



# THE BATTLE OF NEIGHBORHOODS

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# Introduction

- BACKGROUND : Safety is a top concern when moving to a new area. If you don't feel safe in your own home, you're not going to be able to enjoy living there.
- PROBLEM : This project aims to select the safest borough in Chicago based on the total crimes, explore the neighborhoods of that borough.
- INTEREST : Expats who are considering to relocate to Chicago will be interested to identify the safest borough in Chicago and explore its neighborhoods and common venues around each neighborhood.

# Data Analyzing

- From the Chicago crime data, the crimes during the most recent year (2016) are only selected. The major categories of crime are pivoted to get the total crimes per the boroughs for each major category.
- After visualizing the crime in each borough we can find the borough with lowest crime rate. The third data set is created, with the names of neighborhoods and the name of the borough with the latitude and longitude.
- The new data set is used to generate the 10 most common venues for each neighborhood using the Foursquare API, finally using k means clustering algorithm to clustering similar neighborhoods together.

# Discussion

- The aim of this project is to help people who want to relocate to the safest borough in Chicago, expats can choose the neighborhoods to which they want to relocate based on the most common venues in it.
- For example, if a person is looking for a neighborhood with good connectivity and public transportation.

# Conclusion

- This project helps a person get a better understanding of the neighborhoods with respect to the most common venues in that neighborhood.
- It is always helpful to make use of technology to stay one step ahead i.e. finding out more about places before moving into a neighborhood.
- We have just taken safety as a primary concern to shortlist the safest borough of Chicago.
- The future of this project includes taking other factors such as cost of living in the areas into consideration to shortlist the borough, such as filtering areas based on a predefined budget.