

# Poll System using Electronic Voting and View of Sample and Questionnaire

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**Abstract:** E-Voting means voting over the internet, unlike the traditional voting it doesn't require punch card or other means like paper ballot, or sometimes persons going to stations and it makes the whole process easier and less expensive for voters, it is used to help businesses and organizations to evaluate their policies and to help voters to express their opinion. This project enables voters to access the web application and have their own private voting or general voting according to the privilege that they got from the main administrator, accessing this web application through web browser, instance result can return with every type of voting (Private, General) in six ways depending on the six questions of each type. Oracle data base 10G system was used to build this web application, forms and reports also provided by oracle developer 10G are used to build the pages of the web application.

**Keywords:** E-Voting, Poll System, Electronic voting, E-voting, Web Application.

## I. INTRODUCTION

An Electronic voting (E-voting) system is a system which the data are electronically record, processed, and saved primarily as digital information, it is a very important topic and if it applied with high security, "e-voting" means voting over the internet, unlike traditional voting it doesn't require a punch card or other means like paper ballot or sometime person going to stations and it makes the whole process easier and less expensive for voters and the authorities [1]. E-voting systems must be designed well and run, to ensure the safety and reliability of the voting process. Electronic voting is necessary because it is way in which poll system can be applied electronically without introducing opportunities for fraud or scarifying voter privacy [2]. The voting system must ensure the secrecy of voter's choices and integrity of the election result [3]. The first use of electronic voting system was in 2000 in America and it was referendum of a political nature. After that the UK piloted new ways for voting in local governments' election in 2002. France, Canada and Switzerland started to use internet voting in 2003. In 2004 for the first time the Netherlands used internet voting and Estonia in 2005 held its first election using the internet. 2006 saw submitted of six countries using vote on the internet, which was not matched again until 2010 [4]. Creating a web application for voting to ensure security, transparency and cost effective, especially when considering production cost of printing.

Education, National Kaohsiung, Normal University, and their study "Design and Implementation of an electronic Voting System with Contactless IC Card", This system compare foreign E-voting system by literature review to clarify the existing problem. Furthermore it design and implement an E-voting system with contact less IC Card.[5] In 2009 Jan G. and Urs G., University of St. Gallen and their study "Three case studies from Switzerland: E-voting", that examines how these system have worked in the test cantons of Geneva and Zurich.[6] In 2012 Zainab A.M. University of information technology/Multimedia technique and her study of "E-voting systems", two experiences are produced; the Estonian e-voting system and Secure Electronic Registration and Voting Experiment (SERVE) which implemented in the United State America.[7] In 2015 Dr. Ali M., Emirates Identity Authority, Abu Dhabi, United Arab Emirates, and his study "E-voting in UAE FNC Elections: Case study", that present a case study of an E-voting system deployment in United Arab Emirates (UAE). [8] And in 2015 Marwa S.B, University of information technology /web sites technology and her study of "Design and implementation of E-voting website", this project enable the member of the Hose of Representatives to access through internet using pc(personal computer), PHP language was used to build this website, and the data base used is MY SQL.[9].

## II. LITERATURE SURVEY

Many researchers have applied many algorithms in voting systems these work can be presented as following:

- In 2008 Jung Y.L., Chun F.L., and Chung H.Y., Graduated Institute of Information and Computer

## III. WEB APPLICATION

A web application is an application that is reached over the intranet or Internet [10] To user a web application must know the URL, name and password for the application. Browser transmits request to the web server which hosts the request web.

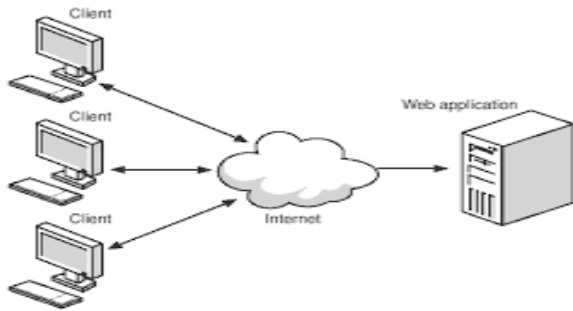


Fig. 1 Web Application

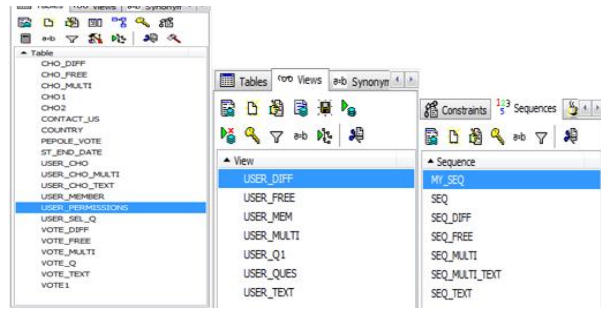


Fig. 3 Database tables, views, Sequences

IV. DESIGN AND IMPLEMENTATION

The design and implementation of web application for E-Voting system, this web application has been designed to help businesses and organizations to evaluate their policies and to help voters to express their opinion. Language that have been used in the implementation of the web application is Oracle Database 10g, Oracle developer 10g, SQL\*Plus, Toad for oracle database and the graphic editing program called 'Adobe Photoshop' has been used in addition. This web consist of many pages and the home page interface includes all basic information about the voting types and description of our services that we provide on the web, also home page include Linked button to active pages and general reports of the web application.

A. Authorization of the webpage

Login an authorized admin can adding privet and general user in order to put their six type of voting question as shown in figure 2.

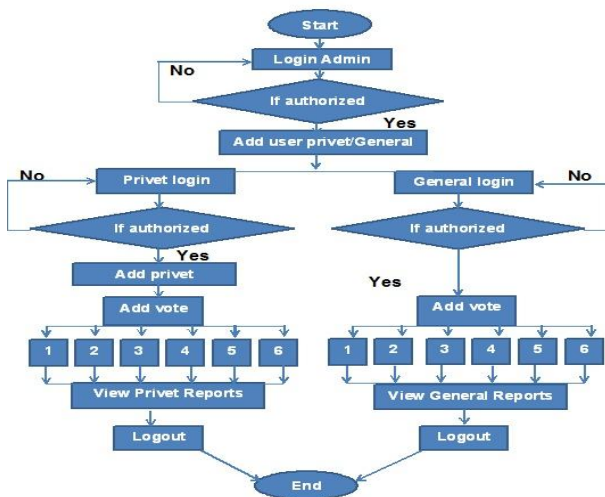


Fig. 2 Authorization of the web page

B. Database Design

The database includes many tables, each table has a number of many records, and it must be connected between the client and the server in order to access the database information on the server. This project required (21) table, (7) views and (7) sequences as shown in figure 3.

V. HOME PAGE IMPLEMENTATION

The home page Interface of the web application is designed by using Oracle Form Builder 10G and Oracle Reports Builder 10G as shown in figure 4.

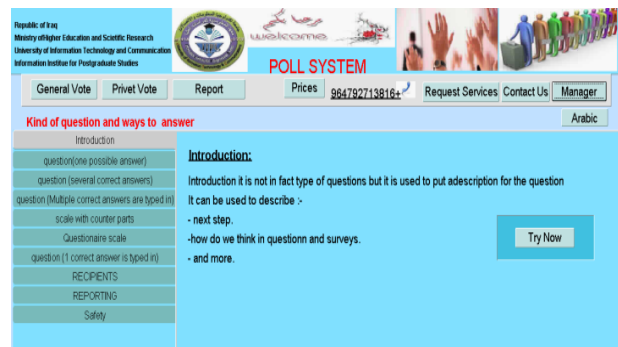


Fig. 4 Home Page Interface

C. Manager Page Implementation

When new form instance eight page will be not active. This page can both Administrator/(user that buy the services) to logon it, typing there User name and Password more than three times in a wrong way will Exit the form automatically, else will active the change password and save button for easy and more security password change. Eight page as Administrator login with Apppear with full control, if the login done by user that buy this services, this eight page will active as what he pay for which type of question to vote, and the two kind of voting (privet/general) or both as shown in figure 5.

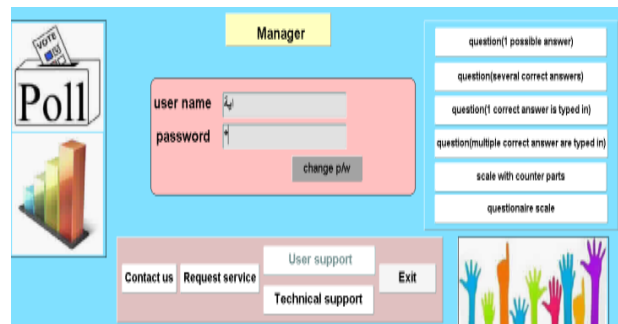


Fig. 5 Manager page interface

D. Question (One possible answer):

Allow user to put this question with one answer only as shown in figure 6.

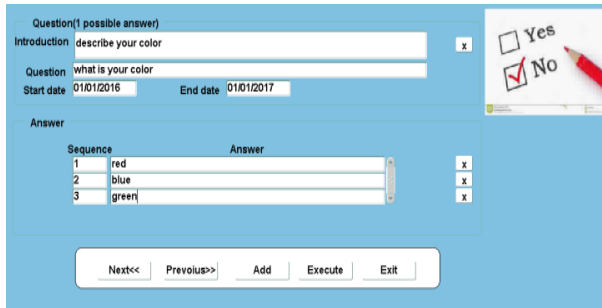


Fig.6 Question one possible answer

E. Question (several answers):  
Allow user to put this question with several answers as shown in figure 7.



Fig.7 Question several answers

F. Question (1 free typed answer):  
Allow user to put this question with one typed answer only as shown in figure 8.

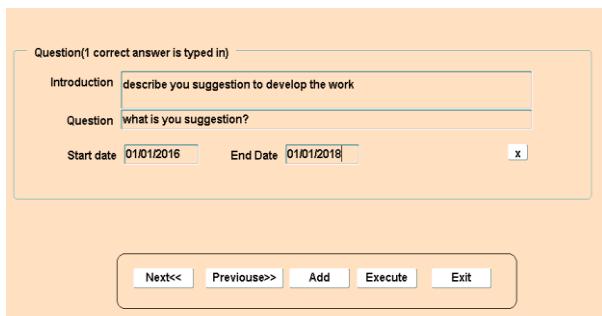


Fig.8 Question one free typed answer

G. Question (multiple free typed answers):  
Allow user to put one question with multiple free typed answers as shown in figure 9.

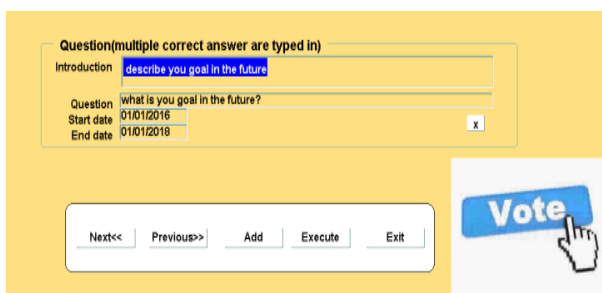


Fig.9 Question multiple free typed answer

H. Question (scale with counter parts):  
Allow user to put this question with scale answer as shown in figure 10.



Fig.10 Question scale with counter parts

I. Questionnaire:  
Allow user to put this many question with the same multi answers as shown in figure 11.

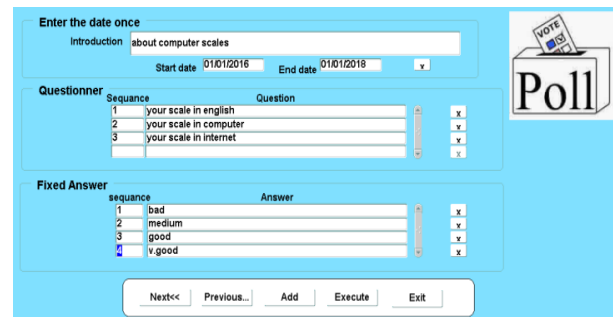


Fig.11 Questionnaire

J. Privet Vote Page Implementation  
Allow user that buy for privet services to view their question on this page. It is required to choose their user name/company name who invites them first, then typing their name, country, Email, gender, and so on. If this information has an empty field the cursor will take you on that empty place, also for wrong typed information a message will appear automatically for that error, and then form is clear. If this information is correct it will activate the six buttons on the right as shown in figure 12.

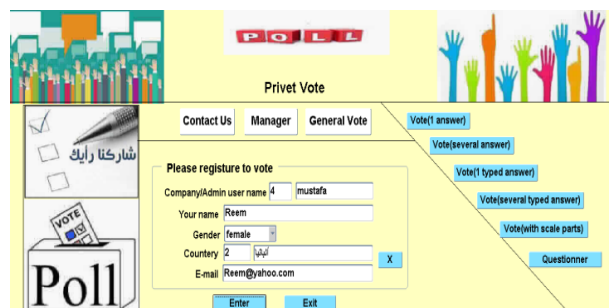


Fig.12 Privet voting page

K. Vote (1 answer):  
A question put by the inviter privet user will appear with its own choices according to the date that question available as shown in figure 13.

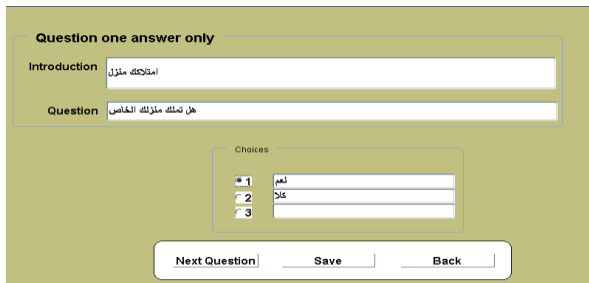


Fig.13. Voting one answer

L. Vote (several answer):

A question put by the inviter privet user will appear with its own choices according to the date that question available as shown in figure 14.



Fig.14 Vote several answers

M. Vote (1 free typed answer):

A question put by the inviter privet user will appear with one text field to type in according to the date that question available as shown in figure 15.




Fig.15 Vote one free typed answer

N. Vote (multiple free typed answer):

A question put by the inviter privet user will appear with three text fields to type in according to the date that question available see figure 16.

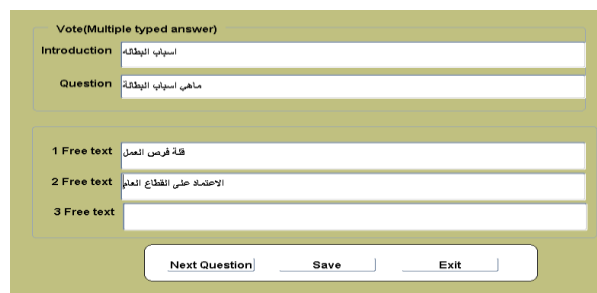


Fig.16 Vote multiple typed answer

O. Vote (scale with counter parts):

A question put by the inviter privet user will appear with its own two different choices according to the date that question available, a scale of six degree between those different parts allow voter to choice from see figure 17.



Fig.17 Vote scale with counter parts

P. Questionnaire vote:

A questioner put by the inviter privet user will appear with its own choices according to the date that question available. See figure 18.



Fig.18 Questionnaire vote

Q. General Vote Page Implementation:

Allow user that buy for general services to view their question on this page to vote by general member as in figure 19, that require registering at first and a welcome message will be seen. All type of available question will be active and display according to the date that question available.

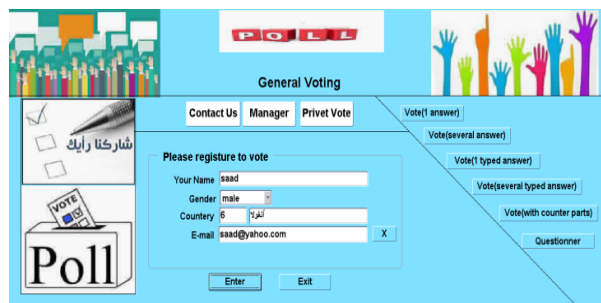


Fig.19 General Vote page

VI. CONCLUSION

The process of electronic voting as seen by many specialists is an effective means to facilitate the electoral process in terms of cost, accuracy and safety. This web application designed by using oracle developer 10G,

SQL\*Plus language, Toad for Oracle and Adobe photo shop also this program is designed to help businesses and organizations to evaluate their policies and to help voters to express their opinion.

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