

Assumptions:

- 1. One user could report multiple events, while one event could be reported by multiple users.
- 2. One event has a specific category.
- 3. One event may not has victim
- 4. One event happened in a specific area
- 5. One street belongs to an area
- 6. Each event has at most one victim

A description of each relationship and its cardinality:

- 1. Users report Events, Events are reported by Users;
- 2. Events have one crime category, a CrimeType is a category of Events;
- 3. Events have Victims, Victims suffur from Events;
- 4. Events happen in Areas, Areas is location of Events;
- 5. Areas have Streets, Streets belong to Areas.

Relational Schema:

Users(UserID [PK], Name, Email)

Reports(UserID [FK to Users.UserID], EventID [FK to Events.EventID])

Events(EventID [PK], DateReported, DateEnd, CrimeType [FK to Crimes.CrimeType], AreaID [FK to Areas.AreaID]) CrimeS(CrimeType [PK], CrimeDesc, Mocodes, Risk)

Victims(VictimID [PK], Age, Sex, Descent)

EventVictims(EventID [FK to Events.EventID], VictimID [FK to Victims.VictimID])

Streets(StreetName [PK], Latitude, Longitude, ArealD [FK to Areas.ArealD])

Areas(AreaID [PK], Name)