

# Moving to Melbourne

Client Report

# Introduction

- Australia, being an English speaking country, has become a popular place for young professionals in Canada to visit and work in recent years
- My client has engaged me to explore different neighbourhoods in Melbourne in anticipation of her upcoming move
- Her criteria for an ideal neighbourhood are a variety of yoga gyms, cafes, bars



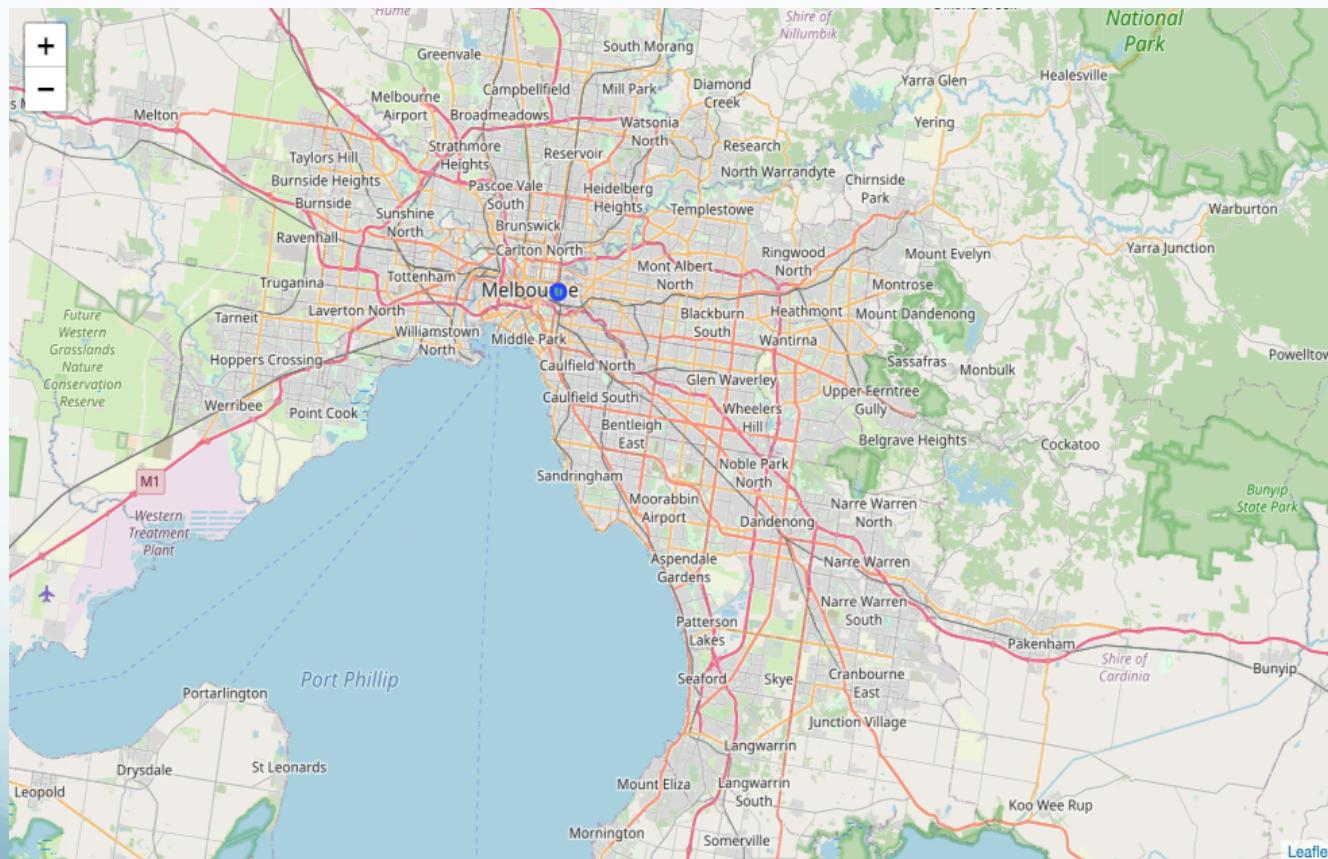
# Data

- GeoNames
  - In order to explore venues in Melbourne, we first have to identify all neighbourhoods along with their coordinates. For this, I used a website called GeoNames
- Foursquare
  - Once I have all the geographic information, I made call request to retrieve venue information from Foursquare



# Map of Melbourne

- Map of Melbourne extracted using Folium



# Methodology

- To analyze dataset, I extracted table from GeoNames using BeautifulSoup.
- I found that:
  - There are a total of 200 neighbourhoods
  - There are a total of 13 cities
  - Neighbourhoods in the same city are in close proximity to each other.

# Methodology

- Since neighbourhoods within the same city are in close proximity, we are selecting representation from each city so the results are not skewed
- One neighbourhood is selected at random from each city

Venue	Scores
Café	5
Bars/Pubs	5
Gyms	5
Restaurants	3
Grocery Stores	2
Others	0

# Methodology

- Neighbourhoods chosen are:
  - Melbourne City
  - Footscray
  - Melbourne North West
  - Preston
  - Hawthorn
  - Ringwood
  - Moorabbin
  - Ferntree Gully
  - Mulgrave
  - Dandenong
  - Frankston
  - Vic Country
  - Vic Far Country

# Methodology

- Using Foursquare API, we found the most popular venues within 500m of each neighbourhood
- Then, we ranked the venues by their popularity
- Sample results:

	Neighborhood	1st_Most_Common_Venue	2nd_Most_Common_Venue	3rd_Most_Common_Venue	4th_Most_Common_Venue	5th_Most_Common_Venue
0	Balwyn	Pharmacy	Café	Grocery Store	Japanese Restaurant	Gym / Fitness Center
1	Belmont	Chinese Restaurant	Grocery Store	Fish & Chips Shop	American Restaurant	Music Store
2	Blackburn	Café	Furniture / Home Store	Car Wash	Outdoor Supply Store	Park
3	Doncaster	Café	Department Store	American Restaurant	Clothing Store	Multiplex
4	Footscray	Vietnamese Restaurant	Bar	Pub	Pharmacy	Café
5	Frankston	Electronics Store	Sandwich Place	Grocery Store	Japanese Restaurant	Furniture / Home Store
6	Glenroy	Restaurant	Himalayan Restaurant	Furniture / Home Store	Dessert Shop	Korean BBQ Restaurant
7	Keysborough	Supermarket	Fast Food Restaurant	Gym	Pizza Place	Pharmacy
8	Melbourne	Café	Coffee Shop	Bar	Dessert Shop	Korean Restaurant
9	Portland	Restaurant	Hotel	Grocery Store	Supermarket	Movie Theater
10	Richmond	Café	Fast Food Restaurant	Sandwich Place	Japanese Restaurant	Gym
11	Tarneit	Discount Store	Supermarket	Arcade	Playground	Pizza Place

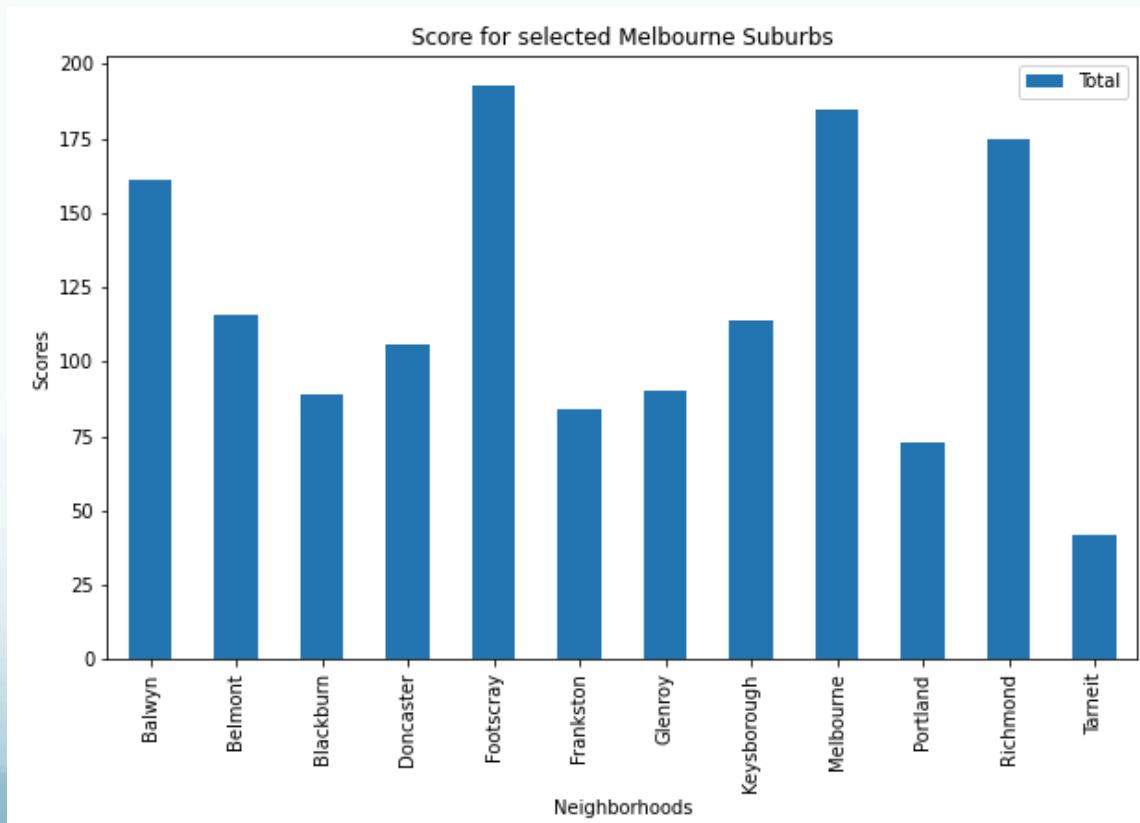
# Methodology

- To evaluate results against the client's preferences, a scoring system was created.
- Venues with higher popular rankings are given a higher weight. Ie: most common venue gets a weight of 10, least common gets a weight of 1
- Cafes, bars, gyms, restaurants and grocery store are given a higher score than others

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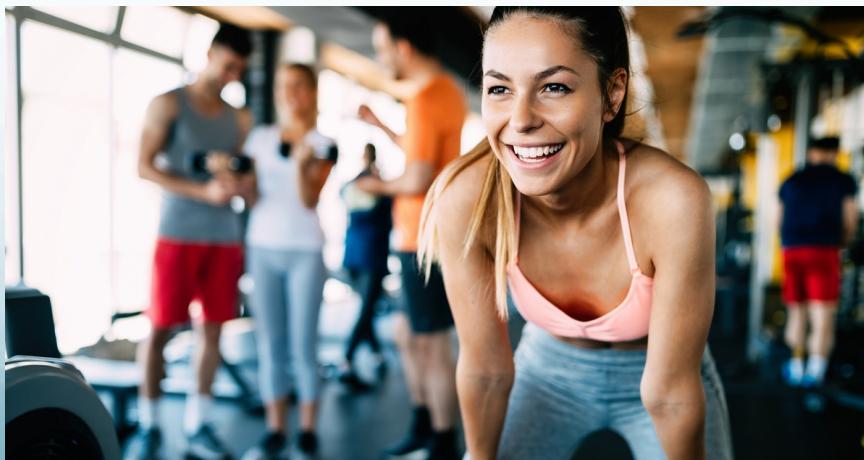
# Results

- Scores were tallied for each neighbourhood – ranges from 42 to 193



# Results

- Footscray has the highest score out of the 13 suburbs
- Melbourne, Richmond and Balwyn are following closely behind



# Recommendation

- We successfully narrowed down the selection from 13 to 4
- Since the four neighbourhoods are so close in score, it is recommended that the client explore each of them and make a decision after experiencing them first hand.

