

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 and the people involved, such as the Deans of various Schools/Departments, 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 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:

- Registered users for the current semester log in using their credentials.

2. File Nomination:

- Candidates register themselves for elections, providing the necessary details.
- Proposers and Seconders can approve their inclusion in the nomination form filled 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 Election Chair to approve or reject candidate registration.

3. Election Management:

- The Election Chair can create and manage elections, define eligibility criteria and voting periods, and manage ballots.

4. User Roles and Access Control:

- Different user roles with varying privileges are defined.
- "Manage User Roles" can be performed by the Election Chairman to delegate work to the required person.

5. Voting Process:

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

6. Result Generation:

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

7. Notifications:

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

Users Privileges:

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:

All privileges that a voter has, along with the following:

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

Dean (of school):

- Log in securely to the system using authorized credentials.
- Certify/Approve the candidate who filed a nomination with a Certificate of Attendance and Academic Record.
- View real-time election results.

Election Chair:

All privileges that a dean has, along with the following:

- Create and manage elections, defining eligibility criteria, and voting periods.
- Approve or reject candidate registrations.

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.