# Safest and most suitable neighborhood in London

BY Krishnanunni B

# Knowing what kind of place or what facilities are there in a place which we are planning to migrate is always an advantage.

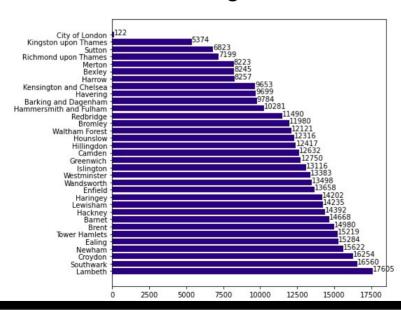
- Lots of students, workers, bussiness men, etc are migrating to London and don't know where in London to settle.
- Such a problem is prevelant in everyone's mind who are planning to migrate.
- This project helps these people in 2 ways:
  - 1.To know the safest Borough in London in terms of crime.
  - 2.To know about each neghbourhood in that Borough and select the most suitable one.
- Those who have no interest in migrating can also explore the neighborhoods so that they may find something interesting which may eventually lead them to migrate to London.

## Data acquisition and cleaning

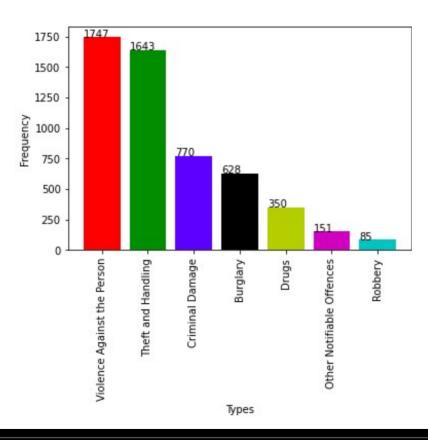
- The London crime data is downloaded from kaggle. You can find it here.
- The location data of neghborhoods was imported through geopy client for python.Click here for more details. After that the location was made into a data frame.
- The venues data in each neighborhood was downloaded as json file using Foursquare API. Then it gas cleaned and was made into a data frame.

### **Exploratory Data Analysis or EDA**

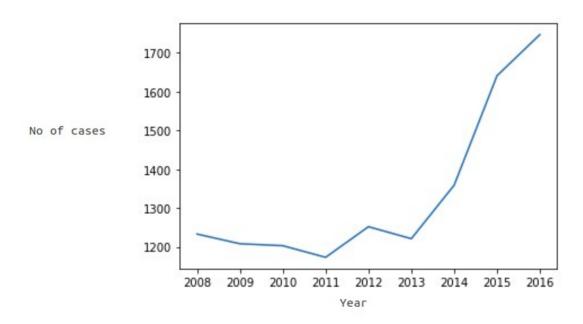
 Arranged the Boroughs with respect to their total number of crimes and plotted a graph. After several analysis and research we found Kingston upon Thames as the safest Borough.



 Another graph was plotted to find out which category of crime is most prominent in Borough which we have found through analysis. Violence against the person is the most prominent crime in Kngston upon Thames.

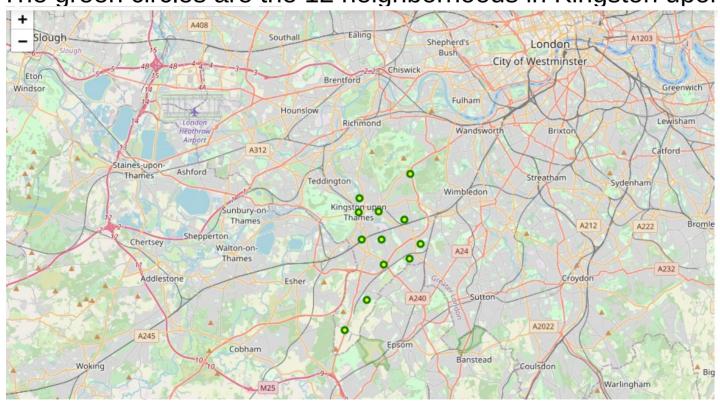


 After all the above analysis, we plotted the trend of the most prominent category of crime from the year 2008 to 2016.

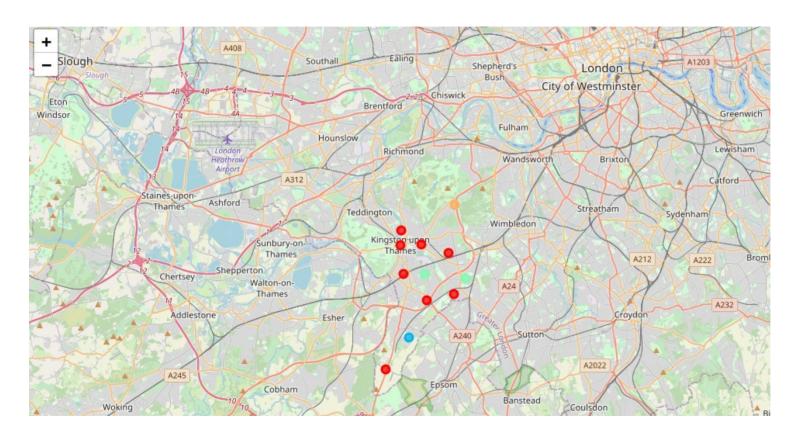


Map of the neighborhoods.

The green circles are the 12 neighborhoods in Kingston upon Thames.



 Map after applying clustering algorithm. The ML clustering algorithm we applied here is Kmeans algorithm.



#### Conclusion and future directions

The project is about finding the best neighborhood in London with least crime number and with different types of amenities and facilities. However, the project only deals with the above mentioned criterias and does not consider the value of the property, taxes and laws, employability, etc in a particular neighborhood. For that another project these criterias and parameters can be considered in future.

