



Battle of the Neighborhoods

Clustering the Neighborhoods of Paris

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Problem

Leverage the Foursquare location data to explore or compare neighborhoods or cities of your choice or to come up with a problem that you can use the Foursquare location data to solve.



Introduction

TripAdvisor, the travel planning and booking site, unveiled the 2018 Travelers' Choice™ Award-winning destinations. This ranking recognizes the favorite destinations of travelers around the world. In 2018, Paris took 1st place in the “World” ranking, ahead of London, Rome and New York.

Travelers' Choice™ Awards winners are determined based on an algorithm that assesses the quantity and quality of reviews of hotels, restaurants and attractions in destinations around the world, gathered over a 12-month period, as well as the booking interest of travelers when they search the web.



Business problem

The objective of this project is to provide tourists heading to Paris the relevant information about the best places to stay in the city while also taking into consideration the best attractions. We will try to find the most interesting neighborhood to stay in using an Airbnb service..



Data

We will be using the following datasets provided by Airbnb:

- <http://data.insideairbnb.com/france/ile-de-france/paris/2020-12-14/visualisations/neighbourhoods.csv>
- <http://data.insideairbnb.com/france/ile-de-france/paris/2020-12-14/visualisations/neighbourhoods.geojson>

We will also be leveraging the Foursquare API in order to discover information about different venues belonging to a neighborhood and a borough. Foursquare is a location data provider that will provide us with the relevant data involving our venues.



Libraries

Pandas

Numpy

Matplotlib

Folium

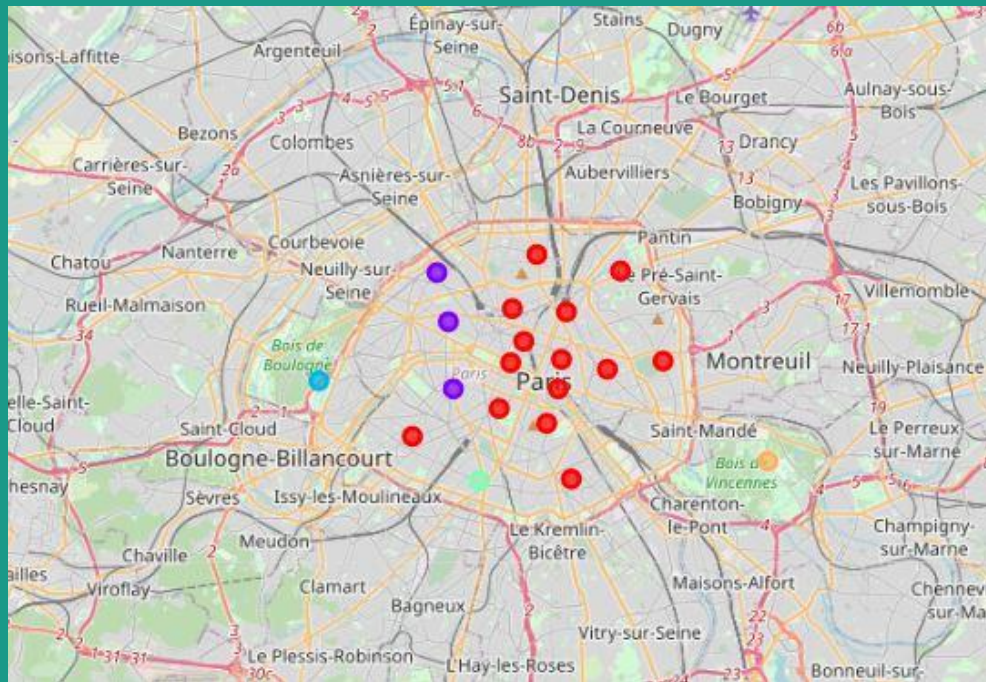
Requests

Sklearn

Map of Paris



Map of Paris





Results and Discussion

The results of the modeling has proven that Paris is truly a multicultural city. It boasts restaurants that cater to all kinds of tastes, including but not limited to Italian, Middle-Eastern, Asian and French cuisines. There are gourmet shops and wine bars for a sophisticated outing as well as bistros and cafes if you want to take it easy and relax. Aside from restaurants, Paris is home to a number of stores, museums, stadiums and hotels that can tickle anyone's fancy. Whether you're looking to relax in a park or go clubbing, Paris has just the place for your needs.



Conclusion

The objective of this capstone project was to analyze data about the city of Paris and give a report on the most interesting places that would seduce a tourist into visiting. Paris seems to offer all kinds of places for all kinds of people. As has been indicated by the modelling, we are able to visualize the extent to which each neighborhood provides a variety of interesting venues for tourists. In the interests of exploration this city has anything you would be interested in seeing, whether it be art and culture, sports or even nature.