
Software Requirements Specification

**For
SAC Election**

Version 1.0 approved

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Revision History

Name	Date	Reason For Changes	Version

1. Introduction

1.1 Purpose

The purpose of this project is to build an online system to conduct SAC Election.

1.2 Document Conventions

This document uses the following conventions

- DB – Database
- DBMS – Database Management Systems
- E-R Model – Entity Relationship Model

1.3 Intended Audience and Reading Suggestions

This project is a prototype for the SAC Election system and it is restricted within the college premises. This has been implemented under the guidance of Dr.K A Abdul Nazeer. This project is useful for the Election committee.

1.4 Product Scope

The system is based on a Relational Database with its Election management and voting functions. We will have a database server which supports voting for multiple posts and contesting candidates. This system ensures that polling is held like secret ballot in which voters choices in an election is anonymous.

1.5 References

- Fundamentals of Database Systems by Ramez Elmasri and Shamkanth B Navathe

2. Overall Description

2.1 Product Perspective

An election database system stores the following

- Posts for which election is to be held.
- Contesting candidates in the election.
- Details of election committee.
- Number of votes polled for each candidate.

2.2 Product Functions

Increasing the count for the respective candidates to whom the vote is polled when each individual votes and only authorized person can have an access to view.

2.3 User Classes and Characteristics

Returning officer should be able to retrieve the information of contesting candidates.

2.4 Operating Environment

Operating environment for the SAC Election system is as listed below

- Operating system – Windows, Ubuntu
- Database – phpMyAdmin/MySQL
- Platform – PHP

2.5 Design and Implementation Constraints

- Relation Schema
- SQL commands for above queries and applications
- Implement the database using a centralized database management system

2.6 User Documentation

2.7 Assumptions and Dependencies

Assuming that there is a secure connection between the user system and the server.

3. External Interface Requirements

3.1 User Interfaces

- Front – end software : HTML, CSS/Bootstrap
- Back – end software : phpMyAdmin/MySQL, PHP, Javascript

3.2 Hardware Interfaces

- Windows, Ubuntu
- A browser which supports Javascript, PHP

3.3 Software Interfaces

Following are the software used for the SAC Election System

Software used	Description
Operating system	We have chosen Windows and Ubuntu for its best support and user-friendliness
Database	To save the data we have chosen phpMyAdmin/MySQL
PHP	To implement the project we have chosen PHP language.

3.4 Communications Interfaces

This project supports all types of web browsers.

4. System Features

4.1 System Feature 1

4.1.1 Description and Priority

The Election system maintains information about candidates, posts and election committee. This project has high priority because electing a student body is essential for every institution

4.1.2 Stimulus/Response Sequences

- Display the candidates for the corresponding posts.
- To cast a vote against a candidate.
- Displays the statistics of the poll.

4.1.3 Functional Requirements

5. Other Nonfunctional Requirements

5.1 Performance Requirements

The steps involved to perform the implementation of database are as listed below

- E-R Diagram
- Normalization

5.2 Safety Requirements

If there is extensive damage to wide portion of the database due to catastrophic failure, such as a disk crash, the recovery method restores the past copy of the database that was backed up to archival storage (typically tape) and reconstructs a more current state by reapplying or redoing the operations of committed polls from the backed up log, up to the time of failure.

5.3 Security Requirements

Security systems need database storage just like many other applications.

5.4 Software Quality Attributes

- Availability
- Correctness
- Maintainability
- Usability

5.5 Business Rules