Software Requirements Specification (SRS) CSE327 Section-4 Anti-Corruption Voting System

Submitted to

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Introduction:

In recent days online software has acquired a lot of popularity this document describes the structural properties and software requirements of the Online National Election Voting System project. This software is very important for our election. This system recognized as secure and accurate in its ability to authenticate peoples and to tabulate voting results.

Purpose:

The purpose of this document is to make the functional and non-functional requirements of the Online National Election Voting System easy to comprehend. It also serves the purpose of making the functionality clear to end users. This project is a contribution from our side by which it becomes possible that our Election Commission can help people in a much better way.

Intended Audience:

- Developers
- Project testers
- End users

Intended Use:

Developers: Developers is a sector who can review project's capabilities and more easily understand where their efforts should be targeted to improve or add more features to it such as design and code the application which sets the guidelines for future development of the system.

Project Testers: Here the project testers can use this document as a base for their testing strategy as some bugs are easier to find using a requirements document. This way testing becomes more methodically organized.

End Users: In this function end users of this application who wish to read about what this project can do.

Product Scope: We are building this system to help people. We will keep some dynamic features that will grab users to use our website & it can be also very helpful. The Online Voting System platform can be made more secure by using the following methods:

- 1. Password Changing
- 2. Finger printing

3. Cornea Detection

The password used by the user to vote is provided by the Administrator. In the future the user can be given the privilege of changing the password. So it helps to increase the security of the system. The other two methods that can be used are cornea detection and fingerprinting. But here the problem is that it decreases the scope of the platform because these systems need some electronic components to implement. So it will avoid the user's privilege to cast the votes at their fingertips. But it can guarantee that fake voting will be impossible.

Risk Definition:

Following will be the risk involved in our project;

Now a days there are lots of online based app and website where this kind of project is available. Online voting system is now a common case is some area. In this way people or user may not find out product interesting. So what would be the real cause that would motivate users to use our product?

- Most of the part of our app will be similar with the other apps, except some features.
- In our product, we will add a GPS feature. This will help admin for caught any fraud using the GPS track.
- If any voter try to give their vote to another area, the admin will be notify through this feature.

User Classes and Characteristics:

In our system the ultimate control will be in the hand of three users. They are:

Product Owner: Product owner is in the higher position who can take any kind of decision regarding this product. And admin and users will follow her/his order for updating purpose.

Admin: Here admin is the highest privileged user who has the full access to the system. And he/she is able to manage any kind of activity regarding the system

Developer: Developing part of the system will be controlled by developers. They can change or update any features in the system.

User Needs:

In this system admin and voters are the main users. Users have some link between them.

Admin: As a user, admin is the first one who will log in our system first. And admin will be able to open the voting window for voters. Then voter will be able to vote the candidate. Admin also input the voter related data in the system and calculate the results or see the results.

Voter: By using this product voter can easily vote their preferable candidates. They can see the candidate details through this system.

Operating environment:

Apparently, all most all of us know about the operating environment .It is the environment where the app will run.

We are basically developing desktop app.

Hardware: Processor (CPU) with 1.6 GHz frequency or above 1GB of RAM (100MB required) Stable

Internet Connection Broadband (high-speed)

Constraints:

Constraints restrict developer's choices on how problems can be solved.

Language and Framework requirements: The code must be written in Java programming language with JavaFx framework.

Completion Time: The app must be completed within three month.

Hardware Limitations: - There are no hardware limitations

Assumptions:

- 1. The user must have the knowledge of understanding English.
- 2. The user must have the ability to browse the internet.
- 3. The user must have connected to the internet for use the system.
- 4. The accuracy of the information of users is the responsibility of all user

Requirements

There are mainly two types of requirements which we will provide. The requirements are:

- Functional requirements
- Non-functional requirements

Functional Requirements

System features:

1.Admin selection:

Admin can select between voter and candidate registration, update their data, start voting or can see the result

2. Voter and candidate registration:

Here admin can add voter and candidate's data (name,nid,mobile, date of birth)along with their photo and crime report

3.No vote:

At the time of voting, there'll be a option for no voting. If 50% or more than 50% vote is pressed as no vote, then the voting session will be cancelled

4. Crime report and restriction

If there is any crime report for the voter then he/she will be restricted from the voting season.

5. Candidate review

At the time of voting session voter will be able to see the candidates detail review including there crime report no.

6.Gps based check voter can vote or not

There will be a gps check for the voters, if the voter is registered for another place then he/she will not able to give the vote.

7. View result:

there will be a special button for stopping the voting session which will require admin password. After the voting session is completed, admin can check the result through the window.

External Interface Requirements:

• Use Interface:

Front-end & back-end software: scene builder, eclipse

Back-end language: java, mysql.

Gui framework: javafx

• Hardware Interface:

Windows with java runtime environment installed.

Non Functional Requirements:

Performance: The product will be based on windows operating system and has to be run from a Local Computer. The product will take initial load time depending on computer configuration ,which also depends on the media from which the product is running. The performance will depend upon hardware components of the client/user. But we will try to provide better interactivity to the user which will need less time to load data and interact with the system. So, ultimately user experience will be smoother.

Safety: There will be a backup log so that damage or crush data can be recovered by using backup log.

Security: The system shall automatically log out all voters after each of their voting session is done. The app will never display a user's password.

Quality:

- Availability: The Anti corruption voting System is available to store the voter and candidates information and helps to organize a corruption free voting session.
- Correctness: The Anti corruption voting System gives the accurate voting result.
- Maintainability: The administrators maintain the server for the better services.
- Usability: It satisfies a maximum number of user needs.