

Tapas in Marienplatz, Munich

Introduction

A Spanish family recently moved to Munich, Germany and they would like to start a business in the food industry. They are thinking on opening a tapas bar in the heart of the city (Marienplatz, Munich, Germany) and they will use mainly the Foursquare API to do some research in the area to see if is worth the effort and money to do it.

They expect to reach people who speak Spanish (people from Spain, from Latin America and people who learnt it as a second language).

Data and Data Sources

For the city analysis the family will use the immigration information provided by the State of Bavaria (<https://www.muenchen.de/rathaus/>) which will tell us about the amount of Spanish and latin people who resides in the city currently.

For example, in the city there is currently living 9,087 Spanish people and approximately 6,170 latin people in Munich. They could be potential customers. Also, the menus can be written in English and German to attract more people. They will also use Foursquare API to collect information about the bars with tapas topic and they ratings.

The main goal will be to find a spot in the city close enough to the centre and main attractions, where the neighbours bars don't have great ratings (in order to not compete with them)

Methodology

1.- First we import all necessary libraries for analysis:

```
import requests # library to handle requests
import pandas as pd # library for data analysis
import numpy as np # library to handle data in a vectorized way
import random # library for random number generation

!pip install geopy
from geopy.geocoders import Nominatim # module to convert an address into latitude and longitude values

# libraries for displaying images
from IPython.display import Image
from IPython.core.display import HTML

# transforming json file into a pandas dataframe library
from pandas.io.json import json_normalize

! pip install folium==0.5.0
import folium # plotting library

print('Folium installed')
print('Libraries imported.')
```

2.- We then get the credentials to access to the Foursquare API:

```
CLIENT_ID = '2Z3UZXIKCNOTBEIK01HVNWDJ1JT0YA'
CLIENT_SECRET = 'AFML0IDZ5Y4J52JD24T2I4RJXI'
ACCESS_TOKEN = 'E5KQLGPNGEB0ZVV0IZI2FFAWEWF'
VERSION = '20180604'
LIMIT = 30
print('Your credentails:')
print('CLIENT_ID: ' + CLIENT_ID)
print('CLIENT_SECRET:' + CLIENT_SECRET)
```

Methodology

3.- We get now the coordinates of Marienplatz:

```
Center in Marienplatz, Munich, Germany

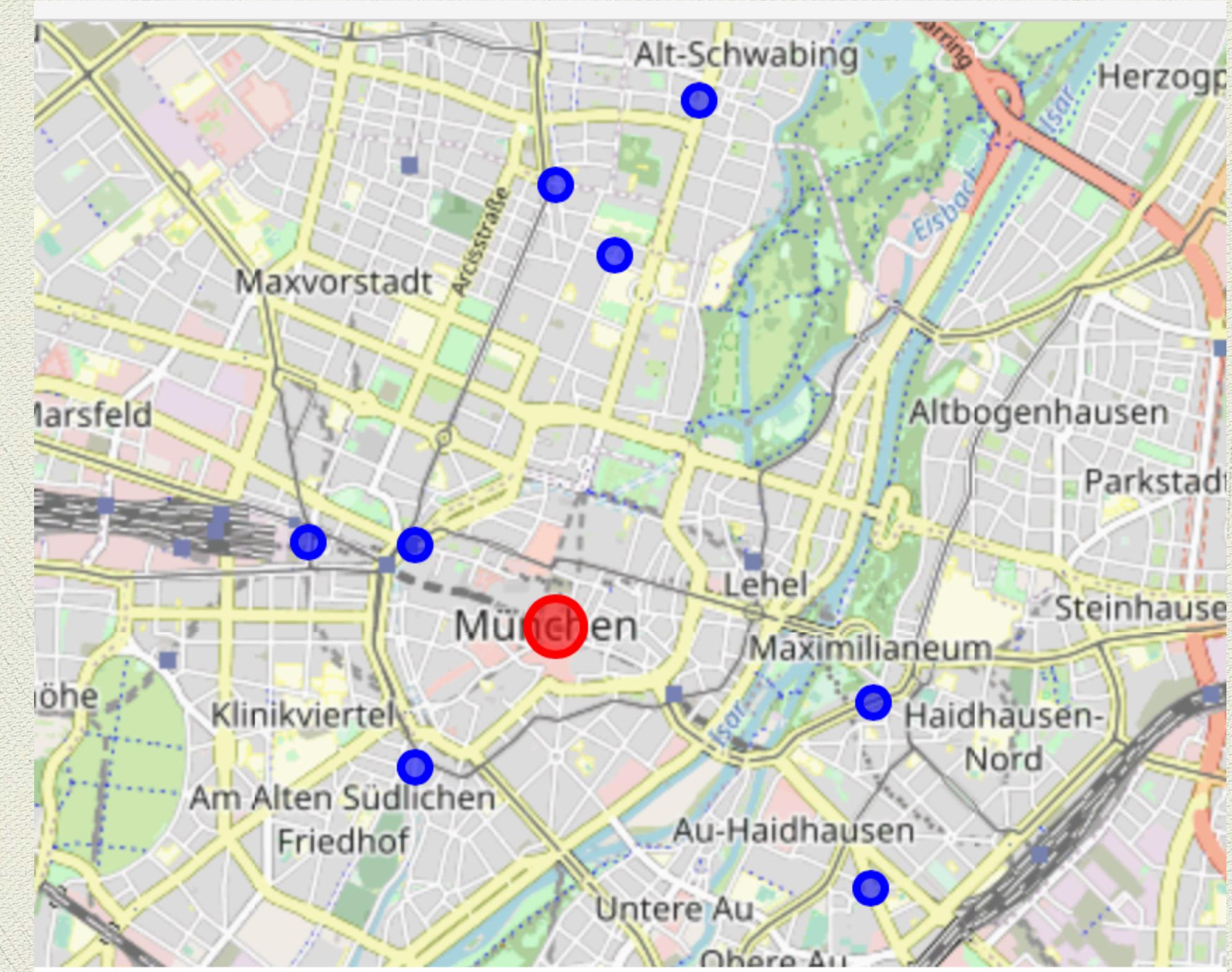
address = 'Marienplatz,Munich,Germany'

geolocator = Nominatim(user_agent="foursquare")
location = geolocator.geocode(address)
latitude = location.latitude
longitude = location.longitude
print(latitude, longitude)

48.13703175000006 11.575924590567384
```

```
dataframe_filtered.name
0 Hickory - Tapas BBQ Smokehouse - Haidhausen
1 Teatro Tapas
2 Tönis Tapas
3 Itxaso Tapas
4 Bar Tapas
5 Tapas Tapas
6 Amistad - tapas y vino
7 bayrische tapasbar
```

4.- Search of venues around Marienplatz:



Methodology

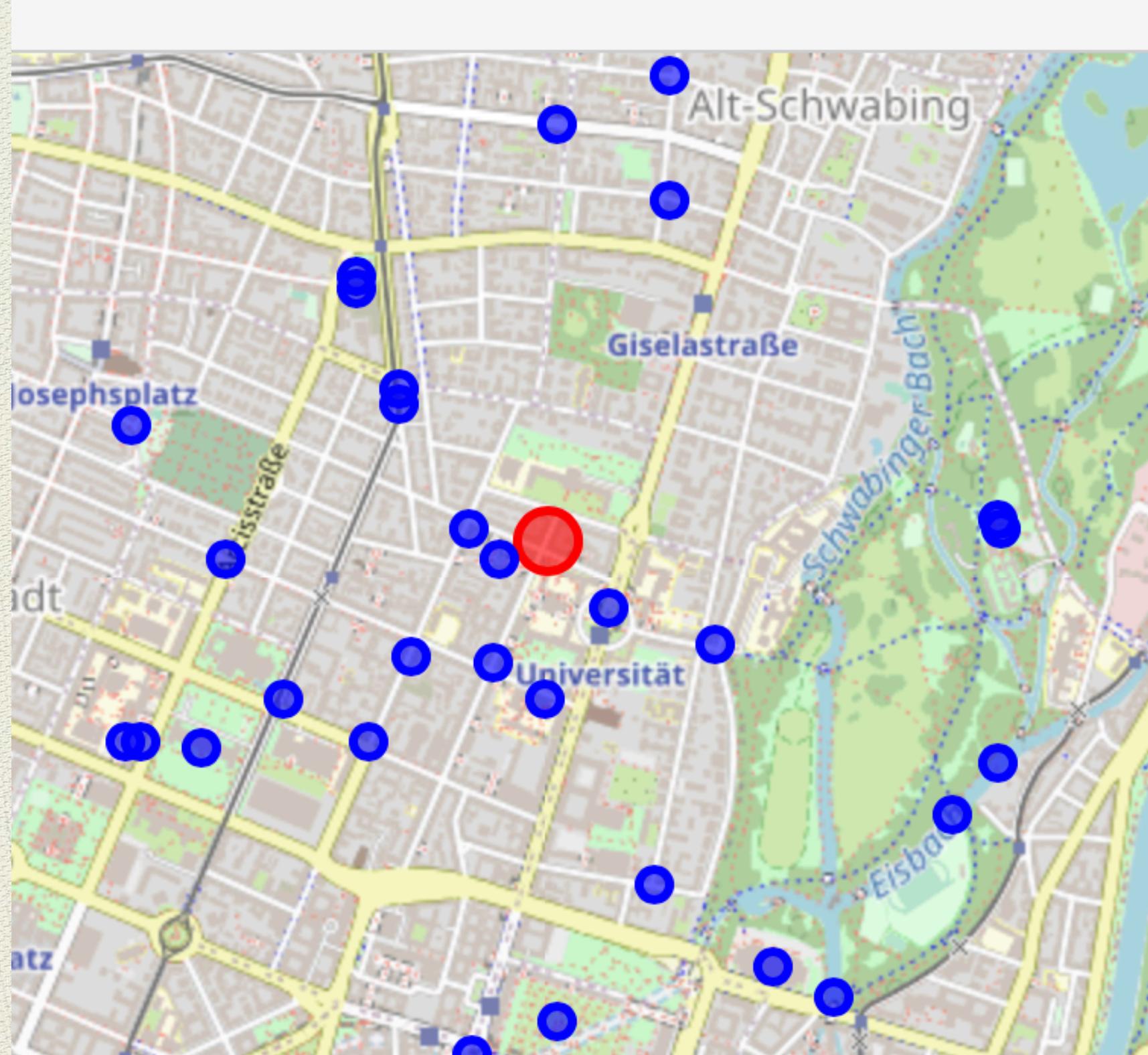
5.- Venues's Scores:

```
: venue_id = '4f830f4ee4b024a26fbb1eca' # ID of Itxaso Tapas
url = 'https://api.foursquare.com/v2/venues/{}/client_id={}&v={}'
result = requests.get(url).json()
try:
    print(result['response']['venue']['rating'])
except:
    print('This venue has not been rated yet.')
7.0
```

```
venue_id = '4b8ecb87f964a520923733e3' # ID of Bar Tapas
url = 'https://api.foursquare.com/v2/venues/{}/client_id={}&v={}'
result = requests.get(url).json()
try:
    print(result['response']['venue']['rating'])
except:
    print('This venue has not been rated yet.')
7.5
```

Methodology

6.- Analysis of the Area around Bar Tapas:



	name	categories	
0	Geschwister-Scholl-Platz	Plaza	Ges Sch
1	Konditorei Kaffee Schneller	Pastry Shop	Amal
2	Julius Brantner Brohandwerk	Bakery	Adalb
3	The Victorian House Brown's Tea Bar	Tea Room	Türk
4	Lost Weekend	Café	Sche
5	Donuts & Candies	Donut Shop	Georg
6	Königin 43	Café	Köni
7	Sushiya Sansaro	Sushi Restaurant	Amal
8	Morso	Café	Norde
9	Ballabenini	Ice Cream Shop	The

Results

Statistisches Amt München shows that through the years, the Spanish immigration has only increased so it is expected to have more Spanish people visiting and staying in Munich in the future years.

Foursquare API showed that there are only seven venues related with Tapas in a 2km radio of Marienplatz. Most of them are not rated and only two are rated but they have not many tips. It also shows that up north of Marienplatz there are much more business related with food.

Discussion and Conclusion

The data related with population accessed through the portal Statistisches Amt München, shows us that there are potential customers who are coming to Munich to live and gives the Spanish family a good start related with customers.

The data accessed through Foursquare API shows us that there are not many Tapas business so is a good start and also not all of them have ratings. We had to rely on the venues that had some valued information and the data showed us that it is a better idea to think of moving the location of the new Tapas Restaurant to a place near the English Garden. It is a vivid a busy area with just 3 similar business, near U-Bahn stations and near a university area.

We would recommend to this family to start their business near the English Garden instead of in Marienplatz area.