NEW BARBERSHOP IN TORONTO

COURSERA IBM DATA SCIENCE CERTIFICATION

THE BATTLE OF NEIGHBORHOODS

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PROBLEM

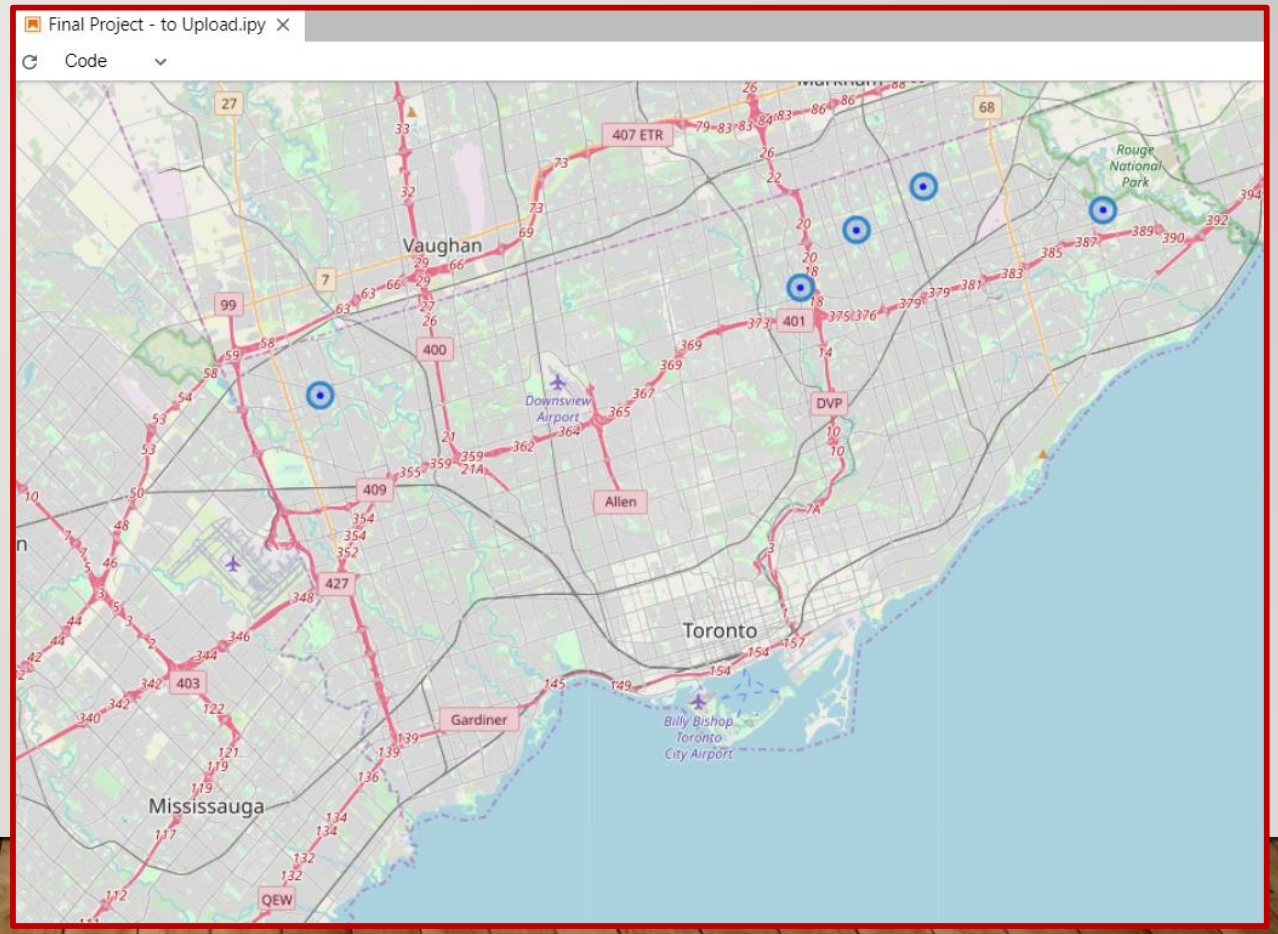
- A new comer to Toronto wants to open a new barbershop, preferably in a populated postal code, with no or little competition. For this reason, the new investor is only interested in checking a score that reflects the ratio of population to competitor per postal code, to identify the top 5 postal codes to consider.

TECHNICAL WORK

- Load the required libraries
- Data Acquisition
  - Population per postal code
  - Coordinates of postal Code
  - Foursquare businesses
- Data Cleaning and Aggregation
- Data manipulation
- Results Display

FINDINGS

- Top 5 show highly populated postal codes, with no competitors
- Top 5 are all located in the suburbs of Toronto



Rank	Postal Code	Population	Competitors	Normalized Score
1	M1B	66,108	0	100.0
2	M2J	58,293	0	88.2
3	M9V	55,959	0	84.7
4	M1V	54,680	0	82.7
5	M1W	48,471	0	73.3

LIMITATIONS

- The limitations of this work stem mainly from:
  - The assumption that population and number of competitors per postal code, suffice to make a business decision or start a business plan
  - Accuracy of the data provided by the sources:
    - Population 2016 figures
    - Coordinates accuracy depends on geopy
    - Competitors data depends on the accuracy and limitations of Foursquare API)

DATA SOURCES

Data Sources:

- Population Data: Link
- Postal Codes Coordinates: https://cocl.us/Geospatial_data
- Foursquare API Category 4bf58dd8d48988d110951735 (Salon/Barbershop)