

Table of Contents

Serial Number	Title
1	Synopsis
2	SRS
3	ERD
4	Use Case Diagram
5	Database ERD

## Synopsis

In the current times, everything has moved online. People prefer to shop online, use online payment methods, etc. which has highly increased ease of life. The current voting system does not fall into this category. In the current digital age, traditional voting system has become obsolete and need for more efficient, secure and accessible methods has arisen.

The current situation has several problems. The manual system requires a high number of workforces, is expensive, time consuming, inflexible and has scope of multiple errors such as mistakes in data entry, loss of registration form. The process of voting, right from registration to casting the vote is too lengthy and inflexible. Citizens need to go to specific centers to cast their votes, in a limited time frame. The lack of accessibility causes people to not take the effort to vote.

To solve this problem, our online Evoting System helps conduct elections with ease and allow citizens to cast a vote without any extra effort. It transforms the way elections are conducted keeping the ease of the citizens in mind. Less workforce is required to successfully maintain this system and enforces transparency and fairness.

Citizens create their accounts using their required documents and only eligible citizens can participate. Authentication of accounts is an essential component. Registration must be done prior to the voting date to ensure the database is up to date. The interface is intuitive and user-friendly allowing voters of all age groups above 18 to participate. The administrator of the system can validate accounts, start an election, maintain access of the users and publish results. Not anybody can be allowed to register to cast a vote. To ensure consistency, users need to be citizens of the region of election and must be above the threshold age limit as decided by the government.

The potential impact includes cost saving, increased civic engagement, faster result generation, improved accuracy, enhanced transparency, etc. Enhanced accessibility will encourage more people to vote, decrease in workforce required would help the government save costs and curb budgets required. Real time counting would help in faster reporting as the system is centralized. False votes, hacking or any other malpractices can be avoided if the system is enforced with high security.

# SRS

## Login/Sign up Page

### 1. User Registration

- Provide a user registration feature.
- Include fields for the user to enter personal information: username, email, and password.
- Validate of the user by entering a government registered identity card (example-Voter's ID number)
- Create a new user account upon successful registration and store it in the database.

### 2. User Login

- Provide a user login feature.
- Require users to enter their registered username and password to log in.
- Verify the user's credentials and grant access upon successful login.

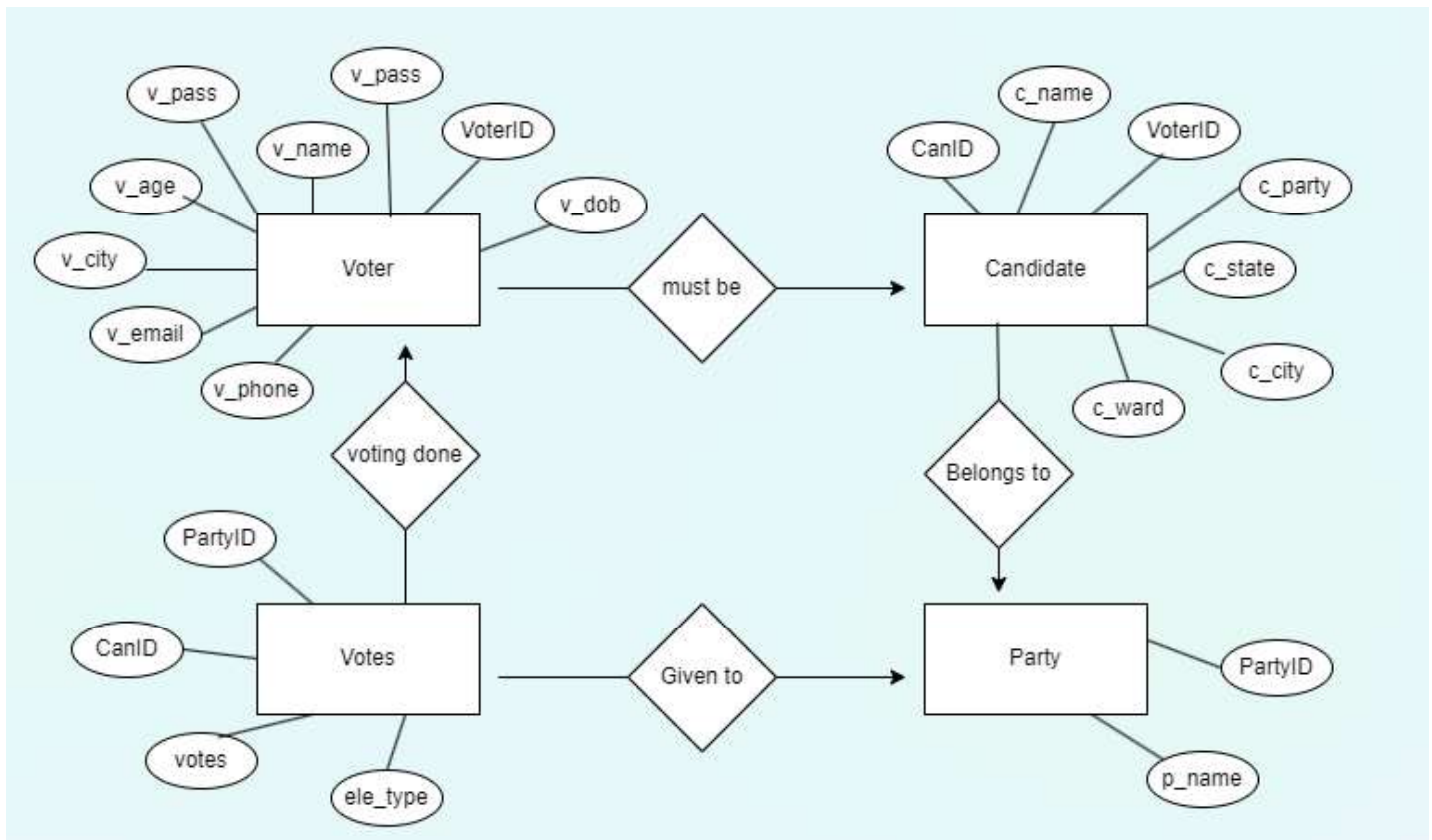
## Voting Page

- Display all ongoing elections and letting choose from them.
- Displaying candidates on vote casting page.
- Allow users to cast votes and keep a record of it in backend.
- Display a confirmation message on successful vote submission.

## Admin Dashboard

- Authentication/login page for admin.
- Edit/Add/Delete ongoing elections.
- Get a tally of votes for each candidate.

## ERD



**Entities:** Voter, Candidate, Party, Election

**Relationships:**

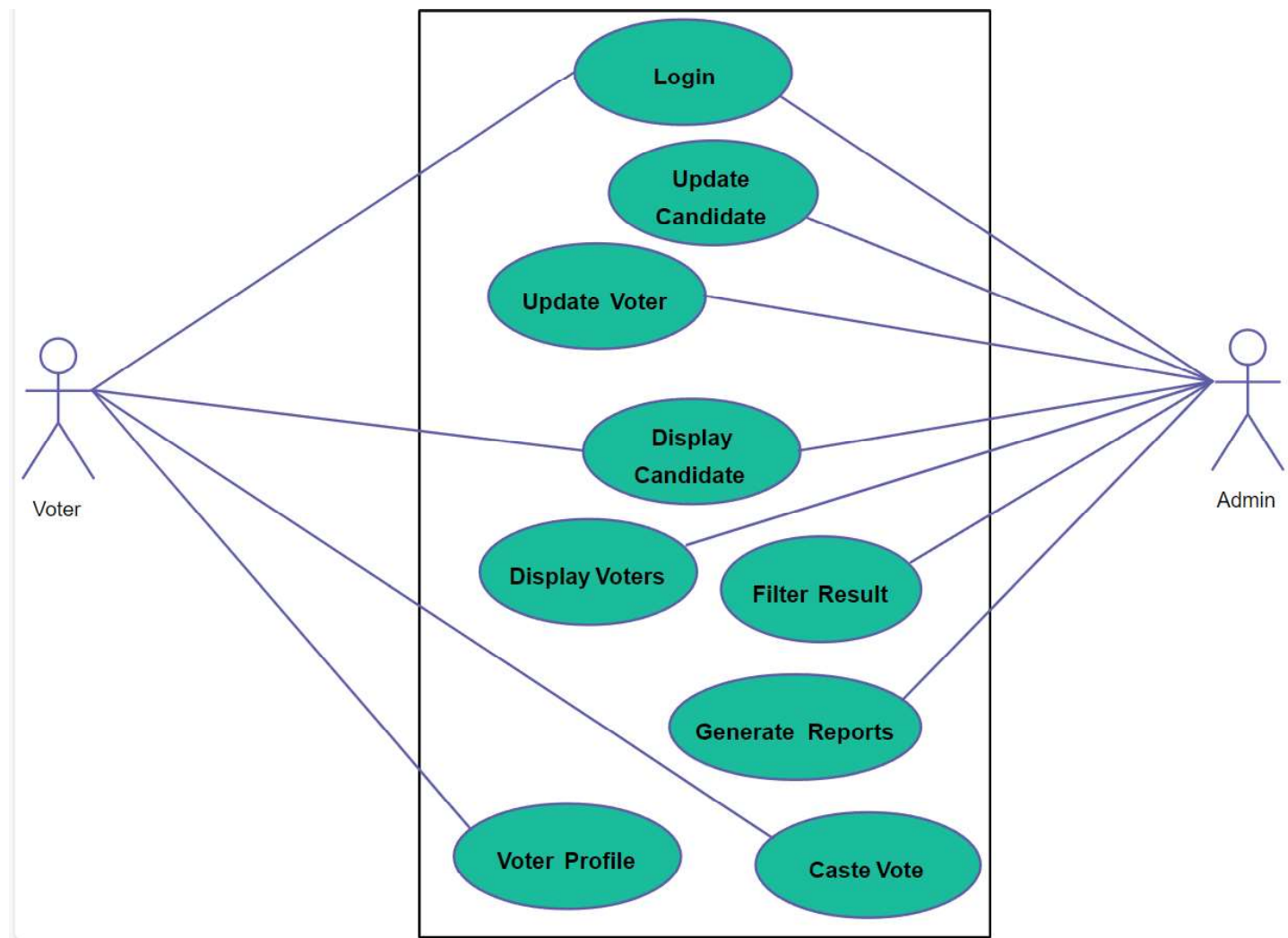
Multiple votes can be given to one party.

A voter can vote for one candidate in an election.

A candidate belongs to one party.

A party participates in one or more elections.

Use Case Diagram



## Database ERD

<b>Voter:</b>						
<b>Column name</b>	<b>Datatype</b>	<b>Size</b>	<b>Null</b>	<b>Constraints</b>	<b>Default</b>	
VoterID	varchar		Not null	primary key		
v_pass	varchar		Not null	unique key		
v_name	varchar		Not null			
v_age	integer		Not null	should be above 18		
v_city	varchar		Not null			
v_email	varchar		Not null	check if valid		
v_phone	integer		Not null	check if valid		
v_dob	date		Not null	compare dob with age		
<b>Candidate:</b>						
<b>Column name</b>	<b>Datatype</b>	<b>Size</b>	<b>Null</b>	<b>Constraints</b>	<b>Default</b>	
CanID	varchar		Not null	primary key		
c_name	varchar		Not null	c_name should be present in Voter(v_name)		
VoterID	varchar		Not null	unique key		
c_party	varchar		Not null	c_party should be present in Party(p_name)		
c_state	varchar		Not null			
c_city	varchar		Not null			
c_ward	varchar					

<b>Votes:</b>						
<b>Column name</b>	<b>Datatype</b>	<b>Size</b>	<b>Null</b>	<b>Constraints</b>	<b>Default</b>	
PartyID	varchar		Not null	composite key		
CanID	varchar		Not null	composite key		
votes	integer		Not null			0
elec_type	integer		Not null			
<b>Party:</b>						
<b>Column name</b>	<b>Datatype</b>	<b>Size</b>	<b>Null</b>	<b>Constraints</b>	<b>Default</b>	
PartyID	varchar		Not null	primary key		
p_name	varchar		Not null			