

Domain Object model for the eVote system

1. Electoral district

Attributes

- name; type: alphanumeric text

Static relationships

- has a number of Voters who belong to it

2. Ballot

Attributes

- start date; type: date and time
- end date; type: date and time

Static relationships

- has an ordered list of Elections and/or Issues
- has a number of Record of votes (cast by Voters)

3. Election

Attributes

- office name; type: alphanumeric text
- is partisan; type: true or false
- alternate candidates allowed; type: true or false
- vote count; type: numeric

Static relationships

- is part of a Ballot
- has an Electoral district
- has an ordered list of Candidates
- has an ordered list of alternate Candidates, if alternates are allowed

4. Issue

Attributes

- question; type: alphanumeric text
- vote count; type: numeric
- yes count; type: numeric
- no count; type: numeric (derived attribute)

Static relationships

- is part of a Ballot
- has an Electoral district

5. Candidate

Attributes

- name; type: alphanumeric text
- is alternate; type: true or false
- vote count; type: numeric

Static relationships

- is a member of a Political party, if election with this candidate is partisan

- is a candidate for an Election
6. Political party
- Attributes
- name; type: alphanumeric text
- Static relationships
- has a number of Candidates who belong to it; only for partisan Elections
7. Elections officer
- Attributes
- first name; type: alphanumeric text
 - last name; type: alphanumeric text
 - user name; type: alphanumeric text
 - password; type: any text
 - email address; type: alphanumeric text, must be in email format
 - address; type: alphanumeric text
8. Voter
- Attributes
- first name; type: alphanumeric text
 - last name; type: alphanumeric text
 - user name; type: alphanumeric text
 - password; type: any text
 - email address; type: alphanumeric text, email format
 - address; type: alphanumeric text
 - voter id; type: alphanumeric text, system assigned
- Static relationships
- belongs to a number of Electoral districts
 - has a Record of vote cast on a Ballot
9. Record of vote
- Attributes
- date; type: calendar date and time
- Static relationships
- has a Voter who casts a vote
 - has a Ballot for which the Voter casts a vote