a truly secure e-voting system. They frequently prompt us of Ken Thompson's receipt speech and the fact that we really do not trust any code which we did not create ourselves. Consequently, they tend to be the tremendously suspicious of proprietary voting appliances and their makers who maintain that we must trust them.

Neumann stretches a entire list of proposals for the "generic e-voting criteria" which suggests that a voting system ought be so solid to be interfere and so resistant to the disappointment that no profitable system is probable to ever meet requirements and emerging a appropriate system would be the very problematic and exclusive.

A e-voting appliance must harvest human-readable hardcopy article consequences, which can be confirmed by the voter beforehand the vote is cast and physically told later if obligatory.



David Charm presents a very interesting scheme, whereby voters could get receipts for their vote done. This receipt will allow them to know if their votes are been included in the final tally or not, to prove that they are voted without revealing any data about how they voted. The security of this scheme depends on the visual cryptography developed by the Shamir and on voters randomly choosing one of 2 pieces of article. Mercury and Neumann advocate the use of this method in the e-voting systems.

In the fresh years, voting equipments which where remained extensively accepted in many countries and they are alienated into five categories: -

- Article-based elective: The elector becomes a complete ballot and usage a pen to be originate once more he requirements to vote for which candidate. Hand-counted ballots is a period and lab our consuming procedure, but it is remained easy to production article ballots and the ballots can be reserved for the confirming, this kind is motionless the maximum common way to vote.
- Lever voting mechanism: Ever appliance is strange equipment and individually level is remained allocated for the consistent candidate. The voter wrenches the lever to poll for his preferred candidate. In this method voting appliance can amount up ballots mechanically. Meanwhile its boundary is not user-friendly sufficient, charitable some training to voters is been essential.
- Direct recording e-voting appliance: This type, which is shortened to DRE, assimilates with keyboard touch screen for the voter press to poll. Approximately of them lay in voting records and counting the votes is actual fast. Nonetheless the other DRE without keep voting records are doubted about its accurateness.
- Punch card: The applicant pending for vote uses metal hole-punch to punch a hole on the blank ballot. It can count votes mechanically, but if the voter's per development is imperfect, the consequence is doubtless strongminded incorrect.
- Optical voting appliance: Afterward each voter fills a circle conforming to their preferred candidate on the

blank ballot, this application chooses the darker mark on respectively ballot for the vote then calculates the whole consequence. In this method of appliance counts up ballots quickly. Though, if the voter stops over the circle, it will principal to error outcome of optical-scan.

Proposed System

In this article, we suggest client/ server web and android submission software. Numerous social issues/ standards mainly control the set of rules and guidelines that govern the dissimilar voting process. For dissimilar college level elections there are on manual article-based elections or voting that take place. There is an opportunity of handling of votes and one of the chief tasks that the e-voting system faces is some student's strength vote more than once. For this determination, our system does not use temporary registration we use the permanent registration numbers that is sole for each and every candidate or student. Added obligation is the transparency in the electronic voting process. The voter votes using either a computer internet or android phone and the voter doesn't have the insight that how the votes are existence interpreted and counted. We are making easy and efficient use of the communication mediums like e-mails and sms service for android mobile phones ensuring that the votes are delivered successfully. The physical or article-based election procedure carried out in the colleges can be time consuming and prone to security. This project is achieved to let the apiece and every student to actively contribute in the college election process in not a good way of place. This is done by android request which will receive the votes of dissimilar student using bid. Administrator determination sign up or register all students with their permanent registration no. and roll numbers. and the candidates might place on for the any desired post. All the student will sign-in through the permanent registration number and the password. On date of election the students can give vote to the desired person through the application. Students does not have android mobile they can vote through the web application. Consequence assessment will take place on server side and it will be posted. Other functionalities are:

- Authentication can be done through permanent registration number and passwords.
- Notification messages will be sent about the election date and timings.
- A separate page for suggestions. Students can like or dislike them.
- Message box for the elected candidate standing in election
- where messages can be sent by students only to a particular candidate
- Finding for the particular candidate's profile can be done.
- Result evaluation will take place on the server side and will be posted.
- Steganography will be used for the protected data transmission so that manipulation of votes can be Avoided User-id and password to every user through mail

Android

Android is a complete software pile of mobile strategies that comprises an operating system, middleware and the key request. This rich source of software bunch is hand-me-down in Mobile Technology finished its invention module of The Android Software Development Kit (SDK). Android can be measured as a unified software package. This software package comprises an operating system, develop Android requests using the programming language of Java. Android is built on open Linux Kernel this specific software for the Mobile Application is complete to be open source, thus giving the occasion for designers to familiarize and include any technical progression. Grounded on custom virtual appliance android stretches its user the more adding usage and request power, to recruit an interactive and well-organized request and operational Software for your phone.

Attribute Suggestion

In this field, we learning and defines solution for the 'attribute suggestion' delinquent. From the delinquent definition we can control two possessions for control and signifying attributes for a document:

- Primary, the attributes necessity has tall level Querying Value (QV) with admiration to the query workload. That is, they must seem in large no. of enquiries in query workload, since the random attributes in workload have a great possible to Advance the discernibility of document.
- Second, the attributes necessity has high level Content Value (CV) with admiration to document textual data. That is, they must be pertinent to textual data. Then, the end user will probably dismiss the suggestions and document will not be correctly interpreted.

Conclusion

The chief characteristics behindhand e-Voting System is that it allowed us to transport out the novel ideas that where been sustained with us for many for many days. This project offers the voters to cast easily through internet. Vote counting is also made easy by the e-Voting System since it's just a matter of querying the database. e-Voting System is used by a many country today.

Developing a good system is critical to the success of the system to prevent system failures or errors and to gain the wide acceptance as the best method available. A good e-voting System requires ten characteristics which this

system already has. In analyzing, designing, implementing and maintaining standards, we considered this characteristic as the foundation. These standards were made national. e-Voting System will be an inexpensive and less time-consuming method once system exhibiting national standards and the above-mentioned characteristics is implemented.

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