

# Software Requirements Specification for **ONLINE VOTING SYSTEM**

Version 1.0 approved

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13th October  
2016

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## Revision History

Name Date Reason For Changes Version

## SOFTWARE REQUIREMENT SPECIFICATION

### 1) Introduction

.The Online Voting system will be operated by the administrator and administrator can set time and voting days. Locations of the Online Polling system will be determined by the elections administration team definitively. The Administrator will be responsible for activating the Online Polling system at the start of the voting period and deactivating the Online Polling system at the conclusion of the voting period.

#### 1.1) Purpose

The purpose of this system is to implement the computerization of the details, Polling results, current Polling and candidates. The Online Polling System is supported through the college Student Records System (SRS). This allows students to login and be authenticated as an entitled voter for election purposes. The Online Polling System is recognized as secure and accurate in its ability to authenticate students and to tabulate voting results

#### 1.2)

#### *Intended Audience and Reading Suggestions*

The document is intended for developers, voter, candidate, users, testers, and documentation writers. First to know about the project for a person it is mandatory to read the purpose then the description for detailed analysis and features for understanding the concept completely then the external requirements and other non functional requirements (if necessary)

#### 1.3) Scope

Voter : The person one who votes for the candidates. Administrator : The person one who is authorized to keep record of the site content and Administrator can maintain Voter and candidate records. Candidate : One who stands for voting. Login ID : It is an ID which is unique to Voter, Administrator as well as Candidates.

## 1.4) REFERENCES

*For more understanding similar models of SRS can be referred:  
Pressman, Roger . Software Engineering: A Practitioner's  
Approach.*

[www.google.com](http://www.google.com)

[www.w3schools.com](http://www.w3schools.com)

[www.scribd.com](http://www.scribd.com)

[www.quickbooks.com](http://www.quickbooks.com)

## 2) Overall Description

### 2.1) Product Functions

The Online Voting system will be operated by the administrator and administrator can set time and voting days. Locations of the Online Polling system will be determined by the elections administration team definitively. The Administrator will be responsible for activating the Online Polling system at the start of the voting period and deactivating the Online Polling system at the conclusion of the voting period.

### 2.2) Operating Environment

*For developer the requirements are java/perl/python, a database (structured or unstructured) ex: my sql, oracle, MongoDB, and servers apache for php or respectively and supporting platforms (ex: jdk for java). for user any browser would be helpful.*

#### 2.2.1) Software Requirements

- Xampp Server
- MS DOS
- WINDOWS XP
- Windows 10
- Notepad++
- Wordpad
- PHP MONGODB DRIVER

#### 2.2.2) Hardware Requirements

- CPU : Intel i5
- RAM : 1GB (MIN)
- Hard disk : 160 GB
- Operating System : Windows XP

### 2.3) Design and Implementation Constraints

*Customer needs to take care maintenance of software updates should be d*

*one timely. Renewal of the software has to be done as per the prefixed periods. DB maintenance should be taken care, so that it will help if there is any DB crash .*

#### *2.4) User Documentation*

*User manual is provided with the details of the renewal periods, contact numbers , addresses , email ids, Forum id details etc , so that user can go through and self help or contact the respective authority.*

#### *2.5) Assumptions and Dependencies*

*It is assumed that the platforms, software, DBs , basic functionality and usages are known to the developers . It is assumed that the words or functions used in the software are known to the customer. It is assumed that the user knows the basic functions of MongoDB used in the backend for the connectivity.*

### **3) External Interface Requirements**

#### **3.1) User Interfaces**

1. Admin Login Screen
2. Menu selection Screen
3. Voter Information
4. Candidate Information
5. Generate Vote(Report)
6. Display Voting Result
7. About

#### **3.2) Hardware Interfaces**

- Server Configuration:

1. Minimum 2GB Hard Disk .
2. RAM 1GB.
3. Windows with Apache preloaded.
4. Xampp Server.

- Client Configuration

1. A terminal with Internet Explorer .

#### **3.3) Software Interfaces**

1. Operating system : Windows 7
2. Language : PHP
3. Database : MongoDB

4. Browser : Chrome, Mozilla Firefox

### 3.4) Communications Interfaces

Communications interfaces can be provided through e-mail, web browser, network server communications protocols, electronic forms, and so on. For this we can use communication standards such as FTP or HTTP to provide security using encryption algorithms and synchronization mechanisms.

## 4)

### System Features

#### 4.1) Login for admin

##### 4.4.1) Description and Priority

*This feature is for the admin to login to make any changes in the records. It is an important feature as the records need to be updated and can be done by the admin only for security reasons. The priority of this feature is 9 on a scale of 1-9 as the records cannot be updated without it.*

##### 4.1.2) Stimulus/Response Sequences

*Username and password buttons are the response of the login button. When the details are given then it takes to the next page*

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*where the employee information will be present*

##### 4.1.3) Functional Requirements

*Function of the login button is to take the admin to the next page for validation of the username and passwords. The validation is the atmost important requirement for the admin for providing security and safety. Once the details are given by the admin then it compares the values with the stored values. If the combination of the username and password are matching it continues further, if not matching it gives the message that the values are not correct.*

#### 4.2) Update

##### 4.2.1) Description and Priority

*Update button is another button which is required for updating the details of the Voter and Candidate. Once it is pressed it takes the admin to the next page where he can update the details of name ,*

address, phone, etc. Priority of the feature is 8 on the scale of 1 to 9 , as without this button details cannot be updated .

#### *4.2.2) Stimulus/Response Sequences*

Personal information details page is the response of the update button. When the details are updated then it takes to the next page of logout or homepage from which the admin can login again.

#### *4.2.3) Functional Requirements*

Function of the update button is to take the admin to the next page where the page asks for the details needed for update of the account. Once all the updates are done page takes to the login page .

### *4.3) Search*

#### *4.3.1) Description and Priority*

Result button is a button which is required for Displaying the Result of Voting. Once it is pressed it show's the details of Candidate Poll. Priority of the feature is 8 on the scale of 1 to 9 , as without this button details cannot be updated .

#### *4.3.2) Stimulus/Response Sequences*

Personal information details page is the response of the search button. When the details are searched then it takes to the next page of logout or homepage.

#### *4.3.3) Functional Requirements*

Function of the search button is to search the information of the Voter. Once the details are searched using the search button, it can be updated by the update button directly.

### *4.4) Logout:*

#### *4.4.1) Description and Priority*

Logout button is another button which is required for taking the user out of system. Priority of the feature is 4 on the scale of 1 to 9. Though the button takes the user out of system, without using this button also the user will come out of system after certain period automatically, if no activity is performed

#### *4.4.2) Stimulus/Response Sequences*

Log out button is the response page once all the activity is done by the user. Logout is the last action performed by the admin.

## **5) OTHER FUNCTIONAL REQUIREMENT**

### **5.1) Performance Requirements**

System can withstand even though many number of users requested desired service. As we are keeping office level server of the online voting system. And access is given to the only registered users of office who requires the services of viewing, Updating etc. It can withstand the load.

### **5.2) Safety & Reliability Requirements**

By incorporating a robust and proven SQL into the system, reliable performance and integrity of data is ensured. There must be a power backup for server system.

### **5.3) Security Requirements**

Sensitive data is protected from unwanted access by users appropriate technology and implementing strict user- access criteria.

### **5.4) Software Quality Attributes**

#### **1. Security**

Sensitive data is protected from unwanted access by users appropriate technology and implementing strict user- access criteria. Companies in this situation also struggle to secure data, a growing concern given some of the high profile cases reported in the media involving lost, breached and stolen data.

#### **2. Maintainability**

Backup mechanisms are considered for maintainability of software as well as database. As it is object oriented reusability exists. As project is based on MVC architecture, testability exists.

## **6) Other Requirements**

*System pages should be user friendly and the terms and buttons used should be understandable to the user and the site should be attractive with the colors and combinations, interactive pictures and graphics.*

## **REFERENCES**

[www.google.com](http://www.google.com)

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