

Capstone Project – The Battle of Neighborhood

Introduction

Melbourne and Sydney are two biggest cities in Australia. I travelled to these cities many times and a thought comes to my mind ‘which city will people choose if they want to live?’. I think venues might be a reason for people who choose the city and it also shows two cities’ competition. As a result I choose to explore the two cities for the people who wants to live in the future. The questions is “number of amenities in Melbourne and Sydney”.

Data selection

1. I will use “foursquare location data” as a data source in order to discover the various venues in these cities.
“foursquare location data” is a location based app which help user to find the best restaurant or shops in their location. I will use the following request to explore venues <https://api.fourquare.com/v2/venues/explore/...>.

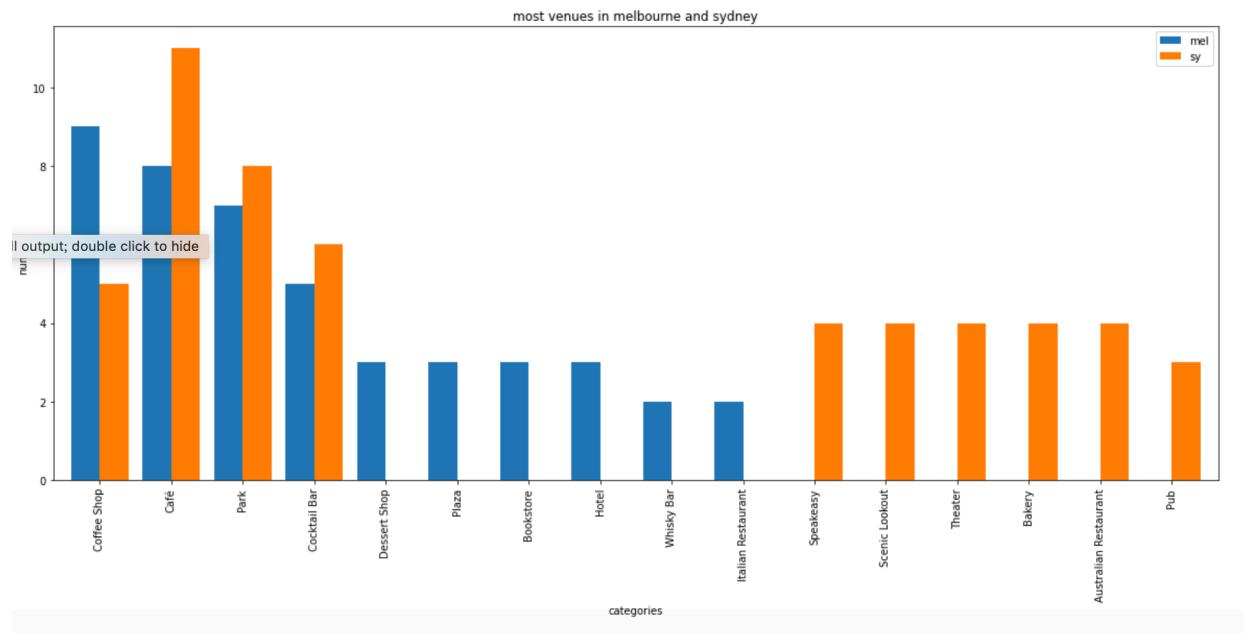
The result is in the format ‘json’:

Field	description
Id	A unique identification
name	Name of venue
location	Latitude and longitude
categories	Categories applies to this venue

2. For the location of Melbourne and Sydney, I will use Geopy. It can return the latitude and longitude of each suburb in the city.

Methodology

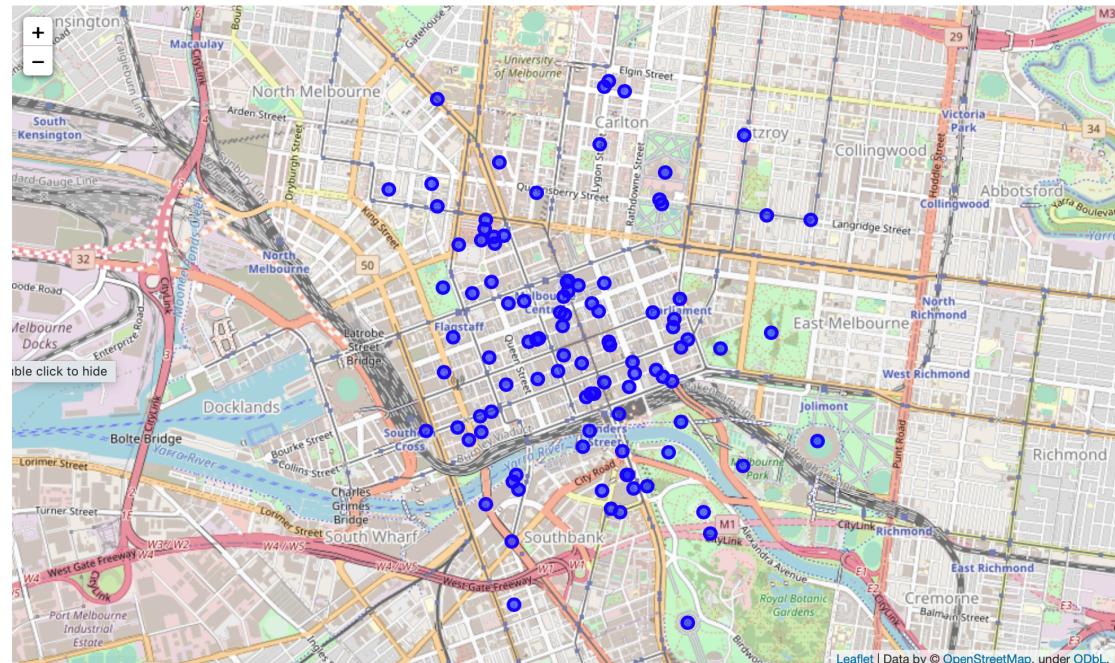
I get the data from foursquare which describe venues in Melbourne and Sydney. Then I plot most common venues categories in these cities and get the plot below.



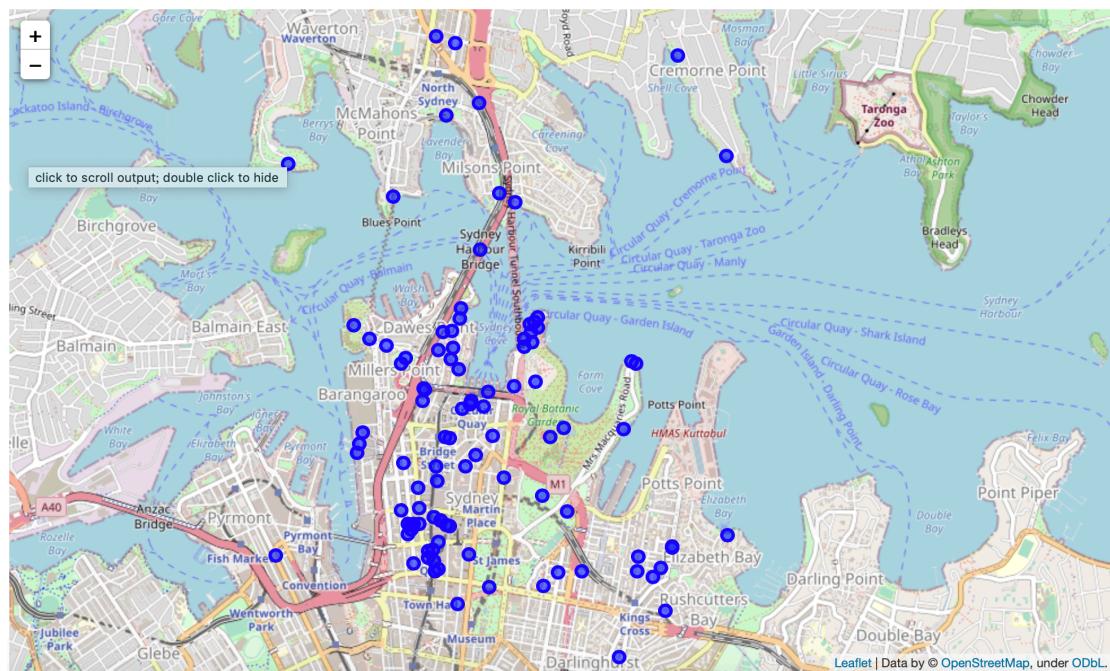
We can clearly see that they can common venues in first four venues. And most of the rest are related to food categories.

Results

Melbourne



Sydney:



Discussion

We can see avenue in Sydney are mostly close to sea while in Melbourne they are close to mainland. The density in Sydney is higher than Melbourne.

Conclusion

We can conclude that Sydney has more categories and numbers of venues than Melbourne and they are close to sea. If you like sea and go to venues everyday, Sydney might be a better place to live. If you like land and food then Melbourne is a good choice.