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## CS 340 Database Project Proposal: 2016 U.S. Presidential Nomination Process

Due: 04/10/2016

### Mini-World

Our project proposal is to create a database that tracks political data related to the U.S. Presidential nomination process during 2016.

### Entities

- **state**: *state\_id, name, abbr*
- **event**: *event\_id, date*
- **candidate**: *candidate\_id, first\_name, last\_name, party*
- **party**: *party\_id, name*
- **contest\_type**: *contest\_type\_id, name*

### Relationships

- **state** has a **1:N** relationship with **event** (each state can have multiple events where delegates are allocated to candidates)
  - **event** and **state** both have total participation
- **event** has an **N:M** relationship with **candidate**
  - **candidate** has total participation, while **event** has partial participation due to write-in votes and uncommitted delegates which are not tied to a **candidate**
  - **contest\_candidate**: a table between contests and candidates which handles the N:M relationship and has a few of its own attributes: *contest\_candidate\_id, vote\_count, delegate\_count*
- **event** has an **N:1** relationship with **contest\_type** (each contest will be associated with a single type of event like a caucus or a primary)
  - **event** and **contest\_type** both have total participation
- **event** has an **N:1** relationship with **party** (each contest is for 1 political party)
  - **event** and **party** both have total participation
- **candidate** has an **N:1** relationship with **party** (each candidate is associated with 1 party, but each party can have N candidates)
  - **candidate** and **party** both have total participation