



SAFE LOCATIONS

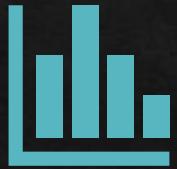
ADITYA
SHANKARNARAYAN

Title Lorem Ipsum



Safe locations

Provide hotel and sight seeing recommendations. While having a few safety measures



Maps

Maps for each component



Simple and easy

Simple and easy to understand and decide

BUSINESS PROBLEM

- ❖ San Francisco is a popular destination for tourists and they look for good accommodations that has a proximity to transport and a variety of amenities like restaurants. Many of them are unaware of the crimes in the neighborhood. Being unaware and naive roaming in a foreign country can cause a big problem. They might get mugged or injured

PROBLEM TO BE RESOLVED

- ❖ Find hotel
- ❖ Amenities near the hotel
- ❖ Display crime in the area in a easy to understand manner
- ❖ Provide suggestions for sight seeing

INTRESETED AUDIENCE

- ❖ Tourists who are looking for accommodation in San Francisco and require proximity to metro and different amenities like bars, restaurants, etc. Tourist who is looking for a trendy place to visit and they can make educated decision dased on crime in the area and proximity to government authorities and safe places like a cafe where they can ask for help if they get mugged

FACTS

- ❖ A popular website exclaims "With a crime rate of 64 per one thousand residents, San Francisco has one of the highest crime rates in America compared to all communities of all sizes - from the smallest towns to the very largest cities"
- ❖ SOURCE:<https://www.neighborhoodscout.com/ca/san-francisco/crime>

DATA SECTION

- ❖ **Data Requirements:**
- ❖ Geodata from Foursquare for all the following:
 - ❖ Hotels
 - ❖ Metro
 - ❖ Amenities
 - ❖ Trendy places
 - ❖ Government authorities

DATA SECTION

❖ Data Requirements:(Contd.)

Data Requirements

- ❖ Cafes
- ❖ (Foursquare)
- ❖ San Francisco Crime Data which depicts all the total crime in the neighborhood
- ❖ (https://cocl.us/sanfran_crime_dataset)
- ❖ Geojson file for boundries
- ❖ (https://cocl.us/sanfran_geojson/sanfran_geo.json)

DATA SECTION

- ❖ **Processing:**
- ❖ Data processing will be done using Python 3. Foursquare API will be used to get all the required geographical information. Pandas will be used for manipulation and Folium will be used for mapping

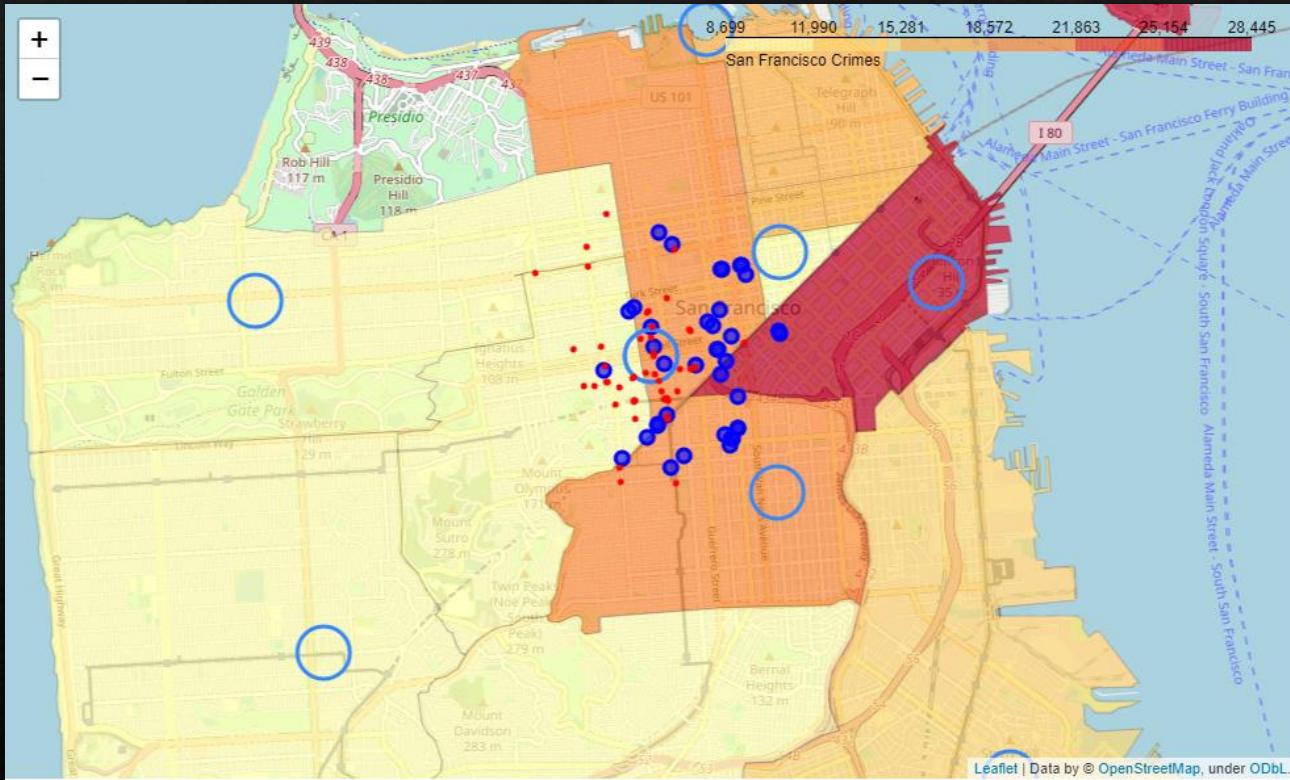
Methodology section

- ❖ The San Francisco data set was a crime statistic data set with many components like X, Y coordinates and type os felony, etc. So data was cleaned, removing unnecessary columns and summation of all the crime in the neighborhood. was done.
- ❖ Then another data set was created with longitude and latitude of all the neighborhood and merged with the previous dataset.
- ❖ The GeoJSON file has boundary information for making a choropleth map so the crime can be plotted wit efficiency and have a clean look.
- ❖ Foursquare API was used to fetch hotels in San Francisco and plotted on a map using folium.

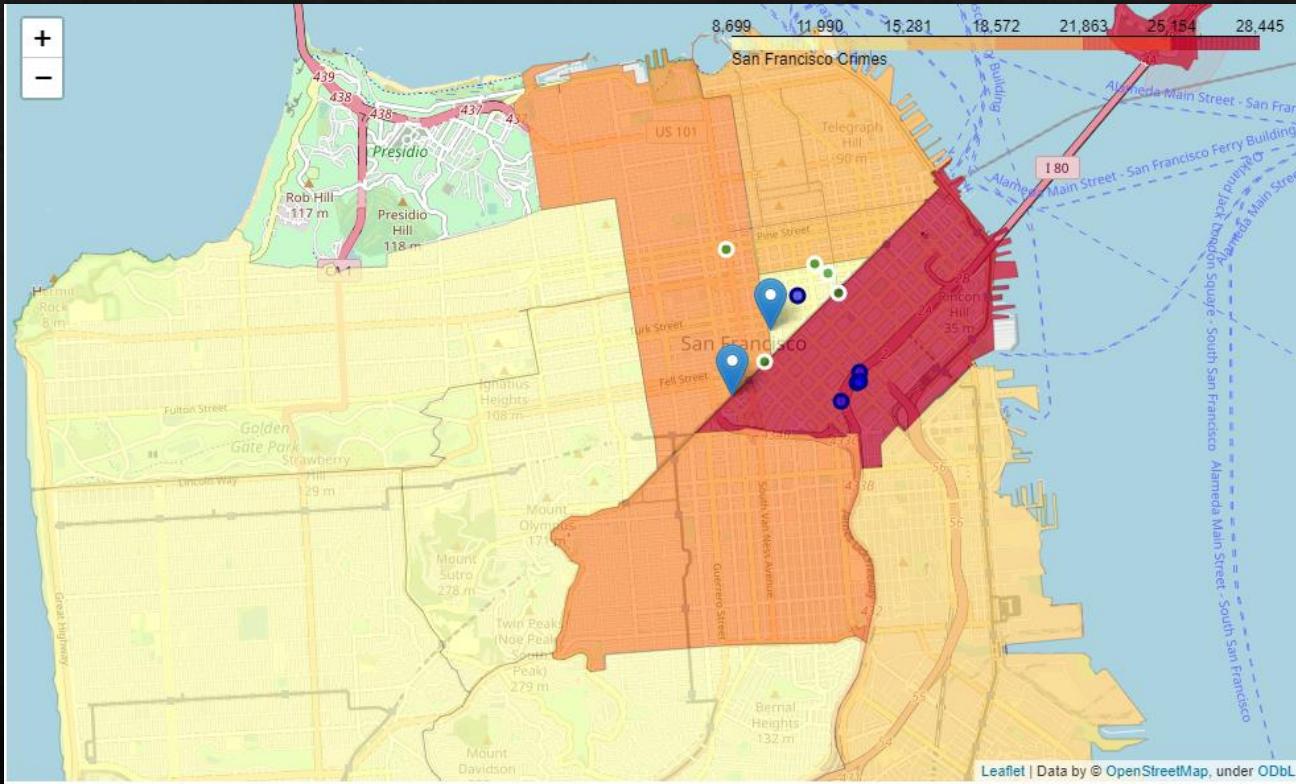
Methodology section

- ❖ Foursquare API was used to gather information about the amenities in San Francisco and then it was clustered together using Kmeans. Clustering was done so that for each neighborhood a cluster of hotspots with lots of amenities could be created and was mapped in folium. This was done so that tourists can make get a rough sense of where all the amenities are in a neighborhood.
- ❖ As transport is important and SF having metro and bus facilities throughout the city, it becomes an important factor for some to choose a hotel with proximity to the station.
- ❖ After making a decision Foursquare API was used to get sightseeing the location in SF and after a location was decided police station and safe location near it are also displayed.

HOTEL RECOMMENDATIONS



SIGHTSEEING RECOMMENDATION WITH OTHER IMPORTANT INFORMATION(POLICE STATION, etc.)



SIGHTSEEING RECOMMENDATION WITH OTHER IMPORTANT INFORMATION(POLICE STATION, etc.)

- ❖ THE POPUP MARKER IS THE HOTEL AND THE SELECTED LOCATION
AND THE GREEN DOT ARE SAFE LOCATIONS AND BLUE ARE POLICE
STATION

DISCUSSION

- ❖ As SF has a high crime rate, tourist can feel unsafe wandering in the streets and as they travel across SF they should have peace that they are going in a low crime area or something along these lines.
- ❖ It is also important to be prepared if anything happens to the tourists.
- ❖ They should no they location of police stations or places where they can feel safe and get help

CONCLUSION

- ❖ As anyone whould like to feel safe in a city this program helps them by recommending a good hotel based on machine learning.
- ❖ Nice places to vist and if anything goes side ways also provides knowledge about police and safe locations

THANK YOU!