

The background features abstract, overlapping green geometric shapes, primarily triangles and polygons, in various shades of green, creating a modern and dynamic visual effect.

HUMAN CENTERED CITIES

A Look at Vienna And Singapore

The Cities

- Both cities are on the list of the [World's Healthiest Cities](#)
- Their structures are to be compared to ascertain what elements of cities enhance human health
- City planners could benefit from information about what constitutes a healthy city

Vienna

- ▶ Located in Austria, Central Europe
- ▶ Population 1,888,776
- ▶ Number of Districts : 23

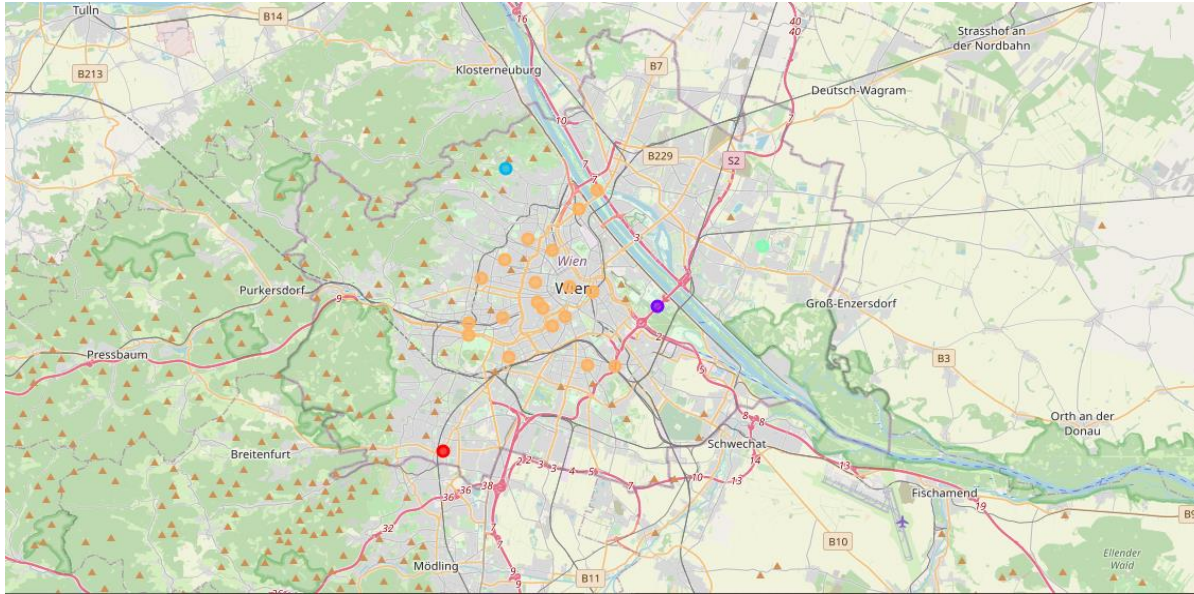
Singapore

- ▶ Located in Singapore, Southeast Asia
- ▶ Population: 5,703,600
- ▶ Number of Districts: 55

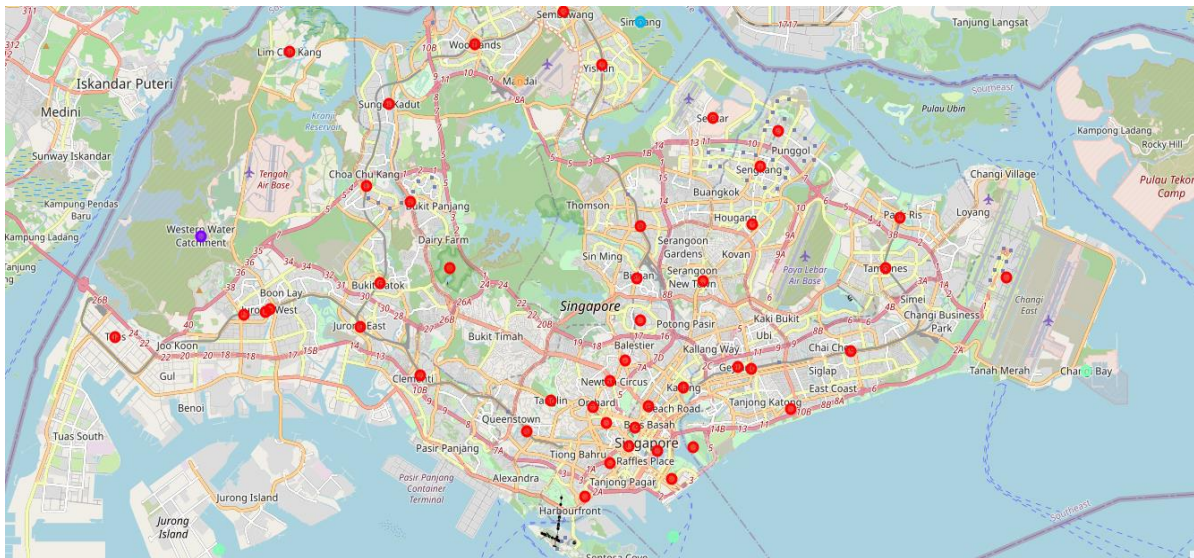
Data Acquisition and Cleaning

- ▶ Vienna Location data scraped Data from [Austria's Open Data](#) site
- ▶ Singapore Location data scraped Data from [Singapore's Planning Areas Wiki](#)
- ▶ Unused columns and rows were dropped
- ▶ Both Location data frames geocoded to retrieve coordinates
- ▶ Venues and venue categories retrieved with Foursquare API
- ▶ K Means Clustering to group districts into clusters based on the similarities of their venues

Clustered Map



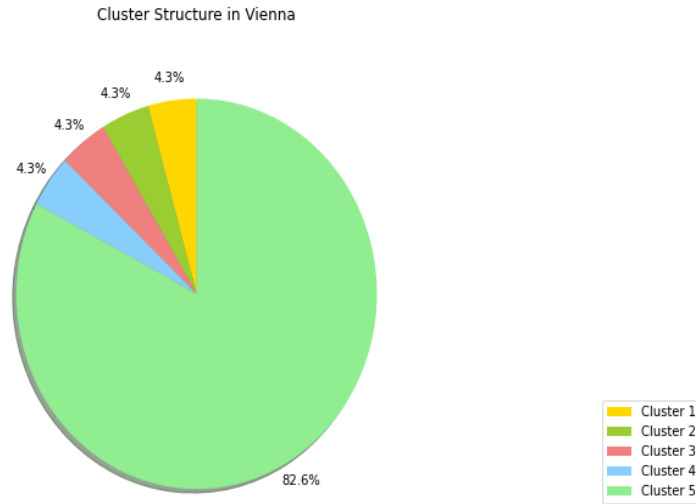
- Clustering shows that both cities have the majority of districts in one cluster, Cluster 5 for Vienna (top) and cluster 1 for Singapore (bottom)



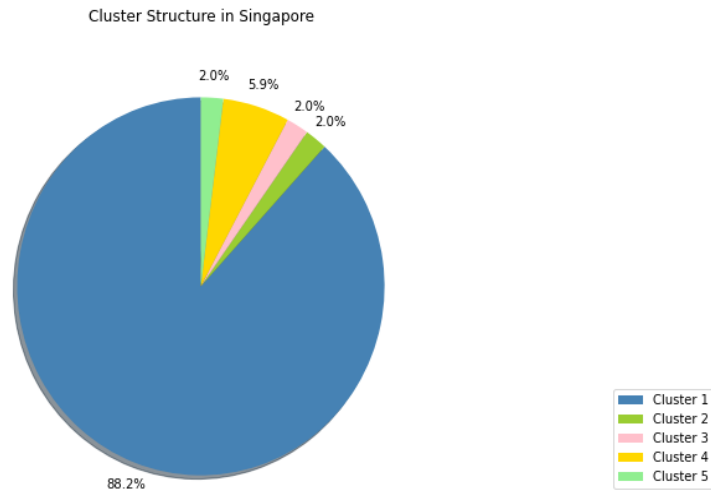
- In both cities, the districts not in the majority cluster lie close to the outer boundaries

Cluster Structure

V_Districts



S_Areas



- Cluster structure very similar in both cities
- Largest Cluster makes up ~83% in Vienna and ~88% in Singapore

Most Common Places

Vienna

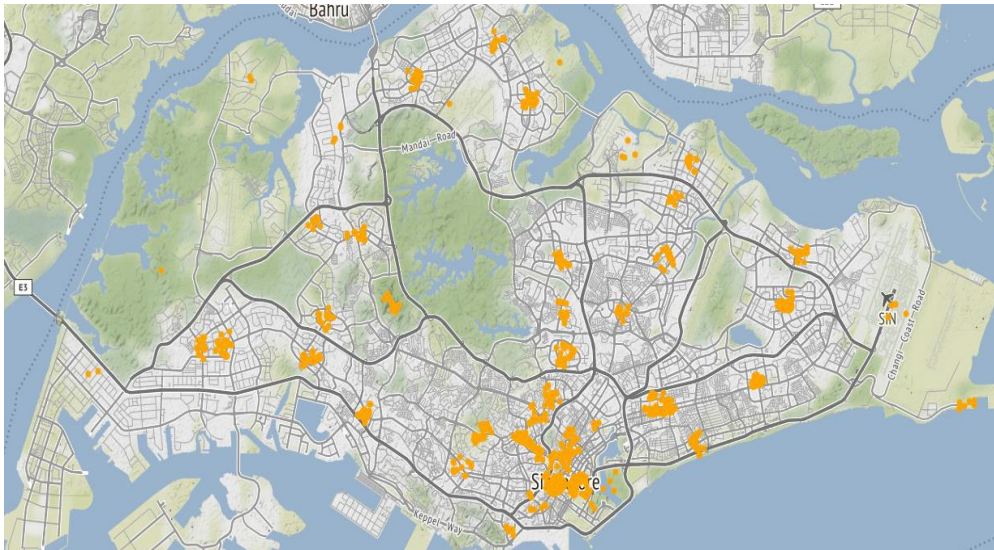
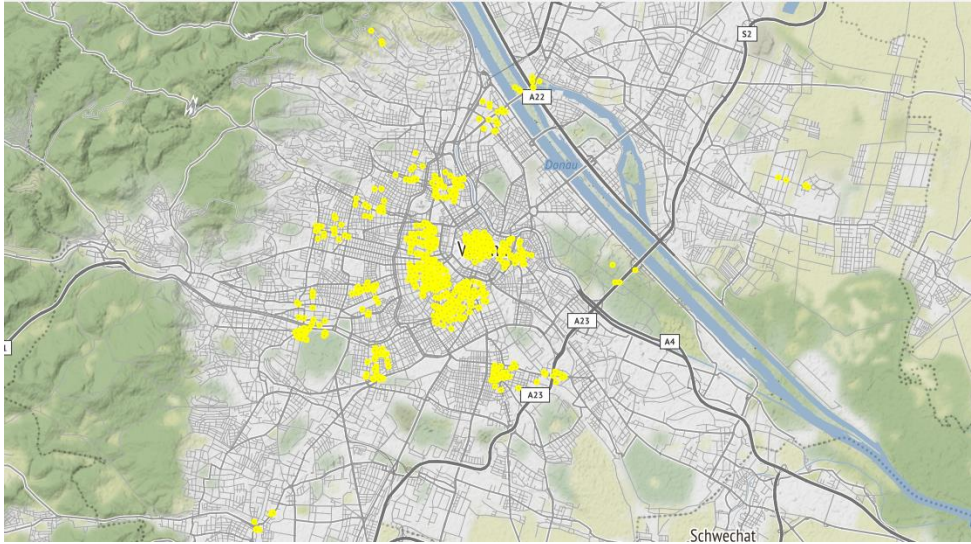


- Indigenous Places of leisure abound
- Parks are found in both
- No gyms or other "wellness" venues in most common places

Singapore



Greenspace



- Both are on the list of the Cities with the most Greenspace
- Interaction of venues with greenspace especially evident on Singapore map (bottom)

Conclusion

- ▶ Planning healthy cities requires a substantial use of greenspace
- ▶ Human centeredness lies more designing the city around a lifestyle that enhances life and not so much in providing wellness centers
- ▶ Promoting local cuisine might be a decisive factor in overall health