Battle of Neighbourhoods in Munich

Data Description

The data that will be required will be a combination of .csv, .xlsx and .json files that have been prepared for the purposes of the analysis from multiple sources:

- 1. list of neighbourhoods in Munich from wikipedia.org in combination with the geographical location of the neighbourhoods from https://geohack.toolforge.org/
- 2. zip codes were collected via https://www.muenchen.de/. Munich has for every neighbourhood more than one zip code, so to make things easier only one zip code for every neighbourhood was chosen.

	Postal Code	Latitude	Longitude
Neighbourhood			
Altstadt-Lehel	80331	48.136111	11.572222
$Ludwigs vor stadt \hbox{-} Is arvor stadt$	80335	48.127222	11.564722
Maxvorstadt	80333	48.150000	11.569444
Schwabing-West	80809	48.161111	11.568889
Au-Haidhausen	81543	48.131944	11.588889

- 3. the geographical data of the neighbourhood borders via the AIR'B&B data base
- 4. demographic information, e.g. population and density from https://www.opengov-muenchen.de/

	Population	Area	Density	Percentage	
Neighbourhood					
Altstadt-Lehel	20422	314.57	65	1.39	
Ludwigsvorstadt-Isarvorstadt	50620	440.14	115	3.46	
Maxvorstadt	51642	429.79	120	3.53	
Schwabing-West	65892	436.30	151	4.50	
Au-Haidhausen	59752	421.96	142	4.08	

5. venue data pertaining to Bavarian restaurants via Foursquare API. The venue data in combination with population data will help find which neighbourhood is best suitable to open a traditional Bavarian restaurant.

	Neighbourhood	Neighbourhood Latitude	Neighbourhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
0	Altstadt-Lehel	48.136111	11.572222	Asamkirche (St. Johann Nepomuk)	48.135053	11.569746	Church
1	Altstadt-Lehel	48.136111	11.572222	Kustermann	48.136242	11.574897	Department Store
2	Altstadt-Lehel	48.136111	11.572222	Galeria Gourmet	48.137432	11.573217	Gourmet Shop
3	Altstadt-Lehel	48.136111	11.572222	Hirmer	48.138023	11.572046	Men's Store
4	Altstadt-Lehel	48.136111	11.572222	La Burrita	48.136143	11.574489	Burrito Place

Afterwards the location data got merged with the population data for further analysis.

	Population	Area	Density	Percentage	Postal Code	Latitude	Longitude
Neighbourhood							
Altstadt-Lehel	20422	314.57	65	1.39	80331	48.136111	11.572222
Ludwigsvorstadt-Isarvorstadt	50620	440.14	115	3.46	80335	48.127222	11.564722
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Schwabing-West	65892	436.30	151	4.50	80809	48.161111	11.568889
Au-Haidhausen	59752	421.96	142	4.08	81543	48.131944	11.588889
Sendling	39953	393.87	101	2.73	80336	48.121389	11.541389
Sendling-Westpark	55405	781.45	71	3.78	81377	48.122222	11.531944
Schwanthalerhoehe	29663	207.02	143	2.02	80339	48.138900	11.541700
Neuhausen-Nymphenburg	95906	1291.45	74	6.55	80634	48.156944	11.516667
Moosach	51537	1109.36	46	3.52	80997	48.183333	11.516667
Milbertshofen-Am Hart	73617	1341.64	55	5.03	80937	48.198333	11.576389
Schwabing-Freimann	69676	2567.22	27	4.76	80939	48.180556	11.602778
Bogenhausen	82138	2370.97	35	5.61	81675	48.148056	11.616667
Berg am Laim	43068	631.46	68	2.94	81671	48.122222	11.627778
Trudering-Riem	67009	2245.05	30	4.57	81735	48.116667	11.658333
Ramersdorf-Perlach	108244	1989.50	54	7.39	81739	48.102800	11.625000
Obergiesing	51499	572.04	90	3.52	81547	48.111111	11.594444
Untergiesing-Harlaching	51937	805.67	64	3.55	81545	48.092222	11.560556
That kirchen-Obersendling-Forstenried-Fuerstenried-Solln	90790	1776.31	51	6.20	81477	48.089000	11.519000
Hadern	48945	922.37	53	3.34	80689	48.110556	11.465278
Pasing-Obermenzing	70783	1649.78	43	4.83	80687	48.145800	11.459700
Aubing-Lochhausen-Langwied	42305	3406.02	12	2.89	81243	48.158333	11.419444
Allach-Untermenzing	30737	1545.17	20	2.10	80995	48.200000	11.452778
Feldmoching-Hasenbergl	59391	2893.78	21	4.05	80933	48.211100	11.541700
Laim	54030	528.59	102	3.69	80686	48.140278	11.497222

All data, except the json File, were loaded into Pandas dataframes as shown above.