

Public administrative offices of Lecce (Puglia, Italy) & venues of interest in FourSquare

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Summary

- Introduction : The business problem and stakeholders
- Data : Sources and data
- Methodology : Data Cleaning, Data Visualization, Retrieve FourSquare Data
- Results : Map of venues always updated
- Discussion
- Conclusion

Introduction

In this assignment I solve the problem to provide venues' informations for users visiting administrative offices in Lecce, Puglia.

A user, specially tourist, so will enjoy a map, always updated by FourSquare, of places interest or private services in the proximity of administrative offices that he needs.

The stakeholders will be the public administration interested in a better public services development.

Data

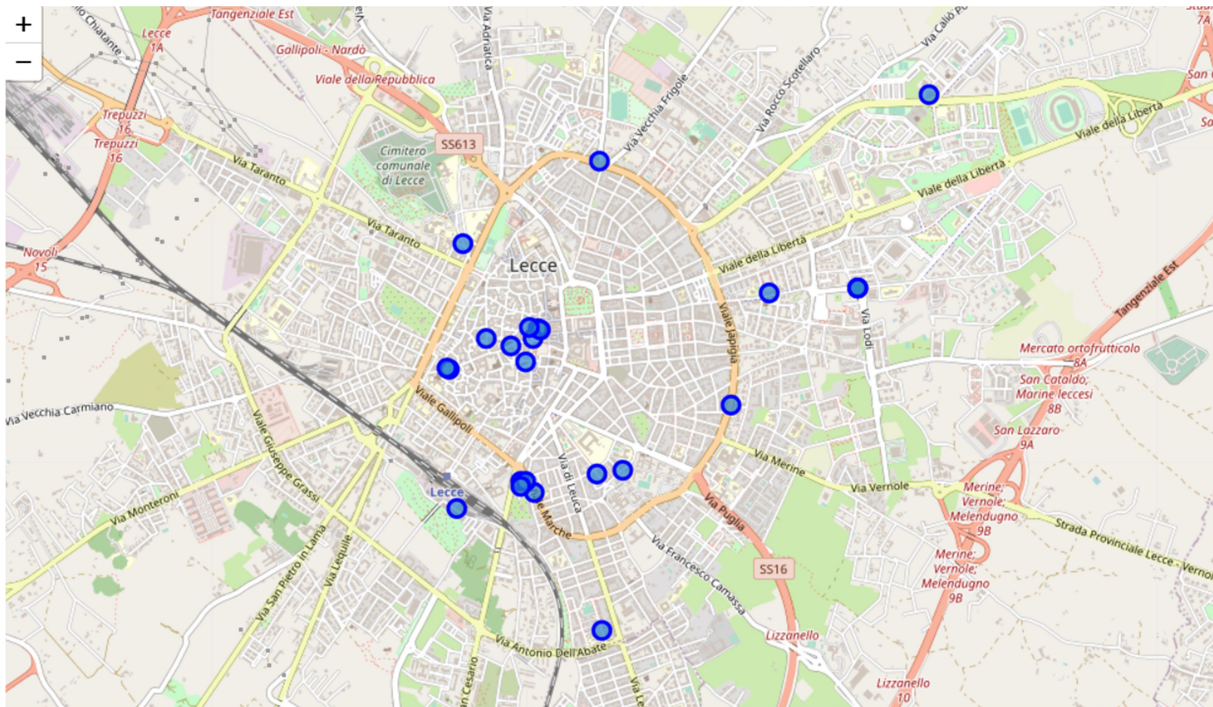
Data are collected from Open Data portal of Comune di Lecce. I download a csv file in which are present coordinates (latitude and longitude) of public administration offices.

Other source is FourSquare.

Methodology

Data Cleaning: cutting of unnecessary columns. Keeping column 'SETTORE' that groups different offices but with same purpose. Verifying data types. Cutting Null values. Some offices for the same sector are in different buildings so we keep only records with unique combination of LAT, LON.

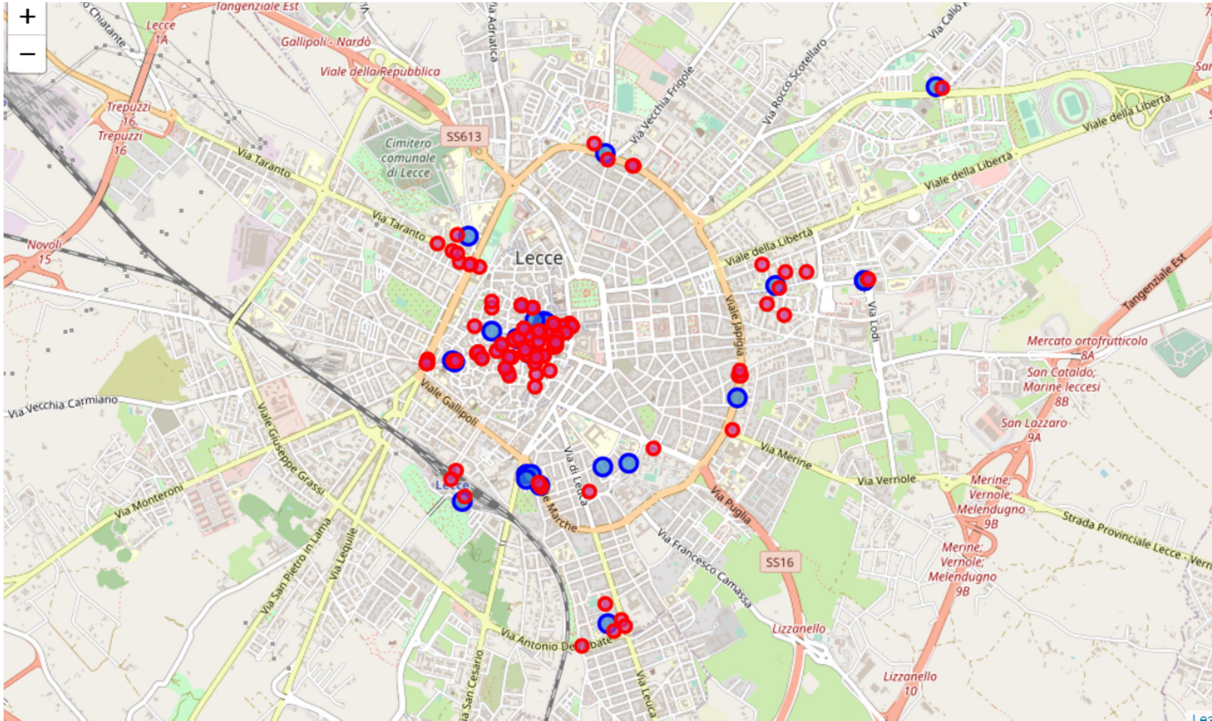
Data Visualization: Is created a map of Lecce with public offices superimposed on top. To superimpose markers with names of public offices and to center this on Lecce coordinates i utilize Folium package.



Methodology : Retrieve FourSquare Data. After uploading credentials for FourSquare for Developers, a function is built to explore every couple of coordinates referring to a sector. A radius of 200 is fixed to search. How many venues were returned for each sector. How many unique category of venue.

Results

Are Superimposed markers of venues from FourSquare on map of Lecce near every sector of offices.



Discussion & Conclusion

Thanks FourSquare a tourist or citizen can check for a venue of interest when he may need to visit a public administrative office in Lecce