

PerfectDateSpot

Introduction & Business Plan

When people are dating it is always hard to find the perfect spot, which I consider here as:

- being similarly easy to reach for both,
- offers the possibility to go for a walk or see something without entrance fees,
- and later on go for a drink or coffee close-by.

The idea can be interesting for people who are new in a city, who don't have any creative ideas of their own or just want to explore new places together.

Data

The first information needed is the location (longitude and latitude) of the two daters, which could be retrieved from both daters smart phones easily (for this project they will be generated randomly). From this a mean value can be easily derived.

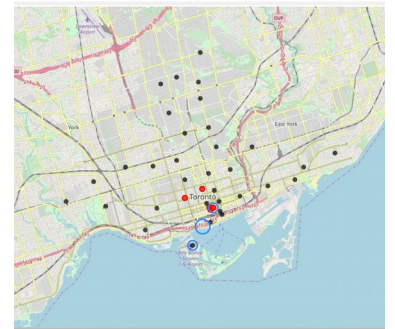
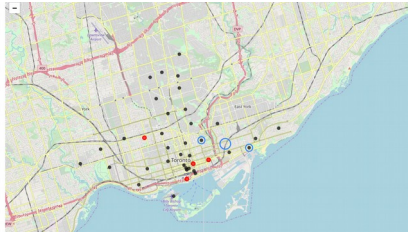
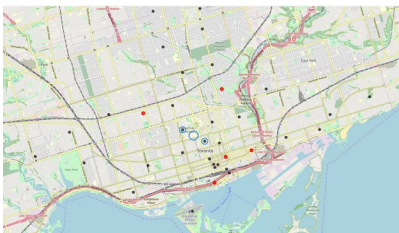
For all neighborhoods venues close by can be retrieved (e.g. parks, sights,...) as well as possible later locations for drinks (e.g. cafes). Additionally the distance between the mean location of the daters to the neighborhood can be calculated. With machine learning the best combinations can be calculated.

Method

After preparing the data with e.g. normalization the neighborhoods will be clustered by a k-means clustering. Values used for clustering will be vicinity to mean location, number of cafes and parks in the venues close-by. Then the "best" cluster is selected by calculating a average of vicinity, number of cafes and parks.

Results

The result is a map with the best cluster marked in a different color (red) as well as both persons location and the mean location (blue).



Discussion

The algorithm only accounts for the exact given venue type e.g. only cafes are selected and no coffee shops. Also the weight of the different parameters (vicinity, number of cafes and parks) depends on the users and is not adapted. Cafes and vicinity are good parameters, however the selection happens mainly because of parks existing in the area.

Conclusion

As one would assume mostly areas in the city center are selected because of a higher number of venues and a mean location that is mostly in the city center.