

Final Report

February 26, 2019

Top attractions and what to see in Matera, Italy

1. Introduction

1.1 Context My hometown of Matera is this year the European Capital of Culture for 2019 and will attract many tourists from all over the world. I want to analyze the Foursquare data available for the city to find out the top rated venues and provide a visual guide to tourists of the top spots in the city for each category.

1.2 Problem We are working on limited number of venues since the city is quite small and largely undeveloped until recently. I want to see what are the top venues and provide a guided tour of the venue content from the Foursquare API. Most of the tourists are staying on average for few days so I want to give them at a glance the top venue for each category available.

In [] :

2. Data

I used the Foursquare API to extract venue information in order to create a more visually appealing data experience for the user. Depending on the time when we query the API we might get different venues since the changes are done live.

3. Methodology

We connect to the Foursquare API and we launch a request to obtain all the trending venues in the city. We obtain from the request a JSON that we clean up and convert to a pandas dataframe. We then regroup the dataframe by category and we calculate the frequency of occurrence for each category. Once we have the data organized as we want we can finally map it using folium and visualizing their position and category info on the map.

4. Results

We obtain a map that is a basic useful tool for a person considering visiting the city and able to see the top venues for each category and where they are located on the map.

In [29] :

Out[29]: <folium.folium.Map at 0x7f1afdd85dd8>