

Peer-graded Assignment: Capstone Project - The Battle of Neighborhoods - REPORT

Cafes and Coffee Shops - Melbourne, Australia



Introduction

The purpose of this project will be to determine which inner-city suburbs of the city of Melbourne, Australia as the highest-rated coffee shops and cafes. The information may be useful for those who are considering moving to the city from interstate or abroad. The inner-city suburbs are: Carlton North, Docklands, East Melbourne, Flemington, Kensington, Melbourne CBD, St Kilda, North Melbourne, Parkville, Port Melbourne, Southbank, South Wharf, South Yarra, and West Melbourne.

Data

To solve this problem, the suburbs were chosen to represent 15 of the inner city postcodes. Some postcodes have more than one suburb, however, for the purposes of this project, only 1 suburb per postcode is used. The data for the suburbs was obtained from the following link: https://en.wikipedia.org/wiki/List_of_Melbourne_suburbs#City_of_Melbourne

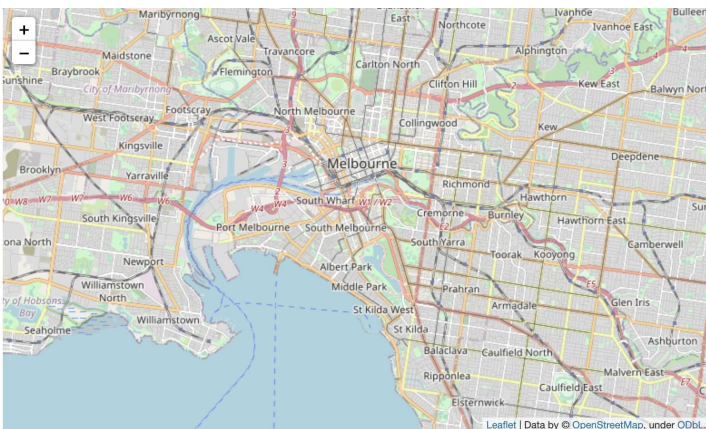
There was no need to scrape this data as the data set was small enough to be copied and pasted into the notebook.

Information for coffee shops and cafes (venues) was obtained using the Foursquare API

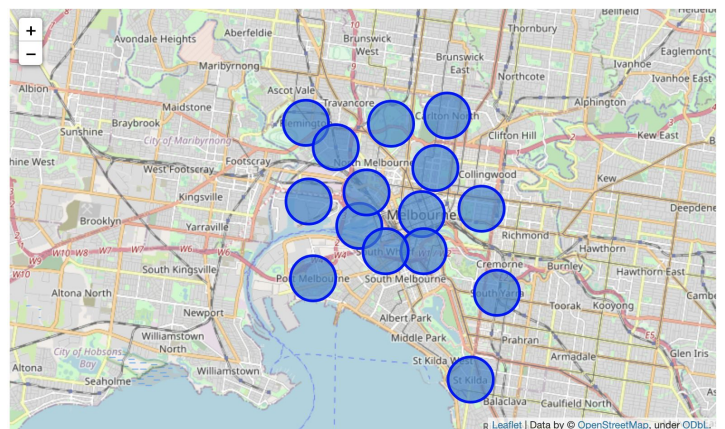
Methodology

In this section, we will be getting the specific details of the venues in each suburb.

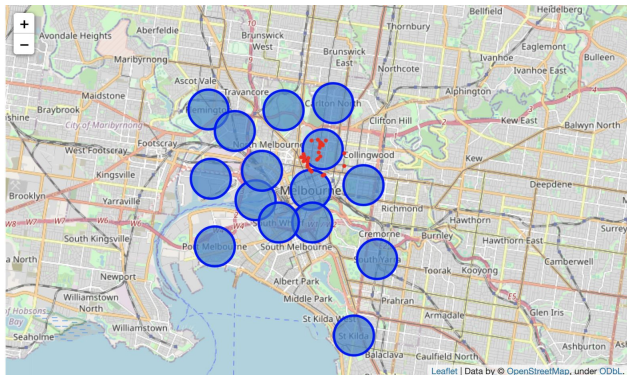
1. Creating a map and visualizing the suburbs locations
2. Getting a list of all venues in each suburb
3. Getting the ratings of each suburb
4. Getting the average rating of each suburb
5. Displaying the results on the map



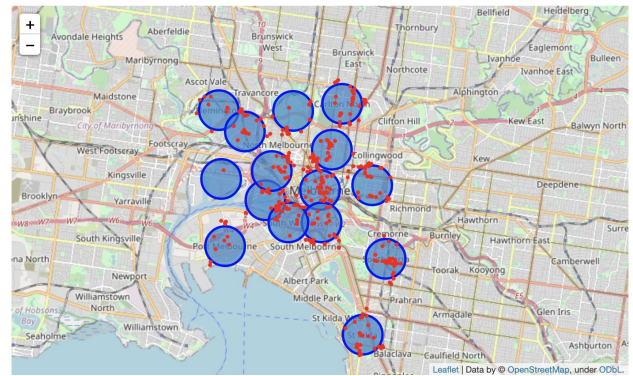
Empty map of Melbourne, Australia



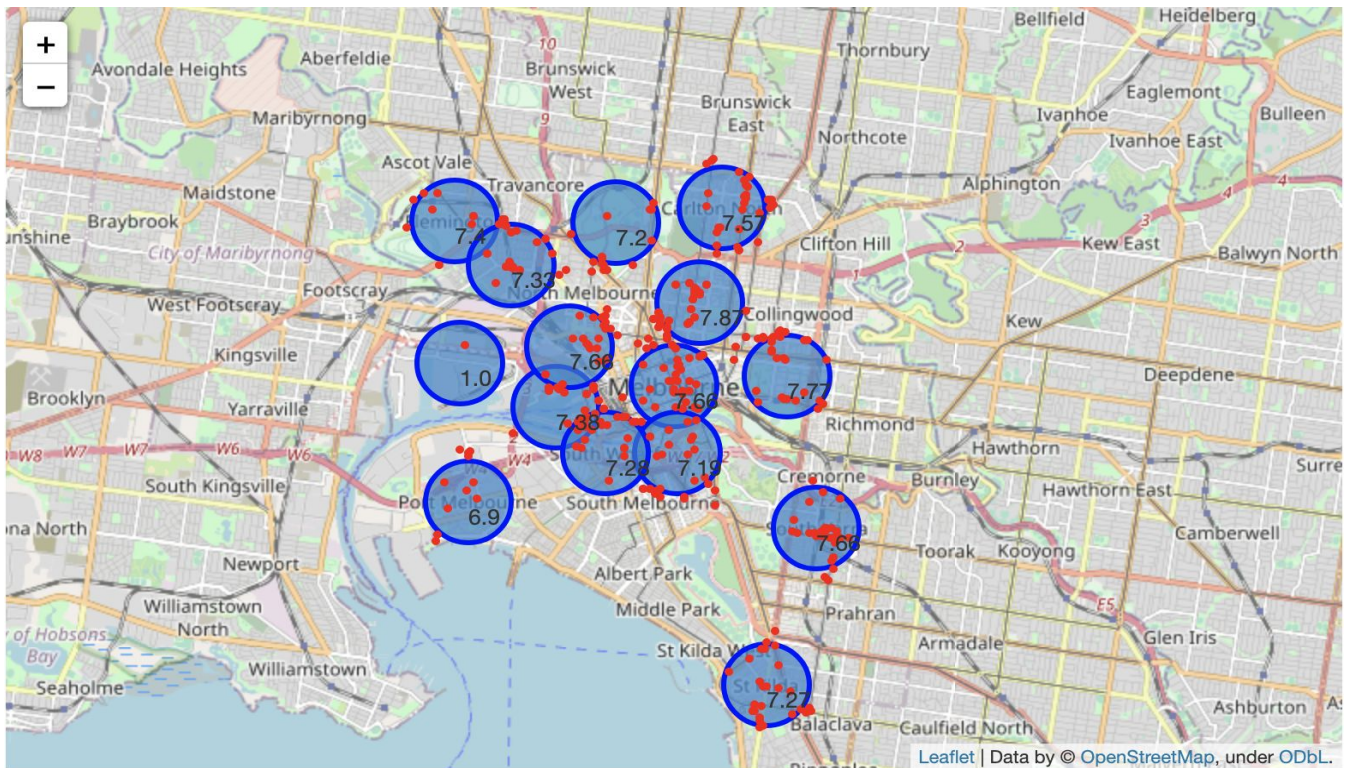
Suburbs added to map



All venues for 1 suburb added to map



All venues added for each suburb



The final map, displaying the average venue ratings for the suburbs.

Results and Discussion

Suburb	Latitude	Longitude	Suburb Averages
Carlton	-37.800423	144.968434	7.87
East Melbourne	-37.812498	144.985885	7.77
Melbourne	-37.814218	144.963161	7.66
North Melbourne	-37.807609	144.942351	7.66
South Yarra	-37.837770	144.991854	7.66
Carlton North	-37.784559	144.972855	7.57
Flemington	-37.786759	144.919367	7.40
Docklands	-37.817542	144.939492	7.38
Kensington	-37.793938	144.930565	7.33
South Wharf	-37.825328	144.949343	7.28
St Kilda	-37.863826	144.981637	7.27
Parkville	-37.787115	144.951553	7.20
Southbank	-37.825362	144.964020	7.19
Port Melbourne	-37.833361	144.921920	6.90
West Melbourne	-37.810448	144.920430	1.00

We've learned that the suburb with the highest average rated coffee shops and cafes in the inner city suburbs of Melbourne is the suburb of Carlton, followed by East Melbourne, and Melbourne CBD, and would recommend choosing from one of these three suburbs to live as a newcomer to the city of Melbourne.

Conclusion

There is a lot that can be done to improve these results. First, geospatial data could have been used to give a more accurate representation of the suburbs. In future versions of this notebook, I would consider using a choropleth map to better visualise the results. I would also improve the location coordinates of the suburbs so that it would not be placed in more urban areas, and not over a zoo or port where there are few venues to analyse.