

# Ibm DateScience Professional Certificate \_ Capstone

Travel agency consultant (Best Place in Rome)

# *Introduction*

- Rome (Latin and Italian: Roma) is the capital city and a special comune of Italy). Rome also serves as the capital of the Lazio region. With 2,872,800 residents in 1,285 km<sup>2</sup> (496.1 sq mi). It is the fourth most populous city in the European Union by population within city limits. It is the centre of the Metropolitan City of Rome, which has a population of 4,355,725 residents, thus making it the most populous metropolitan city in Italy. Rome is located in the central-western portion of the Italian Peninsula, within Lazio (Latium), along the shores of the Tiber. The Vatican City (the smallest country in the world) is an independent country inside the city boundaries of Rome, the only existing example of a country within a city: for this reason Rome has been often defined as capital of two states.



# *Business Problem*

From consulting companies we are required by a group of tour operators to provide some well-defined program that allows these tourist agencies to create a series of tourist packages to be provided to their customers, in particular we are required to provide specific information about:

- Historical place to visit
- Restaurant for typical food
- Good accommodation Hotel
- Spa and Wellness center

# *Data*

## 4 Analysis

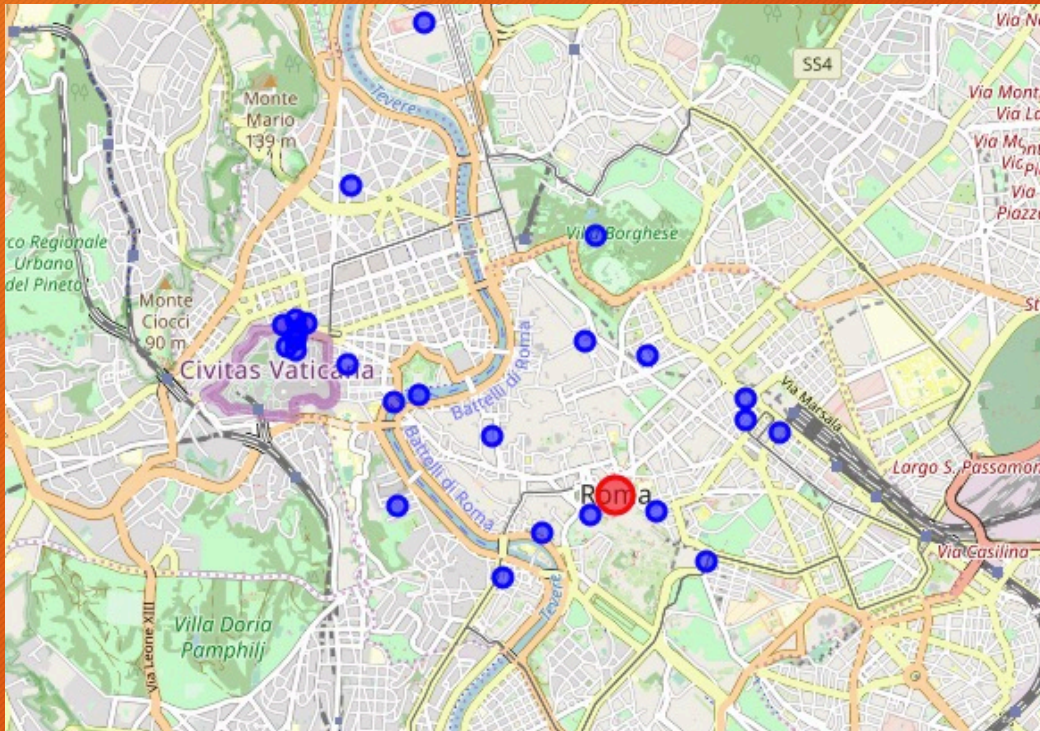
The information will be extrapolated mainly from 3 sources:

- Foursquare api
- Wikipedia source
- Edited csv.dataframe

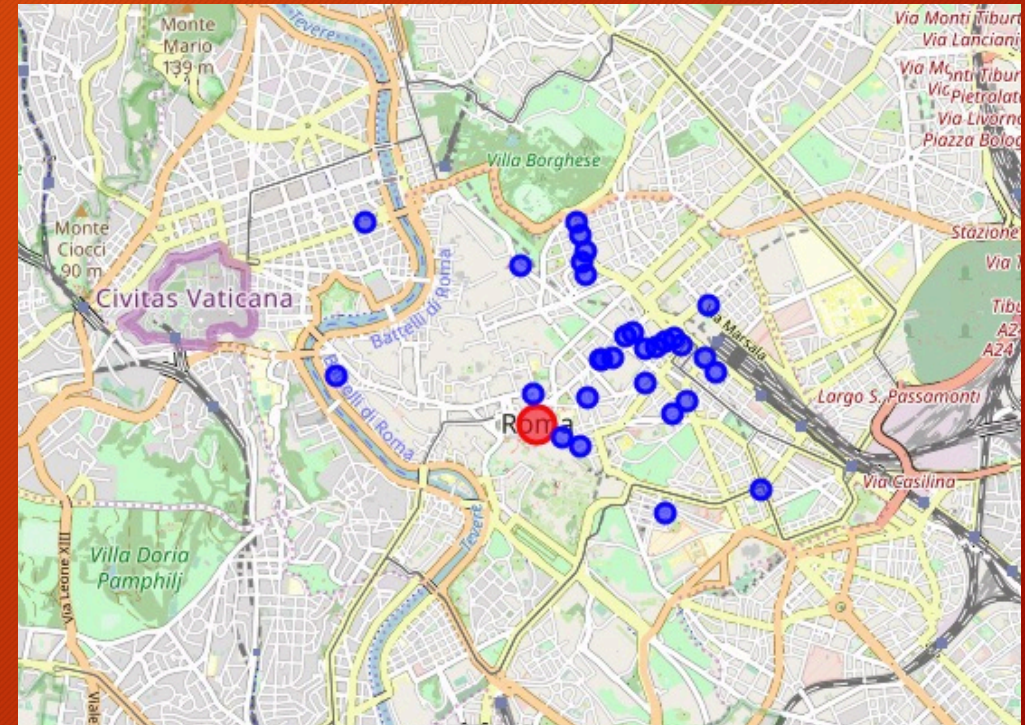


# First impression visual representation

- The Foursquare API allow us to get a clear representation of the place location in the center of Rome (as show below picture)



MUSEUM

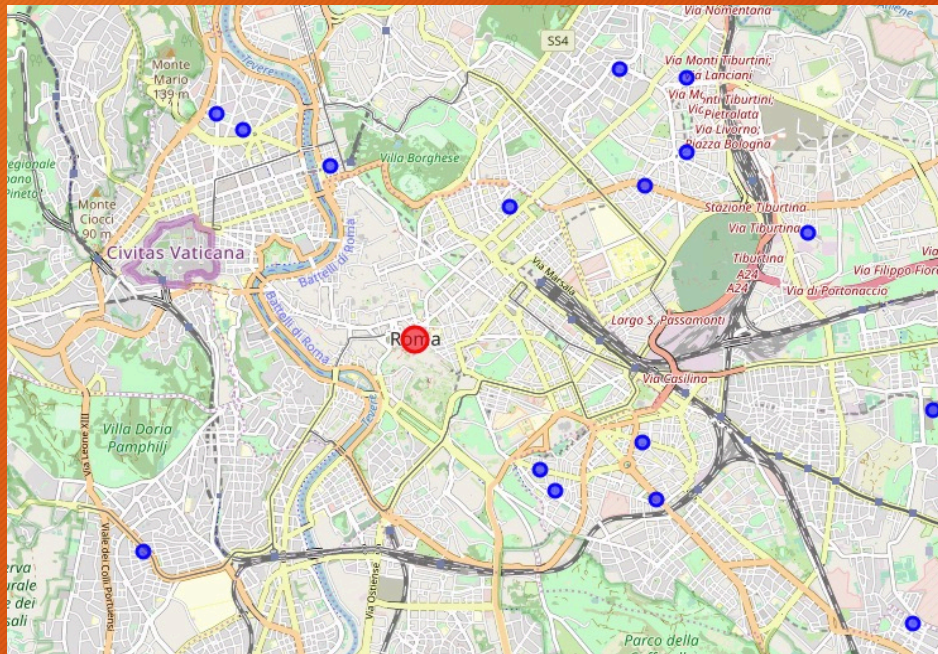


HOTEL

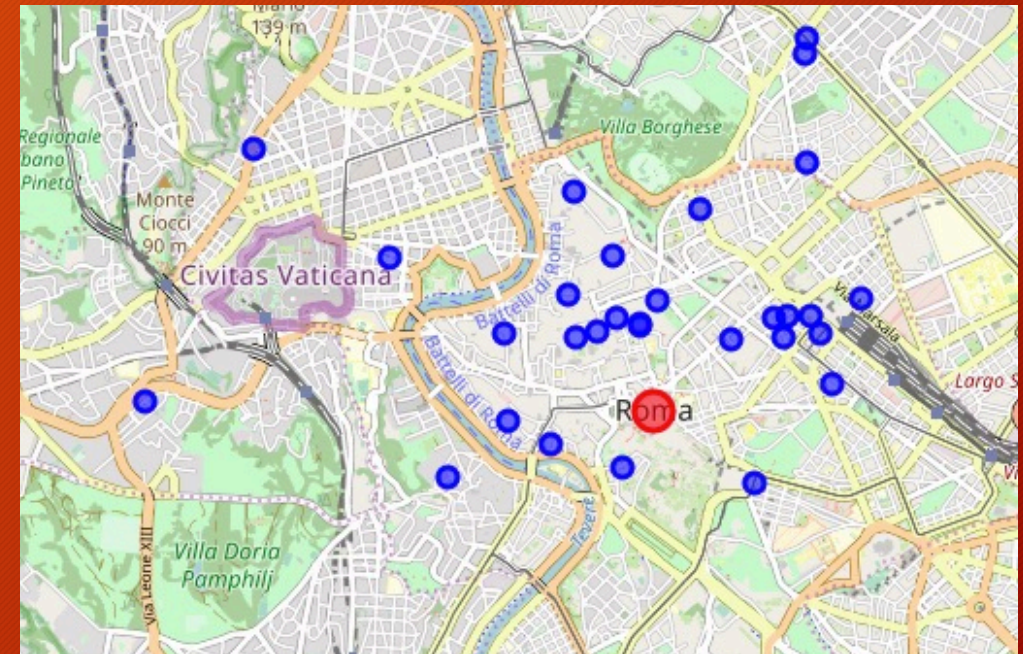


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SPA



RESTAURANT



# Classification of Venues (ex.restaurant)

	name	categories	address	cc	city
0	Daruma Sushi Restaurant - Parlamento	Sushi Restaurant	Piazza del Parlamento 37	IT	Roma
1	Restaurant Roof Garden Les Étoiles	Restaurant	34 Via Giovanni Vitelleschi	IT	Roma
2	Rooftop Restaurant Raphaël Hotel	Italian Restaurant	NaN	IT	NaN
3	Wang Xiang Lou Chinese Restaurant (望乡楼中国饭店)	Chinese Restaurant	Via del viminale	IT	Roma
4	Kilo Restaurant	Steakhouse	Via Tirso, 30	IT	Roma
5	Marini Restaurant & Boutique	Caribbean Restaurant	Via Borgognona 11	IT	Roma

```
dataframeRestaurant_filtered.name
]: 0      Daruma Sushi Restaurant - Parlamento
    1      Restaurant Roof Garden Les Étoiles
    2      Rooftop Restaurant Raphaël Hotel
    3      Wang Xiang Lou Chinese Restaurant (望乡楼中国饭店)
    4      Kilo Restaurant
    5      Marini Restaurant & Boutique
    6      Royal Art Café Restaurant
    7      da brunello restaurant
    8      Restaurant Da Sergio
    9      Bali Bar & Restaurant
   10      Chopstick Restaurant
   11      Restaurant Pipperno
   12      Thai J Restaurant
   13      InRoma Movie Stars Restaurant
   14      Restaurant D'Este
   15      Doney Restaurant
   16      The Hive Restaurant
   17      Restaurant Giglio
   18      Restaurant "Leonardo"
   19      Rotonda Restaurant
   20      Mok Restaurant Club Roma
   21      UNA Restaurant
   22      Rome restaurant da Trani
   23      Grill & Wine Restaurant
   24      Bambù Restaurant 2 (Wok & Bambu 1) (Kung Fu Re...
   25      restaurant due gi
   26      Trevi Restaurant
```

# Conclusion

This work is a simple example of what can be done by combining data from different sources and with different algorithm.

Usefull using additional time as a starting point for further analysis.  
For example:

- create personalized paths that take into account the distances between the places of interest and the time needed to visit them, optimizing timetables and routes,as well as
- classify the places of interest according to the visitors' opinions.
- optimal planning of the journey





THANKS