

Capstone Project – The Battle of Neighborhoods

Smita Dhadhal

August 20 , 2020

Introduction

ABC is a company based in Toronto for organizing events, currently it works on a project to organize an event for 7 days for a group of photographers from all over the world. The company has to determine a good program, including a hotel of residence, a hall for meetings, places of landscape to visit, places of shopping, restaurants and cafes. The company has to make a list of places of landscape in Toronto, including the nearest restaurants, cafes, and shopping stores for each place. And it has to provide a map in case the photographer can't use his/her mobile application for any reason.

Data Description

The data used in this project is provided by Foursquare location data. The data are grouped by landscape area, and each area included the information about this area and all information about restaurants, cafes, and stores which in this area.

Methodology and Analysis

After Cleaning and Preparing the Data let us identify the steps that have to be performed.

The steps are as following:

- 01- Import Libraries**
- 02- Define Foursquare Credentials**
- 03- Define the city and get its latitude & longitude**
- 04- Search for Hotels & clean dataframe**
- 05- Search for Parks & clean dataframe**
- 06- Search for Restaurants & clean dataframe**
- 07- Search for Cafeteria & clean dataframe**
- 08- Search for Shopping Stores & clean dataframe**
- 09- Generate map to visualize hotels, shopping stores and Cafeteria and how they cluster together**
- 10- Generate map to visualize Park, Restaurant and Cafeteria and how they cluster together**

Refer to https://github.com/Smita101/Coursera_capstone/blob/master/Final_Capstone.ipynb for detailed understanding of each step.

Results

As result we found cleaned dataframes and maps as following:

1 Hotels Dataframe

2 Parks Dataframe

3 Restaurants Dataframe

4 Cafeterias Dataframe

5 Shopping venues Dataframe

6 Map visualuization of clustered hotels,shopping stores and cafeterias

7 Map visualization of clusterd parks,restaurants and cafeterias

Conclusion

To conclude,a basic data analysis was performed for an event management company for their upcoming event for photographers going to be held in the city of Toronto.