

Startup Restaurant Plan



Lexi DeLorimiere

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Background

Birdie Bar is a relaxed, entertaining, golf-themed restaurant coming to New York City! In order to have the most success as a business, our analysis team has looked at bars in the area to learn what the most popular types of food and atmosphere are. We want to bring a fun and enjoyable experience to our customers, so catering to their wants is very important.

Objective and Goals

The objective of this project is to look at other bars in the area surrounding Birdie Bar and learn what is most enjoyed by people in terms of food.

Data Extraction and Collection

Through web scraping and using Yelp Fusion API, I was able to look at the types of food that are most popular. Here are the search parameters that were used:

term: restaurants

location: New York City

radius: 20000 (~15 miles)

categories : bars

price : 2 (\$\$ on Yelp)

sort_by : rating

limit : 30 (number of results)

Below is the results that were returned:

	id	alias	name	image_url	is_closed	url	review_count	category
0	NWrMq1iqMDIvy8-8XuLlog	chasers-new-york-2	Chasers	https://s3-media2.fl.yelpcdn.com/bphoto/UYYV0hD...	False	https://www.yelp.com/biz/chasers-new-york-2?ad...	10	[{"alias": "pub", "title": "Pub", "category": "Food & Drink"}]
1	--FoSeUBHQb_p6iTnTY4KA	stafili-wine-cafe-new-york	Stafili Wine Cafe	https://s3-media4.fl.yelpcdn.com/bphoto/aBpSo...	False	https://www.yelp.com/biz/stafili-wine-cafe-new-york	49	[{"alias": "wine_bar", "title": "Wine Bars", "category": "Food & Drink"}]
2	s2CBMRYfJFu3FF6kiAsc4Q	cruz-del-sur-brooklyn	Cruz Del Sur	https://s3-media4.fl.yelpcdn.com/bphoto/6N_epo...	False	https://www.yelp.com/biz/cruz-del-sur-brooklyn	59	[{"alias": "mexican", "title": "Mexican", "category": "Food & Drink"}]
3	aX_QoLQab0UXhl_TtAv0Mg	vinnies-all-star-bar-and-grill-harrison	Vinnie's All-Star Bar & Grill	https://s3-media2.fl.yelpcdn.com/bphoto/JM3Kuv...	False	https://www.yelp.com/biz/vinnies-all-star-bar-and-grill-harrison	42	[{"alias": "portuguese", "title": "Portuguese", "category": "Food & Drink"}]
4	c8wkoGg9UbF55k3Z74X0Qw	betty-new-york	Betty	https://s3-media1.fl.yelpcdn.com/bphoto/cyj4EA...	False	https://www.yelp.com/biz/betty-new-york?adjust...	24	[{"alias": "newamerican", "title": "American", "category": "Food & Drink"}]

rating	transactions	...	coordinates.latitude	coordinates.longitude	location.address1	location.address2	location.address3	location.city	location.zip_code	location.country
5.0	[delivery]	...	40.720352	-73.905469	6065 Flushing Ave			New York	11378	US
5.0	[pickup, delivery]	...	40.737405	-74.006585	796 Greenwich St		None	New York	10014	US
5.0	[pickup, restaurant_reservation, delivery]	...	40.679870	-73.964352	622 Washington Ave		None	Brooklyn	11238	US
5.0	[delivery]	...	40.745587	-74.148878	215 Manor Ave			Harrison	07029	US
5.0	[pickup, delivery]	...	40.713670	-73.987850	193 Henry St		None	New York	10002	US

coordinates.latitude	coordinates.longitude	location.address1	location.address2	location.address3	location.city	location.zip_code	location.country	location.state	location.display_address
40.720352	-73.905469	6065 Flushing Ave			New York	11378	US	NY	[6065 Flushing Ave, New York, NY 11378]
40.737405	-74.006585	796 Greenwich St		None	New York	10014	US	NY	[796 Greenwich St, New York, NY 10014]
40.679870	-73.964352	622 Washington Ave		None	Brooklyn	11238	US	NY	[622 Washington Ave, Brooklyn, NY 11238]
40.745587	-74.148878	215 Manor Ave			Harrison	07029	US	NJ	[215 Manor Ave, Harrison, NJ 07029]
40.713670	-73.987850	193 Henry St		None	New York	10002	US	NY	[193 Henry St, New York, NY 10002]

After setting the parameters, the following columns were made:

Id

Alias

Name

Image_url

Closed

Url

Review count

Categories

Rating

Transactions

Latitude

Longitude

Location city

Location zip code

Location country

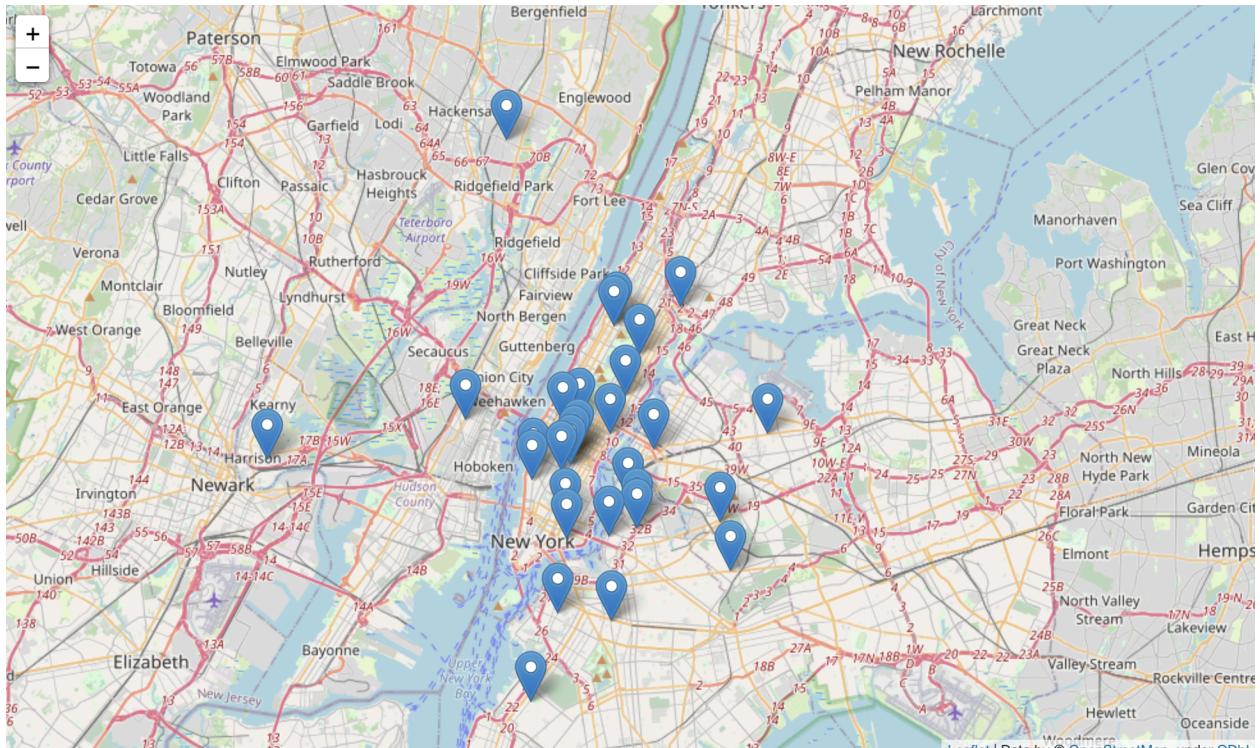
Location state

Display address

I cleaned and analyzed the data by dropping columns and looking at the data types.

Data Exploration

After using packages in Python such as Pandas, NumPy and folium, I was able to create visualizations to determine the location variation of the restaurant results.



These results will help to easily view the variation of locations around the city area.

```
#looking at restaurant categories
print(df['categories'])

0    [ {'alias': 'pubs', 'title': 'Pubs'}, {'alias': ...
1    [ {'alias': 'wine_bars', 'title': 'Wine Bars'}, ...
2    [ {'alias': 'mexican', 'title': 'Mexican'}, {'a...
3    [ {'alias': 'portuguese', 'title': 'Portuguese'...
4    [ {'alias': 'newamerican', 'title': 'American (... 
5    [ {'alias': 'breakfast_brunch', 'title': 'Break...
6    [ {'alias': 'sportsbars', 'title': 'Sports Bars...
7    [ {'alias': 'seafood', 'title': 'Seafood'}, {'a...
8    [ {'alias': 'newamerican', 'title': 'American (... 
9    [ {'alias': 'sportsbars', 'title': 'Sports Bars...
10   [ {'alias': 'chocolate', 'title': 'Chocolatiers...
11   [ {'alias': 'gastropubs', 'title': 'Gastropubs'...
12   [ {'alias': 'bars', 'title': 'Bars'}, {'alias': ...
13   [ {'alias': 'cocktailbars', 'title': 'Cocktail ...
14   [ {'alias': 'bars', 'title': 'Bars'}, {'alias': ...
15   [ {'alias': 'szechuan', 'title': 'Szechuan'}, {... 
16   [ {'alias': 'cocktailbars', 'title': 'Cocktail ...
17   [ {'alias': 'bars', 'title': 'Bars'}, {'alias': ...
18   [ {'alias': 'wine_bars', 'title': 'Wine Bars'}, ...
19   [ {'alias': 'wine_bars', 'title': 'Wine Bars'}, ...
20   [ {'alias': 'sushi', 'title': 'Sushi Bars'}, {... 
21   [ {'alias': 'wine_bars', 'title': 'Wine Bars'}, ...
22   [ {'alias': 'cafes', 'title': 'Cafes'}, {'alias...
23   [ {'alias': 'seafood', 'title': 'Seafood'}, {'a...
24   [ {'alias': 'tapas', 'title': 'Tapas Bars'}, {... 
25   [ {'alias': 'paintandsip', 'title': 'Paint & Si...
26   [ {'alias': 'mexican', 'title': 'Mexican'}, {'a...
27   [ {'alias': 'newamerican', 'title': 'American (... 
28   [ {'alias': 'bars', 'title': 'Bars'}, {'alias': ...
29   [ {'alias': 'modern_european', 'title': 'Modern... 

Name: categories, dtype: object
```

Based on the categories that were outputted, we can see there are a few different types of bars from our set parameters. Most are typical American bars while others are Mexican or cocktail/wine bars.

Conclusions

After performing web scraping using Yelp API fusion, I got a better understanding of the popular restaurants in the surrounding area to help Birdie Bar be successful. Based on the results, our business believes that a sports bar with a twist on American food is the best approach for a good experience for customers. Our location will be near Penn Station due to the high volume of traffic in the area.

Works Cited

<https://docs.developer.yelp.com/docs/fusion-intro>