Introduction

This system is designed to facilitate the process of voting through the internet from the beginning where each candidate registers up to the announcement of the winner. The system will not be doing the verification of the authenticity of the candidate's and voter's files but rather assumes that whoever is added into the system as a candidate or a voter is already verified by a third person. The counting of votes is going to be an internal work of the system that shall not be accessed, altered or edited by an of the users. All users will be able to view the progress of the election, the profile of each candidate and the final winner.

Previous works and their problems

There are about three types of voting systems: **paper-based, direct-recording electronic (DRE) and online.** The problems with the paper-based was that there was wastage of paper and material and the labor work. The problem with the online voting system is mainly *security*; security of the system, the users and the votes. In order to solve these, we need to have user authentication and make sure a user can only vote once and build a more secure voting system.

The system will support three kind of users:

1. Administrators
2. Candidates or the competing parties
3. The voters

1. Administrators

These are the authorized group of users that supervise the entire process of voting. They create the voting events to be held at a certain deadline. The system will automatically shut down the voting or campaigning when the deadline is met. They can also register the candidates and voters. Here, as already mentioned, it is assumed that when these people come, they already have a verification that they are eligible to vote or compete. Administrators can also create an online debate or campaign for the candidates. This debate is going to be public and visible to all members of the system. Administrators can not vote during the voting time, they only supervise the event, never participate in it.

2. Candidates

The candidates are going to be added into the system by the administrators. They can view the progress of the entire election, their parties progress and the campaign of the other candidates as well. Once they have been confirmed into the system, they are free to upload their ideas and motivational campaigns on the system via video, audio, text or image. They can also take part in the online debates created by the administrators. The system also allows the candidates to vote for whoever they want for during voting time.

3. Voters

Voters are the people who vote, the general public. As already mentioned, the system doesn't do the authentication and therefore, when the voters are added into the system, it is assumed that the cases of age, nationality and so on are already taken care of by some other party. After they have been admitted into the system, they take an online card that allows them to vote only once. In cases where the election is specific to a certain location or incident, the voters will ask registration for that specific election and if the are fit to participate, they would be given the online card. The voters will be encouraged to listen to the online debates and ask questions. They can also vote for their choice of candidate.

Functional Requirements

Name	Login
Summery	The system shall allow voters and parties (Competitors) to login to the system by providing their username and password
Description	System users provide their password and username and the system validates the input and redirects to the home page if it is validated right or replay with error message if it validates wrong

Name	Register
Summery	In our system there are two kinds of registrations 1. Voters will be register to the system this registration is used to store all legal voters in the database 2. The second kind of registration is for specific election event
Description	The first registration is always open for all legal users and the second one is time limited registration in which the time is set by admins for specific event

Name	Posting
Summery	This a feature allowed only for competitors. All competitors registered for an event can post their ideas during campaigns this is also time limited
Description	Posts are constrained to the laws and regulation set by admins and every post will address all users whether they are registered for that specific event or not.

Name	Election events
Summery	These events are created by admins

	Events can target specific bodies --> it can be regional or country wide
Description	All events and administered by admins from their creation to distraction All events are time constrained

Name	Votes
Summery	Votes are the numbers of voices given for a party from voters these votes are fundamental blocks of the event since the result is dependent on these votes
Description	Votes are given during voting periods Every voter can vote only once Each vote starts from zero and counts until the voting time is closed

Name	Results
Summery	Results are determining factors in identifying the final winner of the election event Results are derived from final sum of votes
Description	The winner of the election event is the one with the highest numbers of votes Results are displayed in two formats 1. Live result is the progress of parties in competition 2. Final result is the result display at the end of the event which will determine the final winner