Project Proposal for The Senior Project

Group Name: iTeam4

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Project:

Name of the Project: Online National Election Voting System

Sponsor: This is one of the projects proposed by IBM- YAZILIM AKADEMISI 2011 competition. So, this application will be developed by IBM tools and the company will provide these for free.

Description of the problem: We are living in a democratic country and voting is one of the fundamental duties of the public. However, at lots of parts of the country people cannot attend the voting because of several reasons. Especially there have been cases of threatening in Eastern part of Turkey at polling stations and people are faced with problems during voting. Also, sometimes people may not be in village/count registration and because of that reason they don't fulfill their voting duties. So there is a need of a contemporary online election voting system that contributes to the development of the country's democracy in addition to classical voting system.

Market Research on project: There is not an example of online voting system in our country. However similar systems are being used by lots of countries through the world. Since such systems are critical, polling stations are used for voting. For example electronic voting system has been used in Belgium since 1999 [1]. Also statistics show that in France %60 of the public use internet rather than paper [2].

Detailed Description of the project: Online National Election Voting System is a web based application. So, this system can be used by registered citizens through internet connection.

The stakeholders of the system are public, candidates, system administrators and field officers.

The main functionalities of the system are as follows:

- This system provides online voting for citizens during the election day.

- Citizens can discuss topics related to coming vote, candidates, candidates' campaigns through system forums and can send e-mail to one another.

- And candidates perform their election campaigns through the system forums.

- There will be system design that will prevent duplicate voting. So, the citizens cannot vote both online and off line (polling stations).

- The results and statistics about the election will be shown and they will be updated properly.

- The results and statistics of the old elections are also kept by the system.

Since user's identification is one of the main problems in this system the user must be identified correctly. To achieve this aim, the registration process will be as follows:

- Voter's identity cards will be given by field officers and in order to get this card user will update a photo by using system.

- Citizens will register to the system

- Field register will validate his/her identity and give Voter Identification Card.

- Users will use this Voter Identification Card to as a user name and will have password to enter the system.

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According to situation, we may use identification technologies such as finger print, face recognition.

In demonstration, voters will be registered and they will give their votes. And also they will discuss with each other and send emails. Candidates also update their profile and perform their campaigns. To test the system's scalability we plan to use large amount automatic users[bots] which try to vote at the same time.

References:

[1]- http://en.wikipedia.org/wiki/Electronic_voting_examples

[2]- http://www.foruminternet.org/telechargement/documents/reco-evote-en-20030926.pdf

[3]- http://www.yazilimakademisi.org/2011/detailproject.php?id=25