# The battle of Neighborhoods Final project

## Introduction

- The client is interested in opening a new restaurant in San Francisco but is still unsure of the location to make the investment.
- The restaurant has gastronomy and Mexican theme.
- He has contacted me to help him find the best place to have a return on investment.
- He knows that SF is a very competitive place and he has asked for help to do the analysis.

# Business problem

- Easy to replicate
- Search competition
- Clear data analysis

## Success criteria

- Finding a suitable place for the client
- Create a simple report so that the client can understand it and help them make decisions based on it.

#### Known data

- General data of San Francisco
- Type of restaurant and menu
- The client is looking for a place where there is not much competition considering gastronomy.

## Data description

- To learn more about cooking in San Francisco I used the following open data repository <a href="https://bata.sfgov.org/browse?">https://bata.sfgov.org/browse?</a> <a href="mailto:q=restaurants&sortBy=relevance">q=restaurants&sortBy=relevance</a>
- And I inspected the scores of the restaurants <a href="https://data.sfgov.org/Health-and-Social-Services/Restaurant-Scores-LIVES-Standard/pyih-qa8i">https://ES-Standard/pyih-qa8i</a> and data viz of <a href="https://nycdatascience.com/blog/student-works/san-francisco-restaurant-inspection-analysis-visualization/">https://nycdatascience.com/blog/student-works/san-francisco-restaurant-inspection-analysis-visualization/</a>

## Approach

- Extract the most popular restaurants from the open dataset
- Get keywords from the menu of the most popular restaurants
- Compare if there is Mexican food for each area
- Recommend a place with a variety of restaurants but lacking Mexican cuisine

## Methodology - Part 1

- Load the data and explore
- Transform the data into pandas dataframe.
- The dataframe contains the geographical coordinates of SF city neighborhoods.
- Create the map of SF with geopy and folium.
- Analyze population, demographics.

### Discussion

- Will it be possible to find a place where Mexican food is lacking?
- Can we find a place with an influx that allows increased sales?

## Conclusion

Through data analysis it was possible to compare the different restaurants and find a place where there was no Mexican food and the number of sales is high due to the influx of people.