The application being developed is a tool to analyze Los Angeles-area crime reports over time, beginning with the years 2012 through 2015. The intention is--in addition to filing and storing these records for future recollection--to understand trends and patterns in crime reporting and police activity. What proportion of certain crimes result in apprehension of the perpetrator(s)? Which crimes see the greatest difference between time of report and time of crime occurrence? When are most crimes likely to occur throughout the day, month, or year? Which crimes tend to always, often, rarely, or never trend together? These are but a few of the many fascinating questions that law enforcement and civilians alike might want answers to. It's in this spirit that the database in question is to be designed such that any possible questions of frequency, comparison, and probability with regard to the data collected can be accurately answered.

With regard to the data collected, this database will store several important types of information: crimes committed, relevant statutes violated, reports and statuses filed on occurrences of crimes, and officers who responded to reported crimes along with their departments. It should then go without saying that vital details relevant to those types of information will also be contained (for instance, officers have names and badge numbers; crime reports have dates filed and addresses of crime commission). As much relevant data as possible will be compiled to ensure that as many reasonable and interesting queries regarding crime reporting trends can be posed and answered.

For this particular project, we have run into a couple of small issues. The data set we retrieved did not come with the names of the arresting officers. If this data can't be located, we'll likely have to generate this data arbitrarily. We similarly do not have data sets for Los Angeles police departments and criminal statutes. If separate data for these cannot be located, they will also have to be generated. Finally, there is extraneous data within the present data set whose purpose is not clearly identified. If we cannot reasonably decipher its meaning--or if it proves to be irrelevant to the purpose of this application--it will be discarded.

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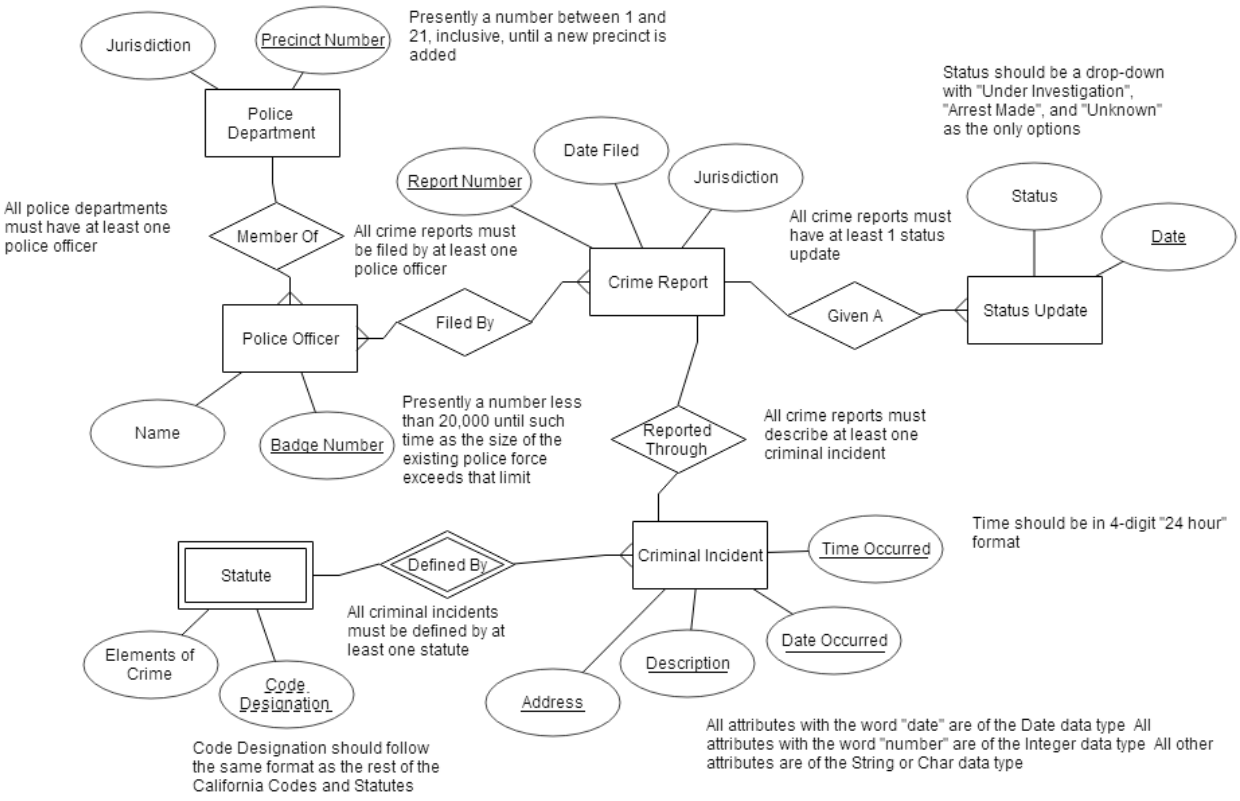
Jurisdiction
Precinct Number
Presently a number between 1 and 21, inclusive, until a new precinct is added
Police Department
Status should be a drop-down with "Under Investigation", "Arrest Made", and "Unknown" as the only options
Date Filed
Report Number
Jurisdiction
Status
Date
All police departments must have at least one police officer
Member Of
All crime reports must be filed by at least one police officer
All crime reports must have at least 1 status update
Crime Report
Filed By
Given A
Status Update
Police Officer
Name
Badge Number
Presently a number less than 20,000 until such time as the size of the existing police force exceeds that limit
Reported Through
All crime reports must describe at least one criminal incident
Time should be in 4-digit "24 hour" format
Statute
Defined By
Criminal Incident
Time Occurred
All criminal incidents must be defined by at least one statute
Elements of Crime
Code Designation
Description
Date Occurred
Address
Code Designation should follow the same format as the rest of the California Codes and Statutes
All attributes with the word "date" are of the Date data type All attributes with the word "number" are of the Integer data type All other attributes are of the String or Char data type