Battle of the Neighborhoods

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Problem Statement

- Obesity is on the rise every year, and so is heart disease. More physical activity and better nutrition are needed to curve this problem.

- More gyms and other places that promote a physically active and healthy lifestyle are needed so they are easily accessible to everyone.
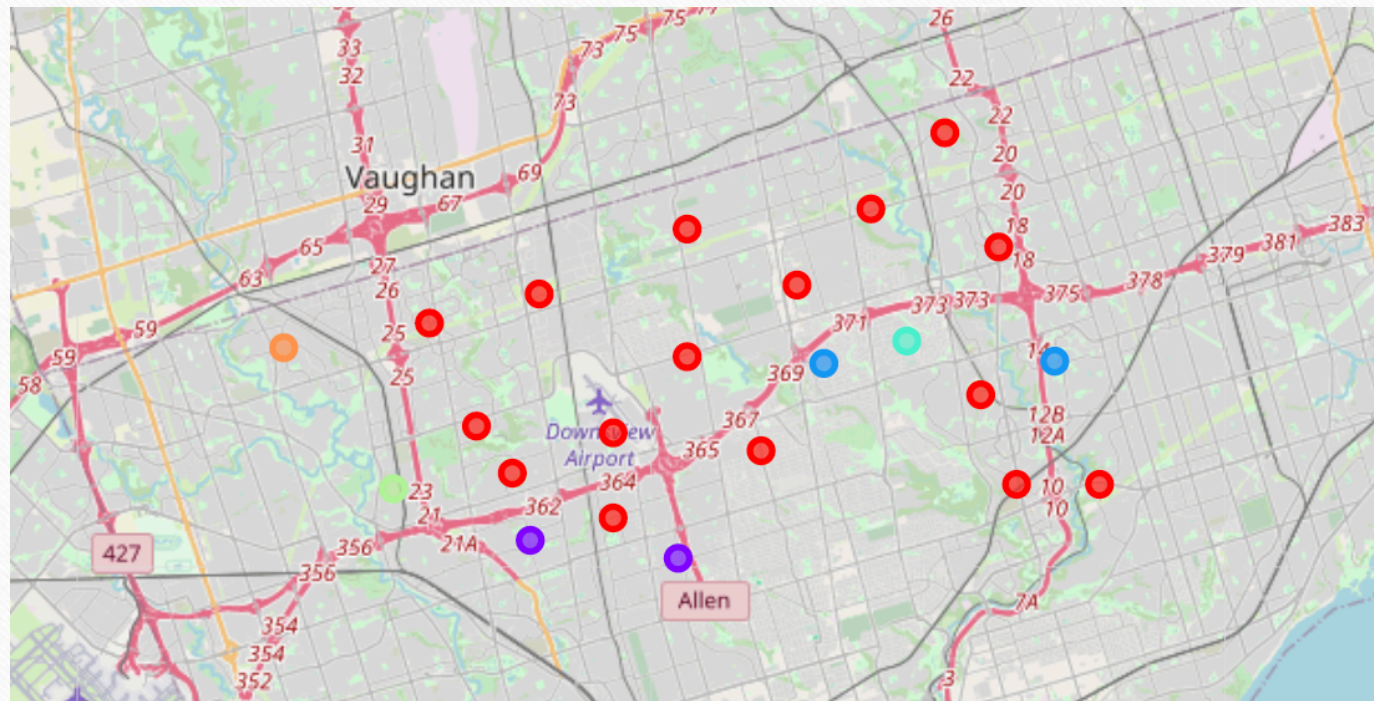
Objective

- Use the data collected from the Foursquare API and apply the unsupervised machine learning model , k-means clustering, in order to find neighborhoods in North York, Canada that lack places that would promote a healthier lifestyle.

Map of North York, Canada

Comparison of the Neighborhoods

- 5 clusters were formed as a result of the k-means clustering algorithim

- Clusters 0,1 and 2 all contained at least one venue that would be categorized as being a physically active venue in their top 10 venue list.

- Clusters 4 and 5 all contained more than one venue that would be categorized as being a physically active venue in their top 10 venue list.

- Cluster 3 contained at no venues that would be categorized as being a physically active venue in their top 10 venue list.

Conclusion

- Cluster 3 (seen in orange) has many venues, but within their top ten most common venues, there are no venues that promote physical activity. This would be an ideal location to open more gyms.