Capstone Project - The Battle of Neighborhoods

Introduction

- Project to find best location to start a Yoga Studio
- Designing this project to help the entrepreneur to find the most suitable location in Toronto

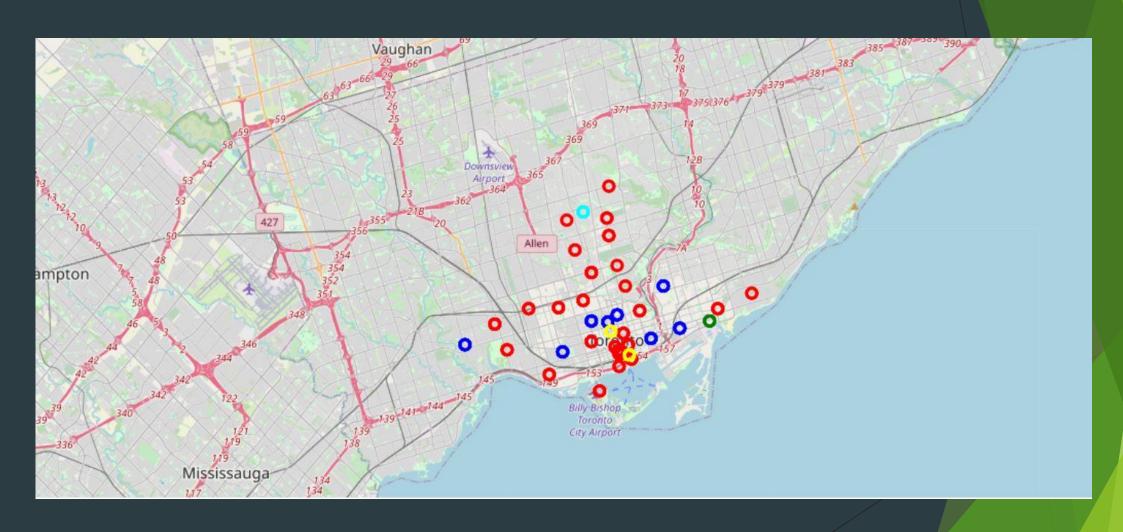
DATA Acquisition and cleaning

- List of neighborhoods in Toronto, Canada
- Latitude and Longitude of these neighborhoods
- Venue data related to existing Yoga Studios. This will help us find neighborhoods that are more suitable to open a Yoga Studio

Methodolgy

- The scrapping of Toronto neighborhoods via Wikipedia
- Getting Latitude and Longitude data of these neighborhoods via Geocoder package
- Using Foursquare API to get venue data related to these neighborhoods
- Performing the clustering method by using k-means clustering
- Clustered the neighborhoods in Toronto into 5 clusters based on their frequency

Results



Result (Cont'd)

- The results from k-means clustering show that we can categorize Toronto neighborhoods into 5 clusters based on how many Yoga Studio in each neighborhood
- Cluster 0: Neighborhoods with good no Yoga Studio.
- Cluster 1: Neighborhoods with more number of Yoga Studios.
- Cluster 2: Neighborhoods with less number of Yoga Studios.
- Cluster 3: Neighborhoods with less number of Yoga Studios.
- Cluster 4: Neighborhoods with less number of Yoga Studios.
- ► The results are visualized in the map with Cluster 0, Cluster 2, Cluster 3, Cluster 4.

Conclusion

- Most of the Yoga studios are present in cluster 1
- No yoga studio is present in cluster 0 making it best location to start. Places include Berczy Park,
 Brockton, Parkdale Village, Exhibition Place, Harbourfront East, Union Station, Toronto Islands.
- Fewer number is present in cluster 2,3 & 4. Places include North Toronto West, Lawrence Park, Stn A
 PO Boxes, Business reply mail Processing Centre. These locations can also be considered.

Thank you