



Finding a gym business the best location in Toronto

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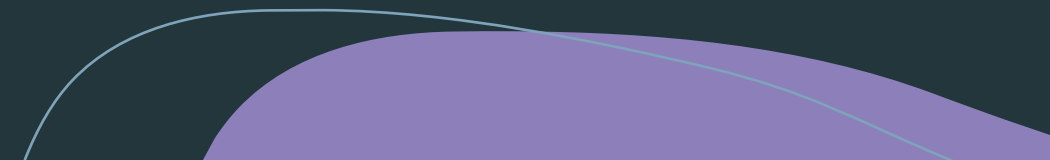
Introduction/Business Problem

- For this project a business is looking for a suitable location to put their new gym business. They are going to build the new gym in the Scarborough area but need to find which part of Scarborough they wish to put it in.



Data

Data collected on each area of Toronto from Wikipedia was:

- Post code
 - Neighbourhood
 - Borough
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Data

- The Foursquare API was used to collect more specific data about each area of the Toronto neighbourhoods

Methodology

Data Set-up

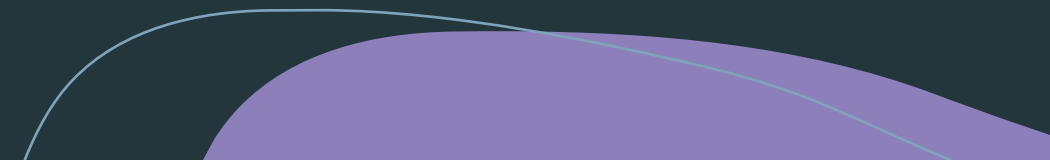
- Removing rows with null values
- Remove all rows with no assigned borough
- Merging data with the geo data of each area



Methodology

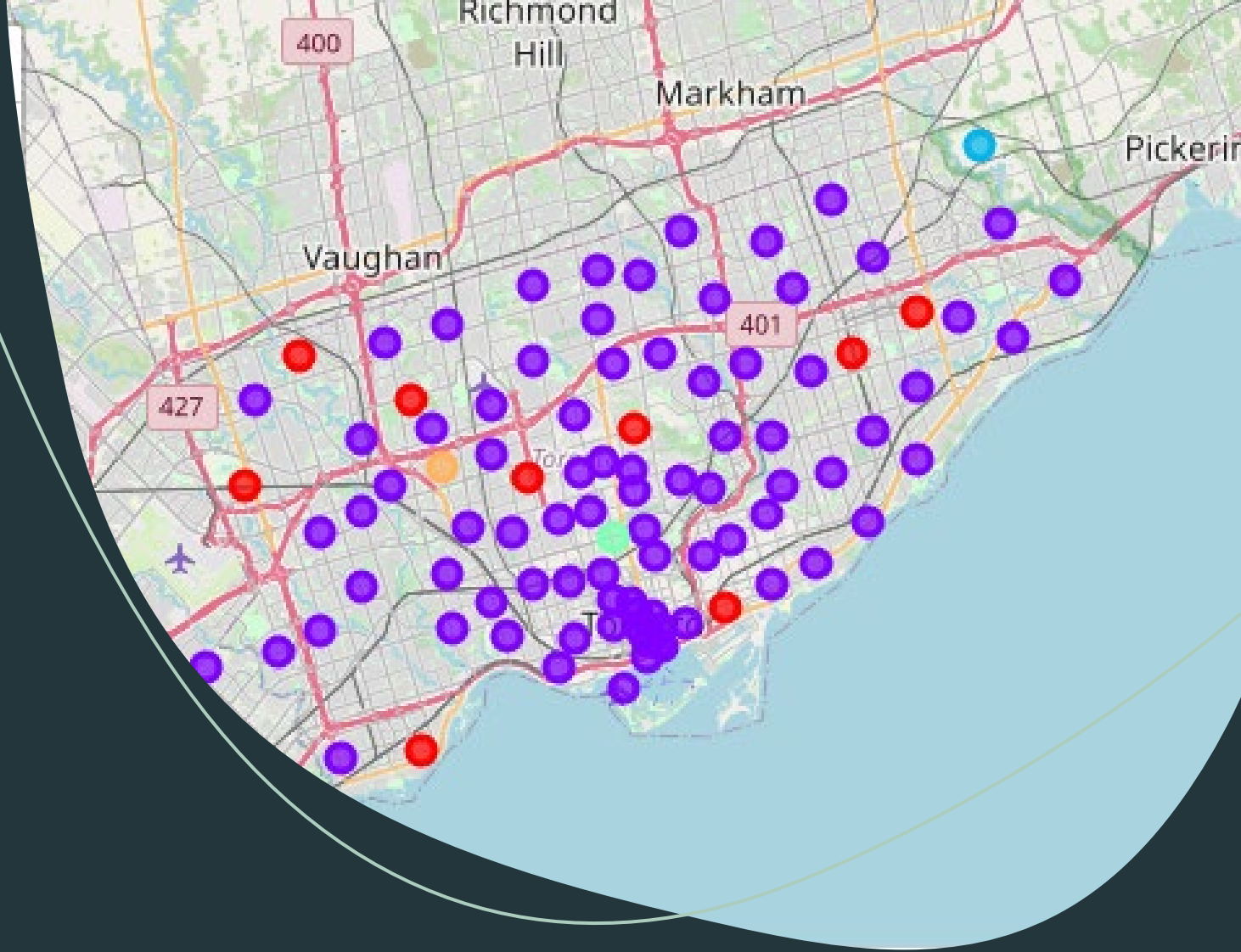
Exploratory Data Analysis

Libraries used such as:

- Pandas
 - Scikit-learn
 - Folium
 - matplotlib
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Methodology

Clustering using folium



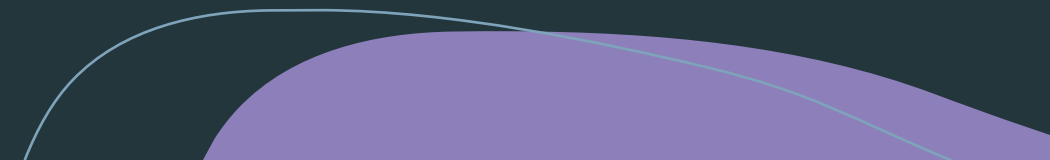
Methodology

Finding the best location meant removing areas that had high competition such as those with a high number of:

- Gyms
- Parks
- Fields
- Yoga Studios



Methodology

- The areas were then compared with their populations to see which had the largest potential customer base
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Results

Postal Code	Borough	Neighbourhood	Population
M1B	Scarborough	Malvern, Rouge	6704
M1W	Scarborough	Steeles West, L'Amoreaux West	5669
M1E	Scarborough	Guildwood, Morningside, West Hill	4992
M1G	Scarborough	Woburn	4850
M1S	Scarborough	Agincourt	4457
M1K	Scarborough	Kennedy Park, Ionview, East Birchmount Park	3980
M1C	Scarborough	Rouge Hill, Port Union, Highland Creek	3647
M1P	Scarborough	Dorset Park, Wexford Heights, Scarborough Town...	3203
M1T	Scarborough	Clarks Corners, Tam O'Shanter, Sullivan	2723
M1M	Scarborough	Cliffside, Cliffcrest, Scarborough Village West	2691
M1R	Scarborough	Wexford, Maryvale	2664
M1L	Scarborough	Golden Mile, Clairlea, Oakridge	2447
M1N	Scarborough	Birch Cliff, Cliffside West	1426
M1J	Scarborough	Scarborough Village	1279
M1H	Scarborough	Cedarbrae	644

Discussion

The recommendation of this research is that the best area to locate the a new gym in Scarborough is in the Malvern and Rouge as shown in the results as the area had the largest population of any area that had little competition and therefore the largest amount of potential customers.

Conclusion

In conclusion, while the research does give a good shortlist of the best areas to locate a new gym for the business, more research is needed to narrow down what the best location would be based on the businesses needs e.g. price range, size of location.