Online election manager/publisher/analyzer

Requirements Specification and Analysis

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REQUIREMENTS ANALYSIS DOCUMENT[1]

1. Introduction

The purpose of this system is to provide an efficient voting platform for various institutions ranging from schools to offices. The proposed system was designed so as to enable users to hold an election with ease. The driving motive behind the development of the system was a growing demand for a platform that will help with the choosing of a person with majority votes fairly while at the same time the system should be user-friendly and need minimal training/knowledge to be able to use.

1.1.Purpose of the System

This system was designed with the aim of providing easy, credible and fair elections for users who want to use a vote to choose a person with the highest number of voters thereby declaring the person the winner. It makes the whole process an easy affair without too much hassle as all the users have to do is sign up and follow a few easy steps.

1.2.Scope of the System

The system provides service to mostly the person who in charge and also universities, government departments and so. Thus, there are some common functionalities for both admins who pay for the service and the users, also some different functionalities for the both too.

The system provides many services to the admins of the system like; Admins can create new election to select a person to as specific position by the votes of people that affected by the results or if admin eliminated a lot candidates and can't decide between several of them, then they can create an election to choose it. They can see the analysis of the elections, they can see the changes between votes between 2 elections and they can manage the system according to themselves.

The system provides many services to the Candidates like; they can vote for themselves or somebody else in the same election. They can see who is winning live before the election ends and they can prepare for a demonstration about what they want to achieve if they win the election to voter's to see while they are voting.

The system provides some services to regular Users; if they are allowed, they can vote in private elections and they can vote in public elections(regional, state etc…). They can follow the election by time going and after the election ends, they can see full analyzed results of the election they participate.

1.3.Objectives and Success Criteria of the Project

Our objective is to grant users the ability to conduct elections easily without having to go through unnecessary hardship. This will be a base system for future online elections and a good choice for today's business elections, to get rid of a lot of paper work and man-hours spent.The success criteria for the project would be:

- users' satisfaction
- the rate of usage
- reported successful elections
- the popularity of the system
- usefulness

1.4.Definitions, Acronyms, and Abbreviations

RAD: Requirements Analysis Document

1.5.Overview

This document contains descriptions of the functionalities of the proposed system. Functional and non-functional requirements of the system are explained in detail. There is also a description of the use cases and scenarios used. Also included is the schedule for when the project is estimated to be completed also known as Gantt Chart

2. Current System

The current election system is used generally around the world is on paper election method that requires voters to come to a specific place to vote and besides regional elections for examples in schools this can be a really big problem.For example last year there was an election in our schools which get %40-50 participation percentage which is very very low. With that system. If we want to continue with school example the paperwork needs to be done by the school and candidates and when election is going through there are a lot of people working in the process to keep the election safe and fast as possible it. After the election is finished there is a calculating votes process and you can't be sure if it's accurate or not fully. When the election is happening voters need to go to a specific place that is mostly not close to their house or they don't want to enter the queue for voting. Moreover, current election system is functional but not optimal.

3. Proposed System

The new system to be designed will enable voting by allowing candidates to sign up to an online system so as to be able to be elected and voters will also sign up to vote for the candidate of their choice. This eliminates the inconvenience of having to be physically present before a voter can vote. It will also increase participation in the elections and we can be looking at an improvement of up to 80% or more (from a poor 40-50%). Our proposed system will make elections tidier because there is minimal or no paper work thus, our system improves accuracy and reliability of elections. Candidates have a unique ID which will be important when the voter is choosing for his choice of candidate to vote for. Election is an unfortunate but common practice in many elections in the current system however, our system will prevent and that is a significant and welcome upgrade. The system ensures that the elections aren't rigged (that is no voter is allowed to vote for the same candidate more than once) by asking for the voter's user ID before they make their vote. So, when a voter with the same user ID tries to vote again for a candidate with the same candidate ID, the system rejects the vote as invalid. Counting the ballots after the elections can be stressful work for the person tasked with the job. As mentioned our system has minimal to no paper work. Votes are automatically tallied and viewed at the end of the elections. This not only improve accuracy significantly but also saves a lot of time which is also very important.

3.1.Overview

3.2.Functional Requirements

3.3.Nonfunctional Requirements

3.4.System Models

3.5.Project Schedule

4. Glossary

5. References

1. Bruegge B. & Dutoit A.H.. (2010). *Object-Oriented Software Engineering Using UML, Patterns, and Java*, Prentice Hall, 3rd ed.