Visualization of the venues more affected by crimes in San Francisco

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1. Introduction:

1.1. Background:

Many tourists over the globe have been affected by insecurity when visiting places on other cities, this due to the fact the tourist does not have information about the most common places where crimes are performed. According to this the tourism and the people affected annually loses a lot of many and time.

Infotou is a data application that deliveries the tourist all information regarding to venues and the security around them, this would help tourists to make good decisions and to have a better vacation around the global cities.

1.2. Problem:

Lots of tourist have been affected by crimes due to lack of information for the cities of visit. Infotou give this information in a easy way to see the most interested venues with the rate of crimes near.

1.3. Interest:

Tourist, venues and police department would be very interested to have this information in ordert to increase tourist visits.

2. Data acquisition and cleaning

2.1. Data sources:

To perform Infotou the following data would be used:

- Foursquare location data, in order to have all venues from the city of San Francisco
- Data base of crimes in the city of San Francisco.

2.2. Data cleaning:

Crimes in the city of San Francisco, need to be clean as we have multiple crimes that are not related with tourist, so we delete this crimes and the columns that we are not using for this assignment.

Foursquare locations data for venues would be reduced to name, category, ID and coordinates, all the other information would not be used.

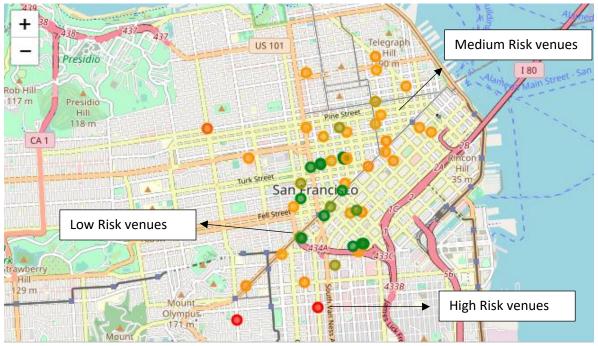
3. Resolving the problem.

For this assignment we have performed the following codes:

- Use of datafrmes and associated functions (Drop, index, joins, concatenate, etc)
- Use of lists
- Use of Folium
- Use of mpu library in order to calculate the distance between 2 coordinates
- Use of foursquare creadentials and library in order to request information.

4. Results:

As we see in the picture below we observe the venues with marker relating the numbers of crimes:



With this information tourist can chose were can they go and be safer.