ONLINE ELECTION COMMISSION

MANAGEMENT SYSTEM

DELHI

Sofware Requirement

Team:

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**Table of Contents**

[1. Introduction 4](file:///F:\project\sofware_engin\temp\EVS-SRS.doc#_Toc153615943)

[1.1 Purpose 4](file:///F:\project\sofware_engin\temp\EVS-SRS.doc#_Toc153615944)

[1.2 Scope 4](file:///F:\project\sofware_engin\temp\EVS-SRS.doc#_Toc153615945)

[1.3 Definitions, Acronyms and Abbreviations 4](file:///F:\project\sofware_engin\temp\EVS-SRS.doc#_Toc153615946)

[1.4 References 4](file:///F:\project\sofware_engin\temp\EVS-SRS.doc#_Toc153615947)

[1.5 Overview 4](file:///F:\project\sofware_engin\temp\EVS-SRS.doc#_Toc153615948)

[2. Overall Description 5](file:///F:\project\sofware_engin\temp\EVS-SRS.doc#_Toc153615949)

[2.1 Use-Case Model Survey 5](file:///F:\project\sofware_engin\temp\EVS-SRS.doc#_Toc153615950)

[2.1.1 Actors 8](file:///F:\project\sofware_engin\temp\EVS-SRS.doc#_Toc153615951)

[2.1.2 Use-Cases 8](file:///F:\project\sofware_engin\temp\EVS-SRS.doc#_Toc153615952)

[2.1.3 Use-Case Risk List 8](file:///F:\project\sofware_engin\temp\EVS-SRS.doc#_Toc153615953)

[2.1.4 Use-Case Specifications 8](file:///F:\project\sofware_engin\temp\EVS-SRS.doc#_Toc153615954)

[2.1.4.1 Vote 8](file:///F:\project\sofware_engin\temp\EVS-SRS.doc#_Toc153615955)

[2.1.4.2 Save 10](file:///F:\project\sofware_engin\temp\EVS-SRS.doc#_Toc153615956)

[2.1.4.3 Update 11](file:///F:\project\sofware_engin\temp\EVS-SRS.doc#_Toc153615957)

[2.2 Assumptions and Dependencies 12](file:///F:\project\sofware_engin\temp\EVS-SRS.doc#_Toc153615958)

[3. Specific Requirements 12](file:///F:\project\sofware_engin\temp\EVS-SRS.doc#_Toc153615959)

[3.1 Functionality 12](file:///F:\project\sofware_engin\temp\EVS-SRS.doc#_Toc153615960)

[3.2 Usability 12](file:///F:\project\sofware_engin\temp\EVS-SRS.doc#_Toc153615961)

[3.3 Reliability 12](file:///F:\project\sofware_engin\temp\EVS-SRS.doc#_Toc153615962)

[3.4 Performance 12](file:///F:\project\sofware_engin\temp\EVS-SRS.doc#_Toc153615963)

[3.5 Supportability 12](file:///F:\project\sofware_engin\temp\EVS-SRS.doc#_Toc153615964)

[3.6 Design Constraints 12](file:///F:\project\sofware_engin\temp\EVS-SRS.doc#_Toc153615965)

**Software Requirements Specification**

**1.Introduction**

**1.1 Purpose:**

This Software Requirements Specification document describes the behavior and requirements of the “Election Management System” software package.

1.2 Scope

This SRS document applies to the “Election Management System” software package

## 1.3 Definitions, Acronyms and Abbreviations

Admin: An administrator.

Candidate: A person who seeks or is nominated for an office.

Cast: The process by which one votes.

Database: A collection of data arranged for ease and speed of retrieval or search.

Election: The selection of a person or persons for office by vote, or a public vote on a proposed submittal.

Electorate: The body of persons enlisted to vote in an election.

Jurisdiction: The territory over which an election occurs.

Poll: The place where votes are taken.

Referendum: A measure proposed or passed by a legislative body to the vote of the electorate for approval or rejection.

## 1.4References

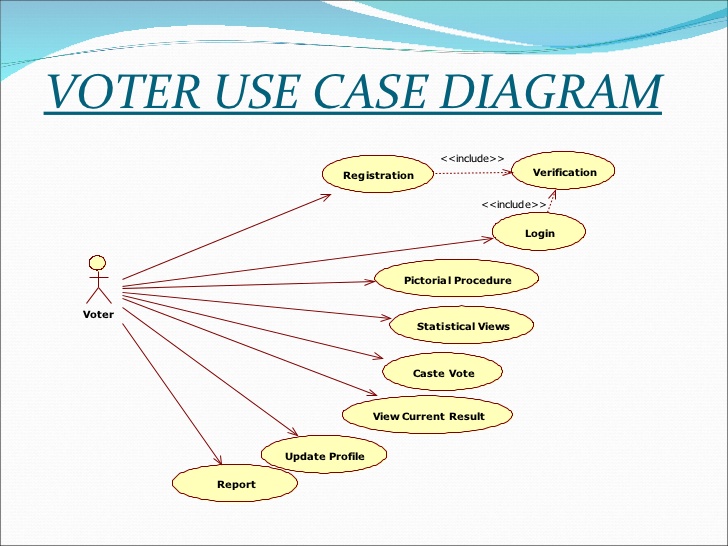
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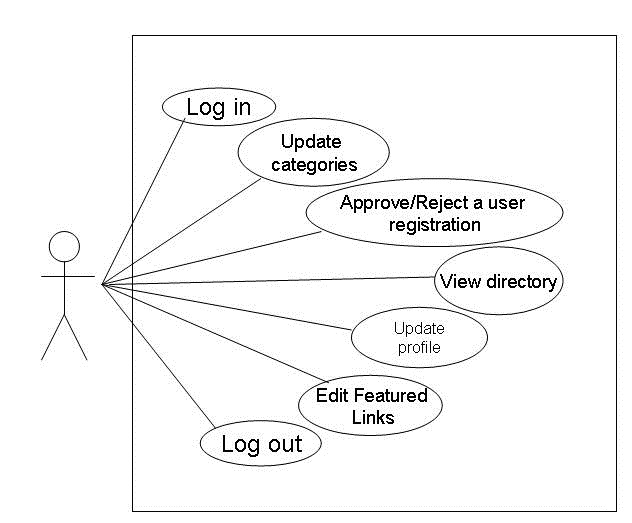
## Overview

The remainder of this document identifies the actors, use-cases, use-case scenarios, activity diagrams, assumptions and dependencies needed for the analysis and design of the “Election Management System” software package. All diagrams conform to UML standards

# Overall Description

## Use-Case Model Survey



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**Fig2-Administrator model**

### Actors

Voter: A member of the electorate, one who uses the “Electronic Commission Management ” software to form a voter card

Admin: A hired employee or volunteer for the agency sponsoring a vote, one who administrates the “Election Management Commission” software.

Database: A database for storing of sensitive vote id information and officer information.

Printer: A secure printer.

### Use-Cases

Voter id : This use-case describes the process by which a voter id creation.

Activate: This use-case describes the process of verifying a voter’s eligibility to vote. It ensures the voter is a member of the electorate.

Save: This use-case describes the process by which the system securely records a voter’sinformation to the database.

Print: This use-case describes the process the system uses to print a paper record, or audit trail, of a voter’s information.

Info: This use-case describes the process through which a voter may obtain vote-specific information during the general voter id procedure.

Update: This use-case describes the process by which an admin may add, remove or update voter id information

Initialize: This use-case describes the process through which the system first initializes during startup.

Login: This use-case describes the process of verifying an administrator’s identity. It ensures that the admin is allowed access to the non-voting capabilities of the “Election management System” software package.

### Use-Case Risk List

Highest: Vote, Save

Average: Update, Info, Print

Lowest: Initialize, Activate, Login

### Use-Case Specifications

### Vote id

* **Brief Description**

This use-case describes the process by which a voter id creation

* **Actors**

Voter

* **Dependencies**

Activate, Save, Print, Info

* **Basic Flow of Events: Voting, No Changes**

1. The use-case begins when a voter selects “Vote id creation”.
   * The system verifies the voter through the “Activate” use-case.
2. While there are more items on the Voter id
   * The system displays the current voter item fill and options.
   * The voter selects an option.
   * The voter presses the “Submit ” button.
   * The system retrieves the voter if information

### Save

* **Brief Description**

This use-case describes the process by which the system securely records a voter’s id information to the database.

* **Actors**

Database

* **Dependencies**

None.

* **Basic Flow of Events: Saving, No Errors**

1. The use-case begins when called from the “Voter id ” use-case.
2. The system checks the voter id and choices for data integrity.
3. The system creates a voter id record.
   * The system calculates a unique record signature.
4. The system encrypts the record.
5. The system adds the record to the Database.
   * The system checks to verify that the record was saved correctly.
   * The system checks the Database to ensure there is enough space for the next record.
6. The system displays a message confirming the voter’s ballot has been cast.
7. The use-case ends.

### Update

* **Brief Description**

This use-case describes the process by which an admin may add, remove or update voter id and officer location items.

* **Actors**

Administrator

* **Dependencies**

Login

* **Basic Flow of Events: Update, Multiple Ballot Items**

1. The use-case begins when an admin selects “Update”.
   * The system verifies the admin through the “Login” use-case.
2. While the admin does not press the “Logout” button:
   * The system displays options for possible administrative action.
   * The admin presses the “Update voter id Item” button.
   * The system displays a list of voter id to be updated.
   * The admin chooses a voter id and officer information
   * The admin enters new information for the ballot item.
   * The admin presses the “Update” button.
     + The system updates the ballot item information.
3. The system closes the session.
4. The use-case ends.

## Assumptions and Dependencies

* The Database system is fully functional and has enough space for at least 100 voter id.
* It can store at least five polling station officer information.
* The Printer device is fully functional and has the capability to print at least one audit trail.

# Specific Requirements

## Functionality

1. **The details about the related constituencies of the district.**
2. **The details about the polling booths in the respective constituency such as normal booths, sensitive booths, hyper sensitive booths.**
3. **The details of the EVM Machine is fed into the computer.**
4. **The Voter id creation**
5. **officers such that non of the polling officers will have the duty in their residential area and their working area**

* be possible through special means.

## Usability

* A voter may only create a one voter id if they are eligible to vote.
* A officer place at only polling both.

## Reliability

* The “Election management System” software will be available for voter use only during normal aelection During this time it shall be operational for as long as is possible.
* Administrators will have 24 hour access to the system.

## Performance

* The “Election management System” software package will perform all functions with minimal delay from the time of the initial request.
* The software will only accommodate one user at a time. No simultaneous use of the system by multiple voters, administrators, or a combination thereof shall be allowed.

## Supportability

The “Election management System” software shall have a clear and easily maintainable interface for managing election specific updates.

## Design Constraints

Due to the sensitive nature of the information handled by the “Electronic Voting System” software, a good deal of specific design constraints will be taken into consideration:

* The system shall only have the ability to write vote id (not read).
* The system shall not have the ability to overwrite any previously written vote id.
* Officer information.