A TALE OF TWO CITIES





BACKGROUND

United States is one of the most popular countries for tourist to visit. It hosts millions of people every year and it does not matter the season; it is always full of tourists. Whether it is New York or Los Angeles, these two cities are the most popular destinations for tourists all over the world. People often believe that these two

states are the center of the 'East Coast vs West Coast war' to determine which one is the best place to be. They offer all the tourist attractions every city has, but what makes them outstand from other places is the different cultures that live there. These two sates are the most culturally diverse among the U.S and this is why they are

so special for tourists.

PROBLEM

The objective of this study is to use data science tools to help a tourist agency to determine a new travel package for their customers. Our job as data scientists is to give the agency multiple travel package options so they can sell them to their customers; these options will be presented by comparing New York and Los Angeles (what makes them different) and what different activities you can do in each city.





TARGET AUDIENCE

 Our target audience consists on every tourist that is interested to travel to the U.S. Since our objective is to give multiple package options, we can have different options for people that travel alone, in groups or as a family.

APPLICABILITY IN REAL WORLD

• For travel agencies, it is sometimes difficult to predict what kind od attractions their clients want and often they only offer a general travel package so they can later choose by themselves where they want to go. But what would happen if you could offer your clients a experience package based on their tastes or by the number of people going on a trip? This is the question I want to answer by analyzing the venues of these two cities in order to offer them the best experience possible.









DATA

Looking for the information about each borough and neighborhood in Los Angeles and New York was relatively easy since these are two of the most popular cities in United States and, also, the information is of public domain.

Data acquisition

The files used for this project consist of two kinds; the first one, was acquired from the "New York neighborhoods" example from the course and the data for Los Angeles was acquired from a '.csv' file in an online site that provides general information about all the cities in United States.

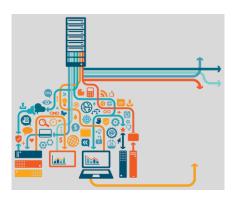
Data Cleaning

In order to use the Los Angeles data, I had to clean the dataset first since it had unnecessary information (native vegetation, native wildlife, number of houses, etc.). Once all the 'junk' information was removed from the dataset, the process on analyzing the data and using Foursquare to rank venues began.



- The first dataset to analyze was the New York one, since it was already analyzed for one city (Manhattan) in the exercise, I proceeded to analyze the data of all the State of New York. The data collected was bigger than the one in the example so I had to reduce the Foursquare search. Instead of using a limit of a 100 for the nearest venues, I changed to 50 because tourists tend to move around very often and do not want to be in the same place for too much time.
- The next thing I did was to search for the top 3 most frequented venues instead of 5 because of the same reason I mentioned above. Tourists only visit a maximum of 3 venues in a determined location and then they move along. The process mentioned above was realized for the Los Angeles dataset, it was important to match the limit and ranked venues to get a more exact result and comparison between these two cities.







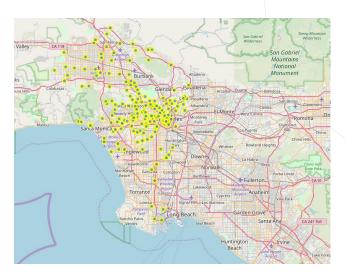
RESULTS

To analyze the results the program gave, it is important to make a first comparison between New York and Los Angeles. First of all, we will compare how the neighborhoods are distributed. In the images below, we can see the difference between New York (blue) and Los Angeles (yellow) in their neighborhood's distribution.

New York



Los Angeles



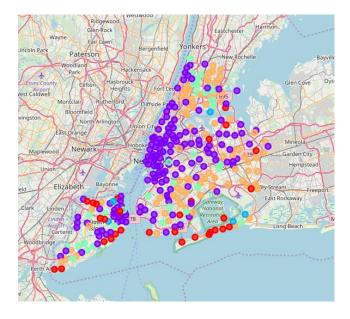
As you can see, New York is a more centric location with neighborhoods interacting with each other by being close by. On the other hand, Los Angeles also present near by neighborhoods but we can also see there are various places close to the sea and mountains, this is mainly because people want to have a quieter lifestyle in California.



RESULTS

With this first comparison understood, we can now see how the neighborhoods are cluster together in order to determine how can we influence potential tourists on picking a destination. For New York, the map below represents the neighborhoods in each cluster

New York



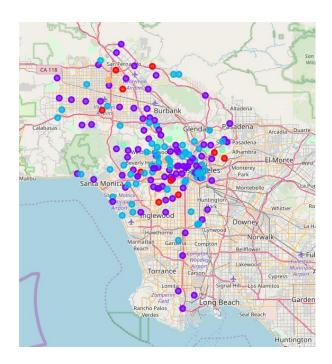
Cluster #	Color on map	Cluster Name	Description
1	Red	Main Attraction	For tourists that come
		Beaches, Bodegas,	either alone or as a
		Pubs and more	couple
2	Purple	Family friendly	Different venues for
		Parks, Playgrounds,	the likes of all family
		Restaurants, Spas,	members. This group
		etc.	is ideal as an 'all
			around experience'
3	Sky blue	Kids only	Perfect destination
		Parks, Fast Food	for families with
		restaurants	small children.
4	Light green	What you want to	For people who
		eat?	consider themselves
		Italian. Chinese.	'foodies', this group
		Mexican, Latin	offers different food
		American restaurants.	experiences.
5	Orange	NY and chill	This package is for
		Ice cream Shops,	all kind of tourists
		Bars, Lounges,	since it offers
		Theaters,	different activities.
		Supermarkets	



RESULTS

With this first comparison understood, we can now see how the neighborhoods are cluster together in order to determine how can we influence potential tourists on picking a destination. For Los Angeles, the map below represents the neighborhoods in each cluster

Los Angeles



Cluster #	Color on map	Cluster Name	Description
1	Red	For the family	A perfect package
		Parks, Playgrounds,	option for the entire
		Museums	family
2	Purple	Some 'Me' time	This group is
		Theaters, Art	represented with places for people who want to
		galleries, Spas,	have some alone time
		Restaurants, Wine	while relaxing in
		Bars	different places
3	Sky blue	Fit and Delicious	This group is filled
		Bakeries, Gyms,	with food options and
		Yoga Studios,	different gym and
		Restaurants, Coffee	sports options for the
		Shops	people that like 'that
			healthy lifestyle' but
			also enjoy good food
4	Light Green	Deep breath of	This is perfect for
		mother nature	more adventurous
		Mountain trails	tourists who want to
			take a break from all
			the noise of the city
5	Orange	For the classic ones	This small group is
		Golf Courses	for tourist who want
			to feel a little bit
			classy and relax
			while playing some
			golf



- We can see that New York and Los Angeles are not that different, they both offer interesting choices for every type of tourists. The main difference between these cities is that New York offers a more nigh time venues while Los Angeles offers options where you can explore the country side by taking a hike in the mountains. So, depending on whether you are a type of tourist who wants to experience the night life of a multi-cultural city, then New York is definitely your next destination.
- If you are the kind of person who wants to explore different landscapes or try different types of physical activities then Los Angeles is where you need to be. We also created different packages for each city, so you have a clearer idea on where you want stay so you can enjoy the activities you like and don't have to deal with activities or places you are not comfortable with.



