



Capstone Project - The Battle of Neighborhoods (Week 1) Bogotá D.C- Colombia

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Capstone Project - The Battle of Neighborhoods (Week 1)

- Introduction / Business Problem
- Bogotá is the most important city in Colombia and the South America region therefore international and Colombian companies wish to know this market and increase their presence in this City.
- The Capstone Project Will focus in providing data to open Argentinian restaurant in this city that its divide in 20 districts (Localidades) that it contains the neighborhoods, on the other hand, the social classification can determine the success of restaurant because the location is important to determine the preferences of potential customers.

Data section

For this Capstone I am going to use the following data source:

Original Data source: Georreferencia puntual por localidad

Url: <https://bogota-laburbano.opendatasoft.com/explore/dataset/georeferencia-puntual-por-localidad/table/?flg=es>

This data source was modified because the CSV setting is different from the Python requirements, and the values were separated with the semicolon, on the other hand, some titles translated into English for I can connect with API foursquare and shows the venues.

Finally, the file with modified data is :

https://raw.githubusercontent.com/camiolo85/Coursera-Capstone/master/Data_bogota2.csv



Data Section

This data source contains the following fields :

Neighborhoods(Localidades)

Code (Número de Localidad)

Longitude

Latitude

With this data, API foursquare can find the venues and start with analysis.

```
url="https://raw.githubusercontent.com/camiolo85/Coursera-Capstone/master/Data_bogota2.csv"
df_bog = pd.read_csv(url)
df_bog.head(10)
```

	CODE	NEIGHBORHOOD	LONGITUDE	LATITUDE
0	2	CHAPINERO	-74.467	4.657
1	8	TUNJUELITO	-74.107	4.588
2	15	ANTONIO NARIÑO	-74.101	4.549
3	16	PUENTE ARANDA	-74.123	4.615
4	1	USAQUEN	-74.031	4.749
5	0	BOGOTA	-74.082	4.610
6	7	BOSA	-74.195	4.631
7	19	CIUDAD BOLIVAR	-74.154	4.507
8	18	RAFAEL URIBE URIBE	-74.116	4.565
9	8	KENNEDY	-74.157	4.627

```
df_bog.shape
```

```
(21, 4)
```

Analysis

- For this case we create a filter with foursquare data where it shows all Latin American Restaurant in Bogota, and we determine the potential districts(localidades), according with the foursquare outcomes.

American Restaurant

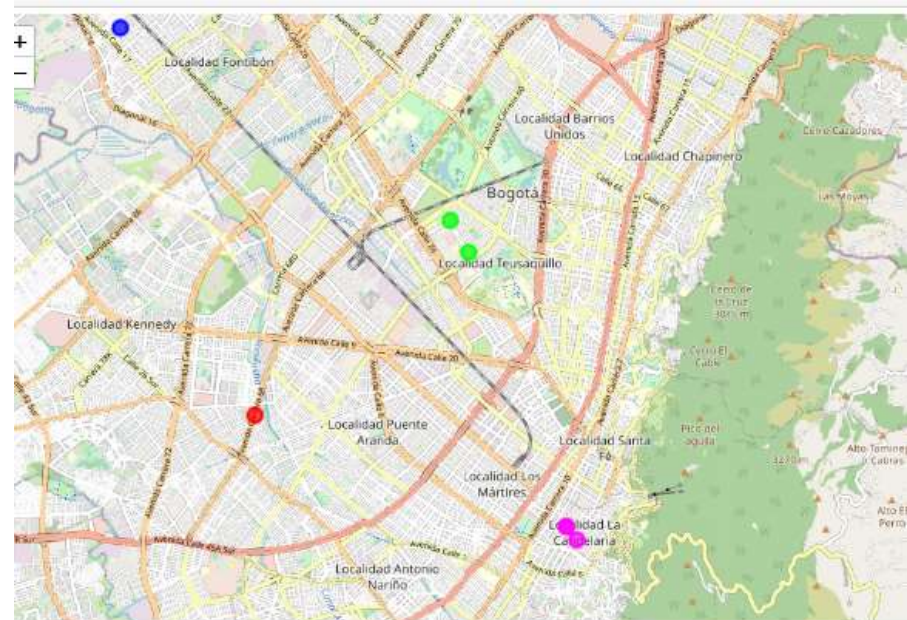
```
Bogota_restaurant = Bogota_venues[Bogota_venues['Venue Category']\
                                   .str.contains('Latin American Restaurant')].reset_index(drop=True)
index = np.arange(1, len(Bogota_restaurant)+1)
```

Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude
	-74.123	El Chef Del Tamal	4.618330
	-74.094	Chuleta y Champus	4.643392
	-74.094	Café y Aroma	4.648841
	-74.074	El Son de los Grillos	4.595569
	-74.074	La Puerta de la Catedral	4.597848

Potential Locations

• Foursquare shows the main districts for open an international restaurant in the following map we can see four locations:

- La Candelaria
- Teusaquillo
- Puente Aranda
- Fontibón



Conclusion

- In our analysis we can suggest that Candelaria is the best location to open the Argentinian restaurant, because this zona has the enough potential to receive local and foreign customers.
- And this location has a lot cultural background and an excellent Access to bank services and hotels.

