

WORKFLOW

Digital Electoral System for University Governance

Abstract:

This project aims to create a software system to make the Registration process of the candidates filing a nomination in the university-level elections easier for the participating students along with the people involved like the Deans of various Schools/Departments, Dean Students' Welfare, and the Election Chair.

In addition, this project also aims to create an efficient and secure online voting system tailored to university settings. The system incorporates features such as user authentication, candidate registration, real-time voting, result generation, and security measures. It ensures a user-friendly experience while maintaining the integrity and confidentiality of the voting process.

Functional Requirements:

The Online Voting System encompasses various functionalities to streamline the nomination and voting process within the university. The key components include:

1. User Login:

- Regular users log in using their university credentials.

2. File Nomination:

- Candidates register themselves for elections, providing necessary details.
- Proposer and Seconder can approve their inclusion in the nomination made by a candidate.
- The system allows the Dean of the School/Department to certify or approve the candidate with a Certificate of Attendance & Academic Record.
- The system allows the Dean of Students' Welfare to approve or reject candidate registration.

3. Election Management:

- The Election Commission creates and manages elections, defining eligibility criteria, voting periods, and managing ballots.

4. User Roles and Access Control:

- Different user roles with varying privileges are defined.
- "Manage User Roles" is performed by the Election Commission.

5. Voting Process:

- Users cast their votes online during specified election periods.
- The system ensures each user can vote only once and maintains the confidentiality of their choices.

6. Result Generation:

- Real-time results are generated after the completion of the voting process.

7. Notification System:

- The system sends alerts and updates to users, such as confirmation of successful voting, and when results are available.

Accordingly, the privileges for each type of user are:

Voter:

- Log in securely to the system using their university credentials.
- Cast votes during the specified election period.
- View real-time election results.
- Upon successful casting of the vote, receive a confirmation notification.

Candidate:

Other than the privileges of a voter:

- Register for elections by providing the necessary details.
- Monitor their candidacy status.

Election Commission:

- Log in securely to the system using authorized credentials.
- Create and manage elections, defining eligibility criteria, and voting periods.

Dean of Students Welfare:

- Log in securely to the system using authorized credentials.
- Approve or reject candidate registrations.
- Access specific reports relevant to student participation or other areas under their purview.

Additional Notes:

- Ensure the system is designed with security measures to protect user data and prevent unauthorized access or manipulation.
- Make the voting process accessible to all eligible voters, regardless of technical abilities or disabilities.