

A subset of relational schema for the Election System

- (The tables required to compute and store election results are not included here)
- Primary key(s) are underlined, foreign keys are denoted by Asterisks.

VoterRegistry (VoterID, Title, FirstName, MiddleNames, LastName, Gender, DateOfBirth, AddressUnitNo, AddressStreetNo, AddressStreetName, AddressSuburb, AddressPostCode, AddressState, ContactPhone, ContactMobile, ElectorateName)

Ballot (BallotID, ElectorateName*, ElectionEventID*)

BallotPreference (BallotID*, CandidateID*, Preference)

ElectionEvent (ElectionEventID, ElectorateName, ElectionType, NoRegisteredVoters)

Voted (ElectionEventID*, VoterID*, VotedFlag, Timestamp, PollingStationName)

Candidate (CandidateID, CandidateName, PartyCode*, ElectionEventID*, ElectorateName*)

Electorate (ElectorateName, CurrentMemberOfParliament)

PoliticalParty (PartyCode, Name, LogoURL, PostalAddress, SecretaryName, ContactName, ContactPhone, ContactMobile)

Note: For each ballot, there is an array of candidate names and corresponding preference number for each candidate. This pair of attributes should be considered as a repeating group of Attributes. As such, when the Ballot entity is mapped into relational schema, that results in two tables (Ballot, and BallotPreference).