

Voter Voter Voter ID, name, age, sex, candidate, EVM, constituency ID

Candidate ID, Party Member ID, assets, education, criminal

record

Attributes

Party JD, Name, symbol, leader, alliance ID,

Alliance D, Name, symbol, Party ID

Constituency Constituency ID, State

Voting Center Center ID, Address, Constituency ID, official ID

EVM No, Center ID

Election Official / Official ID, Name, Age, Sex, Center ID

Party Member | Party Member ID, Age, Sex, Candidate ID, Reports to, Party

Votes Voter ID, EVM No, Candidate ID, timestamp

## Domain Description:

Name

The database is designed to model the Indian electoral process.

Elections are conducted for choosing elected representatives for each **constituency**. Each <u>state</u> is divided into multiple **constituencies**. Each constituency is assigned a <u>unique</u> constituency ID.

Each **constituency** can have multiple **voter centers**, and each voter center is identified by a <u>center ID</u>. A voter center located at a particular <u>address</u>, is presided over by an **Election Official**. Multiple **EVMs** are present at the center for the purpose of voting.

Each **voter** votes on a particular **EVM**, which records the time of the vote as well. A particular EVM No. is assigned to ensure the election integrity.

There are **election officials** deployed to monitor each of the **voter centers**. They also have the additional functionality of verifying each <u>candidate's bio-data/background</u>. The election officials have to submit their <u>name</u>, <u>age</u> and <u>sex</u>, after which they are assigned a <u>Official ID</u>.

A **voter** votes for a registered <u>candidate</u> contesting in a <u>constituency</u>. Each voter is identified by his/her <u>VoterID</u>, <u>name</u>, <u>age</u> and <u>sex</u>. The voter casts his vote for his preferred constituency candidate at an <u>EVM</u> allotted at his appropriate voting center.

Several candidates contest for a given constituency, each having a unique <u>candidate ID.</u> Each candidate in turn is a **party member** chosen to represent a party. Independent candidates are assumed to be a part of their own party. The candidate's <u>background</u> is verified by an **election official**.

**Party members** are identified by their <u>party IDs,name,age</u> and <u>sex</u>. Members double up as <u>candidates</u> standing for elections as well. Members report to other members in the party, ensuring hierarchy within.

Each **party** has a <u>unique party ID</u> and <u>symbol</u> and is headed by a <u>leader</u>. Parties could also be single member organizations associated with independent <u>candidates</u>. Several parties may collude and form an **alliance**. Each alliance has its own <u>name</u>.