The Battle of Neighborhoods

Report

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Report

Data Science

1. Introduction / Business Problem

We are producers of homemade artisan vegan food. The challenge is to find a chain of potential buyers of vegan food that we will start to produce in the city of Toronto in Canada.

We must look for commercial customers who can deliver vegan food, so we will also need to concatenate a Postal Code listing for those customers. The closer to our production site the cheaper we can make these deliveries and offer discounts in a map.

2. Data Section

By the way, the following data is required to answer the issues of the problem, there are a description of the data and its sources that will be used to solve the problem:

2.1. Inputs or Outputs

- List of Boroughs and neighborhoods of secunderabad with their geodata (latitude and longitude) of Toronto-CA

- Venues for each neighborhood

- Venues for restaurants (or food), as needed.

- Map of of potential buyers of vegan food

- Postal Code List of restaurants and potencial food vendors.

2.2. Libs / Necessary instalations

```
!pip install geocoder
!pip install folium
```

```python
import geocoder
import folium
import time
import requests
import json
import numpy as np
import numpy as np
import pandas as pd

from geopy.geocoders import Nominatim
from pandas.io.json import json_normalize
pd.set_option('display.max_columns', None)
pd.set_option('display.max_rows', None)
```

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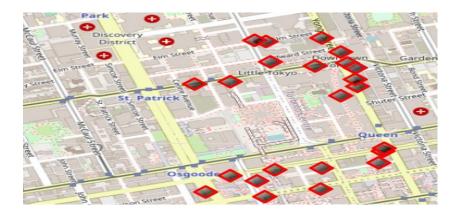## 3. Methodology

- The approach is dependent on the Foursquare API to retrieve records for all locations in each neighborhood in the city of Toronto, Canada, then group by each neighborhood and count how many locations.

- Then, we should apply those that correlate with "Restaurants" or "Food" in the filter categories found in the filter locations.

- Finally, we must do through consultations in the base of cities and in Wikipedia, which are the neighborhoods and their respective Postal Codes for future communications and establishment of delivery businesses

4. Results

- We noticed a decrease in the number of establishments in the city of Toronto when we put filters of related categories.

- Through consultations with stakeholders and investors, we chose "Food" and "Restaurants" as keywords for those categories that are more related to our vegan food delivery business.

- The results show that there is still a potential number of establishments that could be interested in our delivery business.

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5. Conclusions

- Although we recognize an interesting list of commercial establishments in the food industry for final consumers, we should also consider expanding our list of potential customers with more keywords such as Schools, Bars and other local businesses that may be interested in delivering vegan food.

- Perhaps expanding the filters used would be a more interesting approach.¶