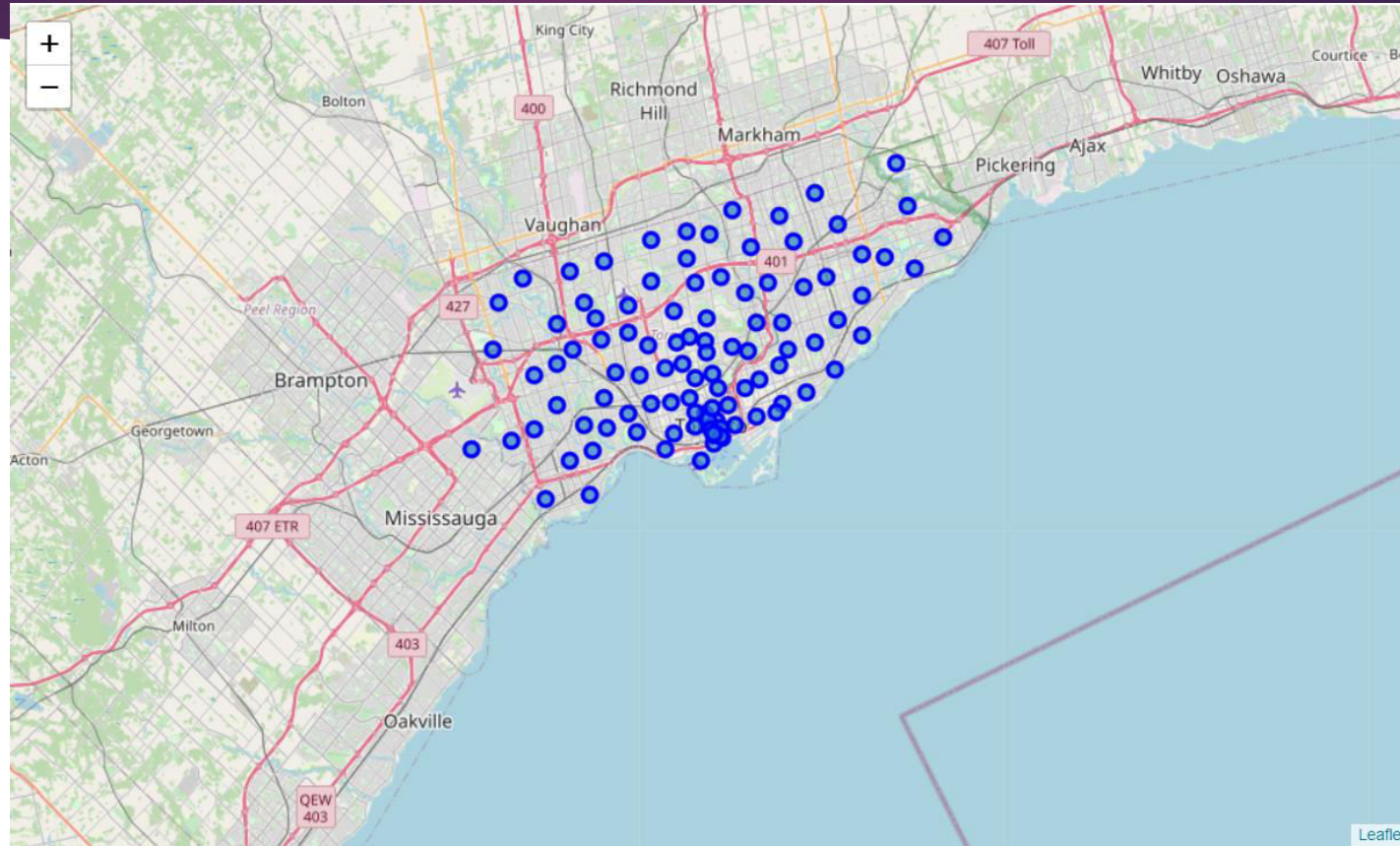# Toronto Clustering of Indian Restaurants

Introduction

For this capstone project, I have taken a scenario where a businessman wants to start a Indian restaurant in Toronto City. The business would like to find the best area to start this new restaurant such that it has the least competition from other Indian Restaurants in the neighbourhood. I design a project to help achieve this by finding places that are viable and places with have the most competition in the City of Toronto for Indian Restaurants.

Data Extraction and Cleaning

1. List of neighbourhoodsusing postcodes taken from
   https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M

2. Geographicdata for the respective neighbourhoodswhich is taken from
   https://cocl.us/Geospatial_data

3. Foursquare API venue search for Indian Restaurants in Toronto Region
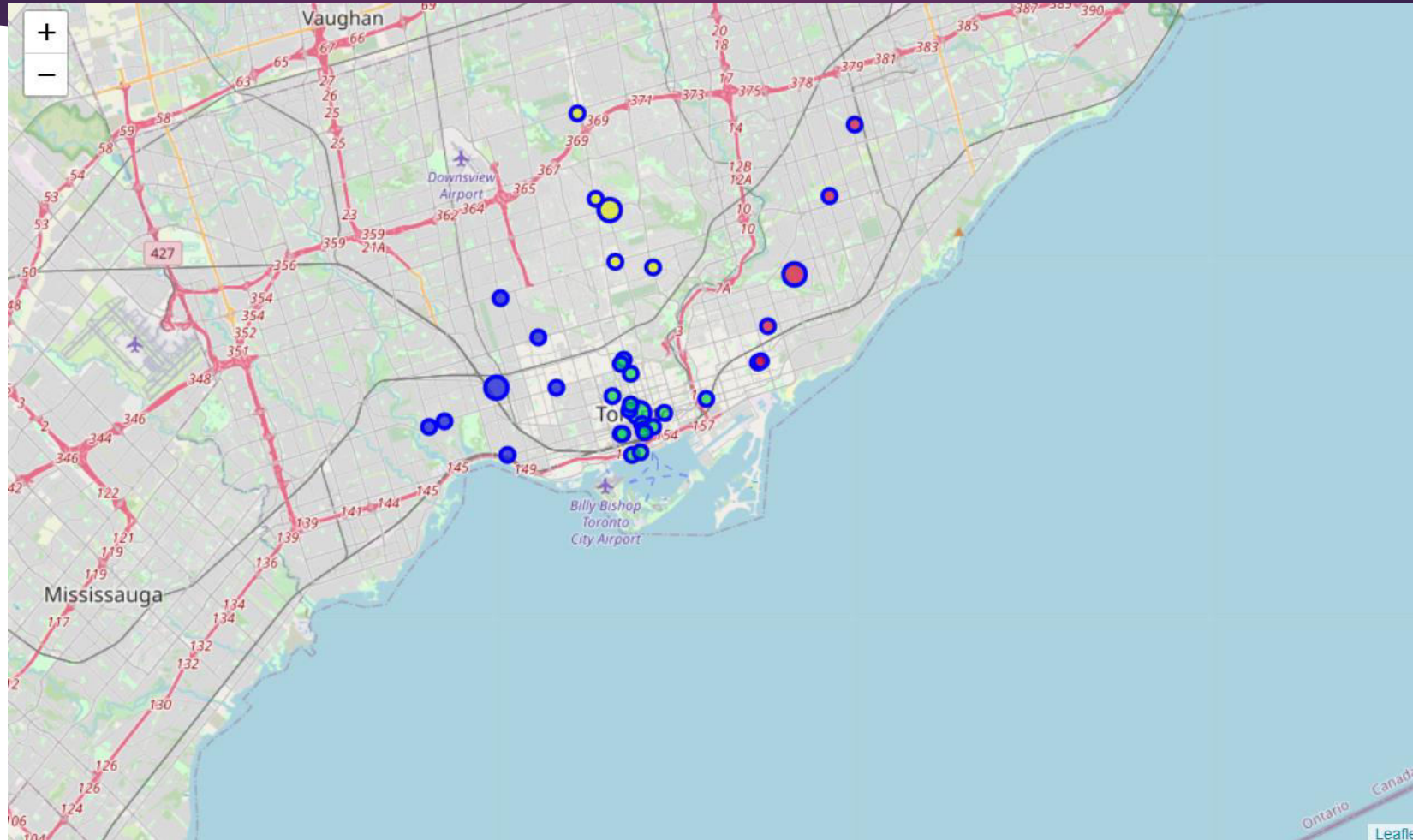
Toronto Neighbourhoods Clustering

K-means Clustering Elbow Curve
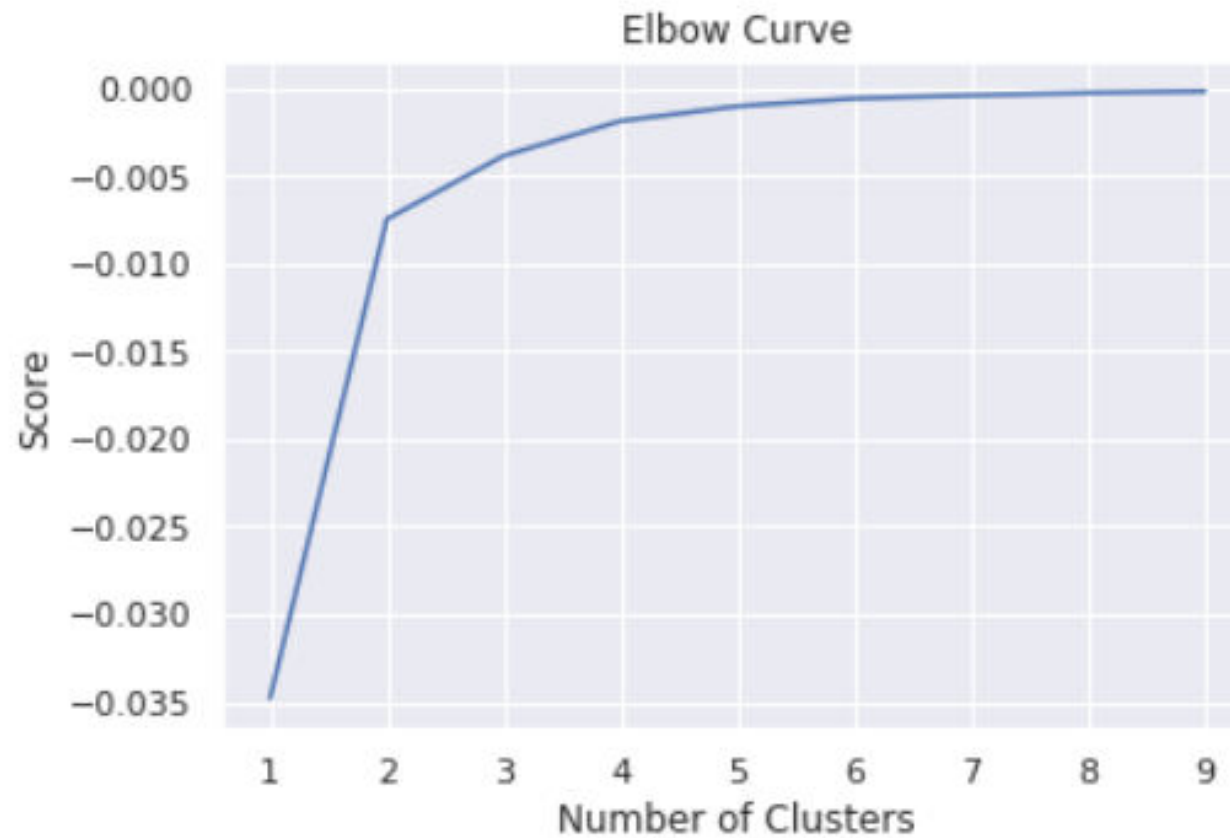
Indian Restaurants Clustered based on Neghboorhood

Conclusion and Future Directions

▶ Able to determine the ideal neighbourhoods to start an Indian restaurant taking only number of restaurants into consideration.

▶ Other factors such as population density, income of people, etc. can be used to improve the accuracy of the model.

▶ Clusters combine multiple neighbourhoods to form 1 cluster, so cannot identify the individual neighbourhood that's ideal.