ADVANCED ONLINE VOTING SYSTEM

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Abstract-
This paper deals with the online voting system that facilities user to vote in different languages, voting schemes in rural areas through televoting. Televoting extends to the voting by SMS (text message) via a mobile cell phone. This also facilities absentee voting. Absentee voting can be performed through e-mails. We purpose an approach for effectively user-friendly application especially targets the weak users such as elderly users. This system guarantees privacy of voters, public verifiability, and robustness against a coalition of malicious authorities.

Keywords—Televoting, Absentee voting, CSS, HTML, Java Script, JDBC, JSP, MYSQL, ORACLE, Servlet, WAMP

1. INTRODUCTION

Online voting system facilities users to vote in different languages. Users can commit their votes by selecting their understandable language to commit vote. This will make voting easy for people from different regions. User can commit votes from rural areas by Televoting. Televoting, telephone voting or phone voting is a method of decision making and opinion polling conducted by telephone. Televoting can also extend to voting by SMS text message via a mobile cell phone. Televoting involves broadcasters providing an audience with different telephone numbers associated with contestants participating; the outcome is decided by the number of calls to each line. The results of televoting will be accessed in database. Absentee voting refers to registered voters who cannot make it to the polls on Election Day because of occupation, business, studies, travel, imprisonment (other than a convicted felon), illness, disability and hospitalization or resident in a long term care facility, may vote by absentee ballot. This voting can be committed through E-mails.

1.1 Problem Statements
In recent scenario online voting doesn’t provide different regional languages for the voters (users/candidate) due to which they won’t be able to vote easily. In rural areas also don’t have facilities to commit their votes and there is lack of awareness about elections. Absentee voting technique is also not present.

1.2 Research Objective
The main objective of this study is to add the functionalities to the current online voting system such as:

1. Different regional languages.
2. Televoting Support.
3. Absentee voting.

Such a framework will allow us to evaluate as well as compare the merits of existing and future online voting schemes. System should support multi-user environment. System should be fully automated. System should provide concrete security features like creating users and assigning privileges to users of the system. System should be capable to keep track of all the detailed descriptions of the client and the whole details of services offered by the client organization. Various outputs (reports) should be available online any time. System should be able to handle external large volumes of data (i.e. large database support). [1]

2. SCOPE OF STUDY

The scope of the project is that it will use the ID and password created by user to register him/her in the voting site, through this all the details of voter are saved in database. And it will act as the main security to the votes system. [1]
Advanced Technology: It is an advanced technology used now a day. It increases the voting rates through Televoting (through speech via telephone/sms), Absentee voting and by providing different regional languages options through.

Internet: It is an online facility and hence very useful for the users. Voters can vote from anywhere at any time in India [1].
E-Mails: Absentee can vote through email. (An absentee voting is defined as when the vote is cast by someone who is unable or unwilling to attend the official polling station).

E-SMS/Cell-Phone: Televoting, telephone voting or phone voting is a method of decision making and opinion polling conducted via telephone or E-SMS. People who have not internet connection they cannot check the emails or not have email they can be informed by SMS on their mobile.

3. LITERATURE REVIEW

3.1. Background
This system is being developed for use by everyone with a simple and self explanatory GUI. This is software that can be used by people to vote in an election. All the user must do login according to their regional languages and click on his favorable candidates to register his vote. The development and testing is done on Ethernet. While online voting system has been an active area of research in recent years, the use of insecure Internet, well documented cases of incorrect implementations reported recently. These challenges are to be resolved so that public should cast their vote in secure and convenient way. People can cast their votes efficiently, faster and also maintain confidentiality at the same time. Proposed online voting system is a system by which any Voter can use his/her voting rights from anywhere in country. Online voting system contains.

- a) Voter’s Names with ID and password.
- b) Voter’s information in database.
- c) Voter’s language information.
- d) Voter’s e-mail address.
- e) Voter’s telephone number.
- f) Voter’s vote in a database.
- g) Calculation of total number of votes.

Various operational works proposed in the system are:

Recording information of the voter in database, checking of information filled by voter. Discard the false information. Each information is sent to election commission.[1]

3.2 Product Perspective
The product is an election conducting tool with a simple GUI. The product is developed using Java. Though product is stand-alone. It requires Java Virtual Machine (JVM). [1]

3.3 User Characteristics
Users are considered to be technically novices but expected to be able to use a computer / hand held terminal (HHT). and to click against the favorable candidate on the GUI. [1]

3.4 Product Functions
The product has a server back-end which takes care of authenticating the users and maintaining necessary data structures. The GUI at the server's end enables creating the polls on behalf of the client. The users must connect to the server to authenticate their identification against the password and then vote using the GUI at their end. [1]

3.5 Overview of Data Requirements
The internal memory requirement will be constant or linearly dependent on the number of users depending on the provision of changing the vote at a later time. In such a case the actions will be stored in a data structure which will be referred to when needed. The external data about the candidates (with photographs) and the posts or the poll questions and the answers will be given as input only at the server end. [1]

3.6 .Assumptions and Dependencies
The user is assumed to have JVM on his system irrespective of its hardware and software configuration. The other requirements are strongly design based and can be only made concrete in the design stage. We also assume that all the clients running this software are not blocked by firewalls, proxies, etc[1]

3.7. Constraints
GUI is only in English. Login and password is used for identification of Voter.[1]

4. SALIENT FEATURE

On-line voting system is a software system through which a voter can give votes through registering themselves on the voting website. All the information in sites which has been entered are stored in database .For each page in the website have its own database table. Each voter has to enter his all basic information like name, sex, religion, nationality, criminal record e.t.c. This is the first page of the website known as the welcome page. It has all the page options like Home, Polling Dates, Register, Login, about us, Contact us, FAQs. [1] Register, Login, about us, Contact us, FAQs.

4.1 Home
4.2 Registration
This is the register page, where the voter, candidate and election commission officer can register themselves. They all have to enter basic information best of their known. All the information registered in the website are saved in the respective database. The Election Commission officer has authority to accept eligible user and suitable candidate, otherwise he/she has right to reject their registration. [1]

4.3 Login
User Login. After registering into the website, this information is saved to the database and sent to the election commission. The user can Login to the website with his unique USERNAME and PASSWORD generated through registration. There is a option for FORGOT PASSWORD, in case user forget his password then he/she can go with option of forgot password. [1]

Candidate Login. After registration candidate can see his/her profile and can edit his/her profile. The candidate has facilitated with all the latest news update regarding election.[1]

Election commission officer login: After login election Commission officer will verify whether user and candidate is authentic or not.[1]
Televoting System. A televoting device is specially meant for a televoting system, in which a large number of subscribers can connect to a telecommunications network and are able to make a call to a subscriber number, herein referred to as televoting number, of a televoting processor which is also connected to the said network in order to transmit their vote to said televoting processing,

(1) Firstly it will be connected to a telecommunications network.

(2) Then they are able to make a call to a subscriber number, referred to as televoting number of a televoting processor.

(3) It provides a way to transmit their vote to said processor.

Absentee Voting. Absentee voting is a voting method where the person who is unable to visit the voting booth due to any problem can commit their votes through Absentee Voting. This system involves voting on a day earlier than the actual Election Day so that the candidate who were absent at the time of actual election date can vote through absentee voting.

4. RESOURCES

We develop this software application with following resources

Front end: - JAVA (JSP, Servlet, JDBC, Java mail,EJB2.0)
Back end: - ORACLE/MYSQL
Design: - HTML CSS (Cascading Style Sheet)
Validation: - JavaScript
Platform: - J2EE [1]
Communication of information is possible through the dedicated network to the server in which database is present. Interface server acts as a medium between the network and the database.

V. CONCLUSION

The functionalities to the current online voting system such as different regional languages, Televoting Support, Absentee voting is achieved which will increase the voting rates in different regions of country. This system is highly reliable and secured in order of their operation. It is user friendly and easy to handle if person don’t have technical knowledge and skills. This system have an excellent mechanism that doesn’t require geographical proximity of the voters.

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7. REFERENCES