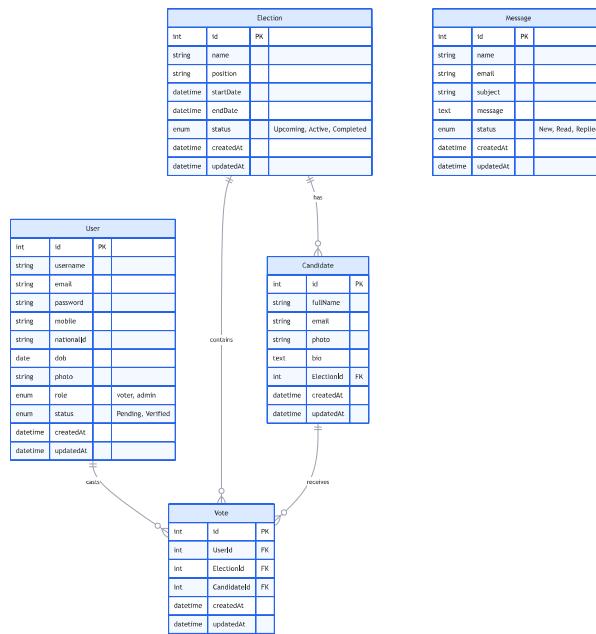


SOM Election Database Schema

Entity Relationship Diagram (ERD)



Schema Documentation

Entities

- User**: Represents all system users, including Voters and Admins. Distinguished by the `role` field.
- Election**: Represents an election event (e.g., "Presidential Election 2025") with a start and end date.
- Candidate**: A person running for a specific election. Linked to an Election via `ElectionId`.
- Vote**: A record of a user's choice in an election. Links User, Election, and Candidate.
- Message**: Stores inquiries and complaints submitted via the public "Contact Us" form.

Relationships

- User casts Vote (1:N)**: A single user can cast multiple votes across different elections, but is restricted to **one vote per election** by a unique constraint.
- Election has Candidates (1:N)**: An election consists of multiple candidates competing for the position.

- **Election contains Votes (1:N):** An election aggregates all the votes cast within it.
- **Candidate receives Votes (1:N):** A candidate can receive many votes from different users.