

Peer-graded Assignment: Capstone Project - The Battle of Neighborhoods (Week 2)

Introduction:

A description of the problem and a discussion of the background:

A travel agency would like to open a new travel package to bring tourists to New York City. Before providing the new package, the travel agency would like to dig deep into New York City since they want to be different from other travel packages, and to provide an in-depth experience to its clients. So, they want to count the venues of each neighborhood and identify some distinct areas and provide a tour guide to walk through some of the areas with clients.

This project is to take a glimpse at different neighborhoods of Providence, RI and Hartford, CT. Both cities are capital cities of their states and are major cities between New York City and Boston on the East Coast.

Travelers from inside and outside of the New England area who want to decide where to visit and business owners may be interested in the project.

A description of the data and how it will be used to solve the problem.

The map data is available through Foursquare API, and the neighborhood information can be found online through zip code.

Number of restaurants in the neighborhood
Quantity and the distance

Number of restaurants, hotels, parks, gaming centers etc
Data will be extracted from both wiki and kaggle for additional purpose

Data Collection

Two data sets of zip code and neighborhoods with latitude and longitude for each city from multiple online sources such as both wiki and kaggle for additional purpose

Methodology

Basic skills from week 3 lab

Majorly relied on Foursquare API to retrieve all venues of each neighborhoods, then group by each neighborhoods and to count how many venues before filter top 10 most common venue types of each neighborhoods

Results

- Providence has more venues than Hartford (512 vs 460)
- Federal Hill has the most venues in Providence
- Downtown has the most venues in Hartford
- Most of venues in Federal Hill area restaurants, bars
- Venues in Downtown Hartford are more diverse including: banks, concert hall, gyms...
- Bars, Restaurants, Bakeries, and Diners are very common in Providence
- Hartford is more about commercial

Conclusion

For travelers:

- Providence may more suitable to spend a good amount time of enjoy the local food
- Hartford has less food but more commercial

For business owners:

- Providence is good place to open small business related to food and travel industry
- Hartford is better place to involve in insurance industry

This analysis is performed on limited data. This may be right or may be wrong. But if a good amount of data is available there is scope to come up with better results.