CAPSTONE PROJECT UBERLÂNDIA

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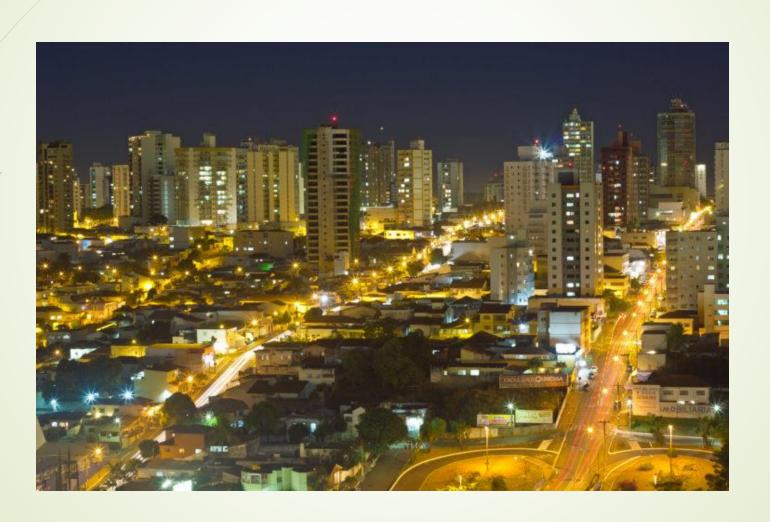
1) INTRODUCTION

Uberlândia is a city located in the State of Minas Gerais, Brazil. It is the second largest city after state capital Belo Horizonte, with a population of 700.000 habitants. Uberlândia is an important logistic hub center between São Paulo and Brazil's capital, Brasília. Recently, the city has been classified by the International Congress and Convention Association (ICCA) as one of the brazilian cities that most host international events, staying in 9th position.

With a diverse gastronomy, international tourists seek in Uberlândia good places to eat brazilian food. The goal of this project is the following:

- 1- Locate good restaurants for the tourists to enjoy Uberlândia food.
- 2- Find neighborhoods that lack restaurants.
- 3- Find potential neighborhoods to open a restaurant dedicated to international tourists.

1) INTRODUCTION



2) DATA DESCRIPTION

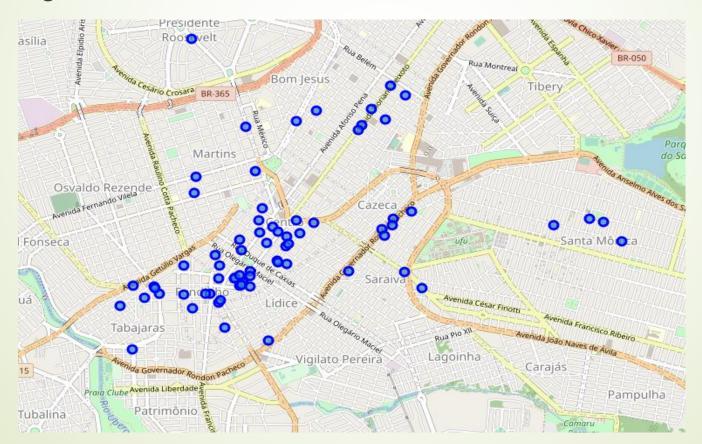
Our data consists of a table containing Uberlândia restaurants with their location, likes, ratings, and names. This data was gathered using Foursquare API. Due to the API calls restriction, I've already saved the data in my personal folder. This data will also be available in my github account.

For our analysis, we'll load Uberlandia restaurants from a table created with Foursquare API. After that, we'll employ folium library to plot Uberlandia map with restaurant locations. Then, based on visual inspection, we'll select places lacking restaurants as well as potential neighborhoods to open restaurants for tourists. For restaurants recommendation, we'll plot the top ten restaurants based on their rating.

Uberlandia restaurants data:

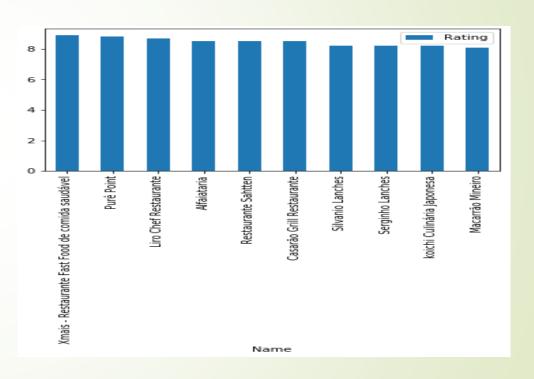
		Neighborhood	Neighborhood Latitude	Neighborhood Longitude	Venue Latitude	Venue Longitude	Venue Id	Venue Category	Name	Likes	Rating	Tips
/	0	Lídice	-18.924568	-48.275133	-18.920301	-48.275595	4cea7d8f948f224b57bdfb5d	Italian Restaurant	Talhareto Cozinha Italiana	10	7.8	4
	1	Lídice	-18.924568	-48.275133	-18.922842	-48.279211	51b35470498e23845ff0663c	Middle Eastern Restaurant	Kebabji Express	29	7.5	9
	2	Lídice	-18.924568	-48.275133	-18.920671	-48.274575	4e0f5b85483bc2b5f48b092b	Restaurant	Macadamia Restaurante	8	7.4	9
	3	Lídice	-18.924568	-48.275133	-18.920484	-48.275485	4dfcde15b0fb84d7ace1a9bc	Seafood Restaurant	Kabana do Peixe	10	7.3	7
	4	Lídice	-18.924568	-48.275133	-18.922532	-48.278934	59e80c7b872f7d28f03e6f18	Fast Food Restaurant	Burger King	6	7.3	0
	5	Lídice	-18.924568	-48.275133	-18.921402	-48.278179	4c2620fbf1272d7f93ec85c5	Fast Food Restaurant	McDonald's	222	7.3	33
	6	Lídice	-18.924568	-48.275133	-18.928332	-48.276450	4c8c2faad5049c7465e5466a	Brazilian Restaurant	Liro Chef	60	7.0	30
	7	Lídice	-18.924568	-48.275133	-18.921854	-48.278244	563242d1498ea8b150d8dff6	Restaurant	Batata Baroa	7	7.0	0
	8	Cazeca	-18.914683	-48.265700	-18.916098	-48.264148	4c55a6f84623be9ae033d5f4	Restaurant	Cantina Bom- peixe	14	8.0	6
	9	Cazeca	-18.914683	-48.265700	-18.915416	-48.262315	50f0bcb4e4b0e0c9cecd4e61	Restaurant	Purê Point	217	8.8	68
1	0	Cazeca	-18.914683	-48.265700	-18.917171	-48.265285	5bac19198c812a002cbb6a03	Fast Food Restaurant	Burger King	3	6.7	0

Visualizing Uberlândia Restaurants:



What are the ten top restaurants?

	Neighborhood	Neighborhood Latitude	Neighborhood Longitude	Venue Latitude	Venue Longitude	Venue Id	Venue Category	Name	Likes	Rating	Tips
26	Fundinho	-18.923440	-48.282926	-18.919766	-48.281662	4bf2f45398ac0f47b15562a8	Fast Food Restaurant	Xmais - Restaurante Fast Food de comida saudável	41	8.9	21
9	Cazeca	-18.914683	-48.265700	-18.915416	-48.262315	50f0bcb4e4b0e0c9cecd4e61	Restaurant	Purê Point	217	8.8	68
34	Tabajaras	-18.926933	-48.289255	-18.924915	-48.290987	4bb3afdd2397b713bc7a38b3	Brazilian Restaurant	Liro Chef Restaurante	236	8.7	95
19	Fundinho	-18.923440	-48.282926	-18.924519	-48.281310	541cb7b0498e537b4054187e	Mineiro Restaurant	Alfaiataria	55	8.5	12
24	Fundinho	-18.923440	-48.282926	-18.920847	-48.281236	4bb3ad0b2397b713d07638b3	Middle Eastern Restaurant	Restaurante Sahtten	157	8.5	68
18	Fundinho	-18.923440	-48.282926	-18.923738	-48.284706	4d594d5656f2b60ca99d772f	Brazilian Restaurant	Casarão Grill Restaurante	151	8.5	51
39	Martins	-18.909576	-48.281718	-18.906836	-48.278679	4cc0b395668db60c032b0fb4	Fast Food Restaurant	Silvanio Lanches	51	8.2	33
35	Tabajaras	-18.926933	-48.289255	-18.924099	-48.288580	4bd4bc686798ef3b454c628d	Fast Food Restaurant	Serginho Lanches	78	8.2	30
20	Fundinho	-18.923440	-48.282926	-18.923634	-48.282185	54ab1318498eeb0561e0ea02	Japanese Restaurant	koichi Culinária Japonesa	41	8.2	17
63	Santa Mônica	-18.918288	-48.243888	-18.916429	-48.243413	50c51c35e4b09f38ade2bf31	Italian Restaurant	Macarrão Mineiro	13	8.1	7



We can observe that these restaurants are all above rating 8, so we can recommend them to the tourists!

In Uberlândia, most of the international events happen at two locations: Center Convention and Parque do Sabia. Let's plot their location (red circles) along with the restaurants to find out what are the nearby restaurants at each event location:



Looking the map we can definitely see that only four restaurants are nearby Parque do Sabia. In this case, the neighborhoods around this place represents a good option for opening new restaurants for international tourists. As for the Center Convention, there are already tons of restaurants that might serve our tourists.

4) CONCLUSIONS

- Our analysis in this notebook leads to the following conclusions:
- 1. Good restaurants for tourists: We've selected the top ten restaurants for the tourists to enjoy some of Uberlândia food based on rating. The top ten have a rating above 8, which makes them well evaluated.
- 2. Find neighborhood that lack restaurants: From the data plotted on the maps, we conclude that the majority of restaurants are found in downtown, hence other neighborhoods might benefit from opening a new restaurant.
- 3. Find neighborhoods to open new restaurants for international tourists: We plotted on the map the main location of international events. It was found that we don't have too many restaurants nearby Parque do Sabia, making this region suitable to open a restaurant for tourists.