

Software Requirements Specification

Functional Requirements

FR 1. Platform Registration: Users can register on the platform using Aadhar number, Email ID and generate his/her password

FR 2. Local governing bodies/ election commission:

FR 2.1 Local governing bodies login

FR 2.2 Approve new voters applications and documents

FR 2.3 Approve change of credentials requests of existing voters

FR 2.4 Declare final voting list

FR 2.5 Create and submit final voting form with shortlisted candidates

FR 2.6 Provide functionality to see statistics and counting after elections

FR 3. Voter Login/Registration and Voting cards:

FR 3.1 New voters can apply for a voter ID

FR 3.2 Existing voters can apply for updating voting cards (change of location,etc.)

FR 3.3 Handle voter ID cancellation request (duplicate entries/ death)

FR 3.4 Cast vote on voting day

FR 4. Provide functionality to reset password in case a user forgets it.

FR 5. Eligibility: Only authorized voters, who are registered, should be able to vote.

FR 6. Uniqueness: No voter should be able to vote more than once.

FR 7. Voter Confirmation: The voter should be prompted to confirm his/her vote before submission and also be allowed to modify the selection if necessary.

FR 8. No multiple-voting: The voter shall be prevented from choosing more than one candidate.

FR 9. Prevent Under-voting: The voter should receive notifications over registered Email ID as a reminder to cast vote to prevent undervoting

FR 10. Auditability: It should be possible to verify that all votes have been correctly accounted for in the final election tally, and there should be reliable and demonstrably authentic election records, in terms of physical, permanent audit trail.

Non-Functional Requirements

NFR 1. User Interface: The system should provide a crisp and user friendly graphical Interface to ensure ease of use. Also it should not require any special skill so that even an illiterate voter can cast his/her vote.

NFR 2. Performance: Response and net processing time of the application must be as minimum as possible to promote better user experience.

NFR 3. Scalability: The system should scale smoothly with high traffic during voting periods.

NFR 3. Voter Anonymity: Ensure that votes must not be associated with voter identity.

NFR 4. System Integrity: Ensure that the system cannot be re-configured during operation.

NFR 5. Data Integrity: Once recorded votes should not be modified, forged or deleted without detection. Security of sensitive information like passwords, votes, documents should be ensured

NFR 6. Reliability and Availability: Ensure that system is protected against accidental and malicious denial of service attacks, up and running 24/7.

NFR 7. Privacy: No one should be able to determine how any individual voted.

NFR 8. Transparency: The system should be transparent enough and easily understandable by voters.

NFR 9. The system must be working at 100% peak efficiency during the voting process.

NFR 10. Accuracy: The system shall record and count all the votes and shall do so correctly. Defects in the local voting database file and in the collection server must be less than 0.0001%.

NFR 11. System should support regional languages too.

System Requirements

SR 1. Laptop/ Desktop/ Mobile with good quality internal or external webcam installed

SR 2. Stable internet connection throughout the onboarding and voting journey

SR 3. The operating systems in use are, but not limited to, Windows, Linux, and UNIX.

SR 4. Support for all modern browsers with >0.2% global usage. Not supporting legacy and dead browsers