The Battle of Neighborhoods – Part I

Applied Data Science Capstone - Project description

Introduction

New York City (NYC/NY) is most populous city in whole United States, with an estimated 8.3 million of residents as of July 2019 – it's almost twice in comparison to second most populous city (LA). In 2017, it had an estimated density of 11 thousands per square kilometer, so only few cities have greater density. These numbers are only for NYC – because if we take this numbers for consideration in taking in account also numbers for NY metropolitan area and state of NY – we will have 36% of metropolitan area and 43% of New York state population. Quite a lot, right?

What is behind these values? Mostly the fact that city has higher immigration than outmigration since 2010 Census data – and it's built on fact, that NY has been always a major point for all immigrants – and of course a starting point for them, as a gateway to this country.

This city is a home for over 500 art galleries, 2000 arts and cultural organizations, and more than 27 thousands of restaurants – starting with Central and Eastern Europe cuisine, moving through Italian, Jewish, Irish, Middle-Eastern to Chinese cuisine. And it's all based, mostly, on immigrants from countries from specific regions of the world – and thanks to that, NY has a reputation of place with most diverse haute-cuisine, according to Michelin.

Challenge

As I am a huge fan of Italian cuisine, I would like to answer following questions:

- 1. Find areas with best Italian restaurants (by overall quality of them) and visualize them on the map of NY.
- 2. Find the best location for such restaurant (Based on number of them?) Quality of them?)
- 3. Find areas which has problem with quality of such restaurants
- 4. Which part of NY will be best to stay if you want to visit best restaurants?