

Capstone Final Project

Looking for best restaurants
and Italian food in Brazil

Introduction

Travel to a big country like Brazil and understand the best places to stay if you are a food or gourmet lover is difficult given the size and the variety of the different venues and restaurants located in Brazil Cities. In this report we will perform an analysis base on data and ranking of different users and give you some recommendations bases on this anlaysis.

The Problem

Brazil officially the Federative Republic of Brazil is the largest country in both South America and Latin America. At 8.5 million square kilometers and with over 211 million people, Brazil is the world's fifth-largest country by area and the sixth most populous. Its capital is Brasília, and its most populous city is São Paulo. The federation is composed of the union of the 26 states and the Federal District. It is the largest country to have Portuguese as an official language and the only one in the Americas it is also one of the most multicultural and ethnically diverse nations, due to over a century of mass immigration from around the world.

With it's diverse culture , comes diverse food items. There are many restaurants in their Cities, each belonging to different categories like Chinese , Italian , French etc.

So as part of this project , we will list and visualize major cities of Brazil and look for answers of the following questions:

- What places are have best restaurant in Brazil?
- What is best City in Brazil for Italian Cuisine ?
- Which City have large number of Italian Restaurant Market ?
- Which is the best place to stay if I prefer a more variety of different cuisines ?

The Data

Zomato Kaggle

Zomato is an API Analysis and one of the most useful analysis for foodies who want to taste the best cuisines of every part of the world. Additionally, this analysis caters the needs of people who are striving to get the best cuisine of the country and which locality of that country serves that cuisines with maximum number of restaurants.

We will use Zomato Brazil to gather Restaurants data that contains list City, Restaurant Name, Rating along with their latitude and longitude.

Foursquare

Foursquare is a technology company that built a massive dataset of location data. Foursquare crowd-sourced their data and had people use their app to build their dataset and add venues and complete any missing information they had in their dataset. Currently its location data is the most comprehensive out there, and quite accurate that it powers location data for many popular services like Apple Maps, Uber, Snapchat, Twitter and many others, and is currently being used by over 100,000 developers, and this number is only growing.

We will use Foursquare to find Nearby places in each City of Brazil. By using this api we will get all the venues in each neighborhood.

The Approach

- Collect the Brazil Cities data from Zomato kaggle dataset
- Using FourSquare API we will find all venues for each neighborhood.
- Filter out all venues that are nearby by locality.
- Using aggregative rating for each restaurant to find the best places.
- Visualize the Ranking of neighborhoods using folium library(python)

Results of the Analysis

[16]:

	city	Lat	Lng	No_of_Restaurant	Cusines	Agg_Rating	Comments	No_of_Votes
0	Brasília	-15.808132	-47.917263	19	Fast Food, French, Cafe, Bakery, Brazilian, Pi...	3.678947	Average, Good, Very Good, Excellent	215
1	Rio de Janeiro	-22.967471	-43.213824	19	Seafood, Bar Food, Brazilian, Desserts, Cafe, ...	4.489474	Very Good, Excellent	400
2	São Paulo	-23.564722	-46.660518	17	Italian, Pizza, Steak, BBQ, Indian, Brazilian,...	4.152941	Excellent, Very Good, Average, Good	555

----Brasília----

	venue	freq
0	Pool	0.2
1	Athletics & Sports	0.2
2	Bar	0.2
3	Forest	0.2
4	Plaza	0.2

----Rio de Janeiro----

	venue	freq
0	Heliport	0.14
1	Farmers Market	0.09
2	Japanese Restaurant	0.05
3	Ice Cream Shop	0.05
4	Soccer Field	0.05

----São Paulo----

	venue	freq
0	Italian Restaurant	0.09
1	Hotel	0.07
2	Burger Joint	0.05
3	Restaurant	0.04
4	Gym / Fitness Center	0.04

----Brasília----

	venue	freq
0	Pool	0.2
1	Athletics & Sports	0.2
2	Bar	0.2
3	Forest	0.2
4	Plaza	0.2

----Rio de Janeiro----

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----São Paulo----

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2	Burger Joint	0.05
3	Restaurant	0.04
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[26] :											
	city	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
0	Brasília	Forest	Pool	Athletics & Sports	Plaza	Bar	Gym	French Restaurant	Gift Shop	Gourmet Shop	Greek Restaurant
1	Rio de Janeiro	Heliport	Farmers Market	Stables	Gym	Hotel	Ice Cream Shop	Indian Restaurant	Japanese Restaurant	Lake	Pizza Place
2	São Paulo	Italian Restaurant	Hotel	Burger Joint	Art Gallery	Gym / Fitness Center	Restaurant	Ice Cream Shop	Bar	Pizza Place	Salon / Barbershop

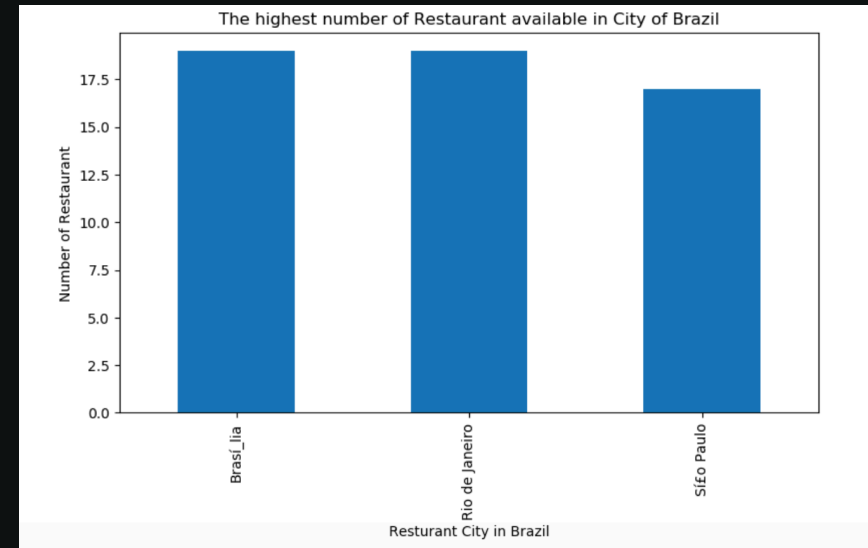
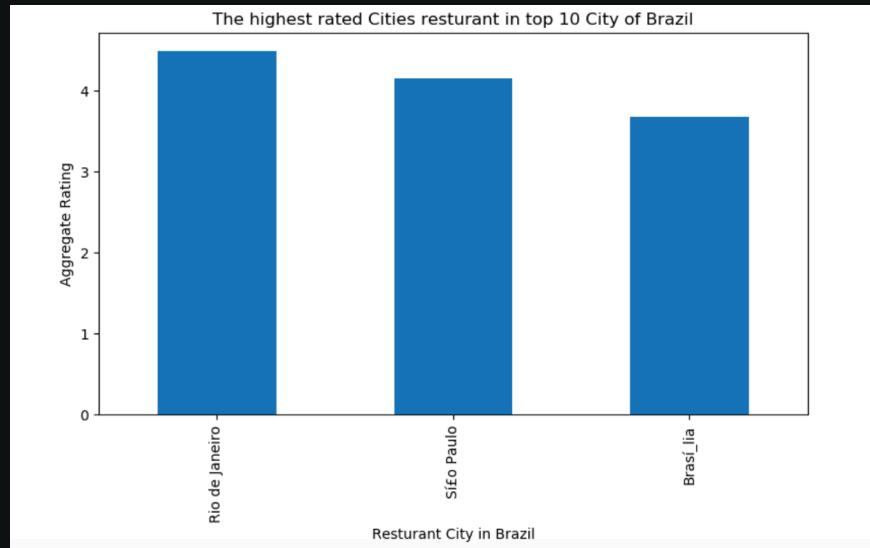
[28] :

	city	Lat	Lng	No_of_Restaurant	Cusines	Agg_Rating	Comments	No_of_Votes	Cluster Labels	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
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Conclusions

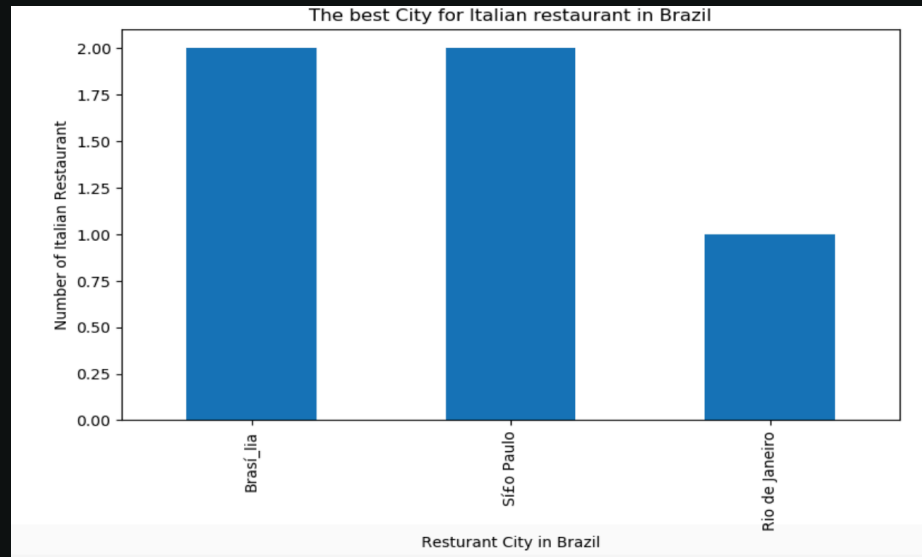
What places are have best restaurant in Brazil?

- In terms of Rating and average Rio de Janeiro shows the best results.
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- In tems of availability and number of restaurants is Brasilia where we can find more alternatives.



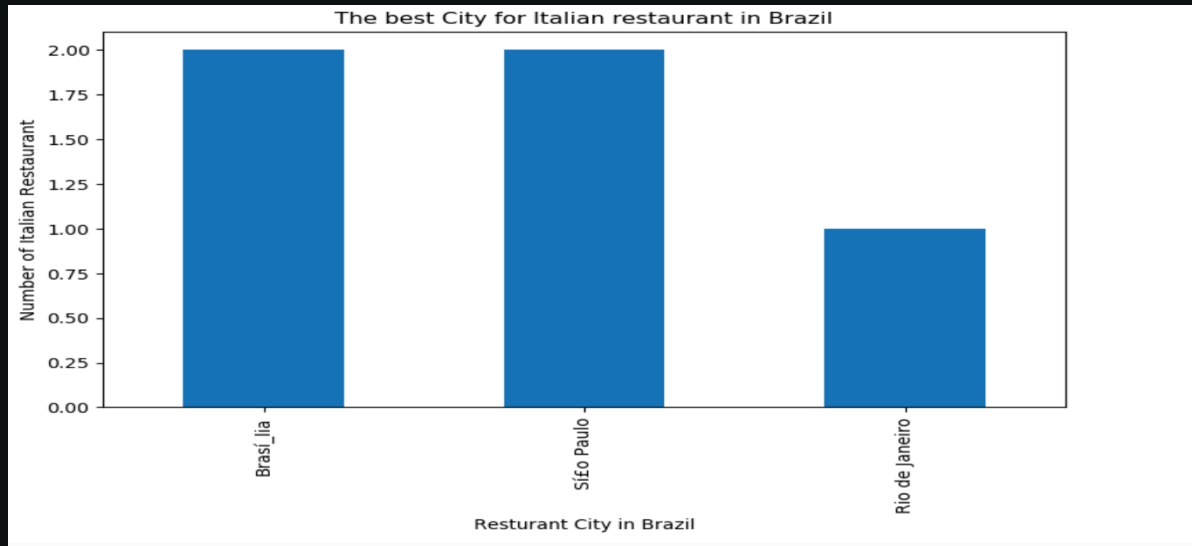
What is best City in Brazil for Italian Cuisine ?

- Brasilia



3 - Which City have large number of Italian Resturant Market ?

- Now if we narrow the focus to Italian Restaurants Market is Brasilia where we can find the majority of Italian Restaurants.



4 - Which is the best place to stay if I prefer a more variety of different cuisines ?

- Rio de Janeiro or Cluster #2 if you look a more variety like Indian, Japanese and Pizza.

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