
Where to live in Stuttgart?

Introduction

Stuttgart is the capital and largest city of the German state of Baden-Württemberg. Its urban area has a population of 634,830, making it the sixth largest city in Germany. 2.8 million people live in the city's administrative region and 5.3 million people in its metropolitan area, making it the fourth largest metropolitan area in Germany [1]. People used to live happy in this city, as depicted by the Figure 1.



Figure 1. People happy in Stuttgart

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is the virus strain that causes coronavirus disease 2019 (COVID-19), a respiratory illness. It is colloquially known as the coronavirus. It is contagious in humans, and the World Health Organization (WHO) has designated the ongoing pandemic of COVID-19 a Public Health Emergency of International Concern [1].

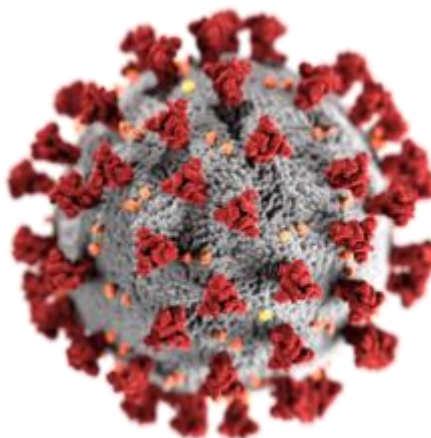


Figure 2. Photo of a SARS-CoV-2 virion (not at scale)

Now because of the virus, the restaurants or other recreation places are closed; the workplaces are empty because people are doing home office. In the end, nowadays, it is best to live in a place that offers gardens/parks as well as abundant medical centers rather than jobs and activities. This report will answer the question where it is the best place to live in Stuttgart. The methodology can be applied to other cities of your choice.

The Data

Data are mainly coming from two sources.

1. The first data are locations. Stuttgart is partitioned into neighborhoods. These data are freely available on the Internet [2], in csv form for example.

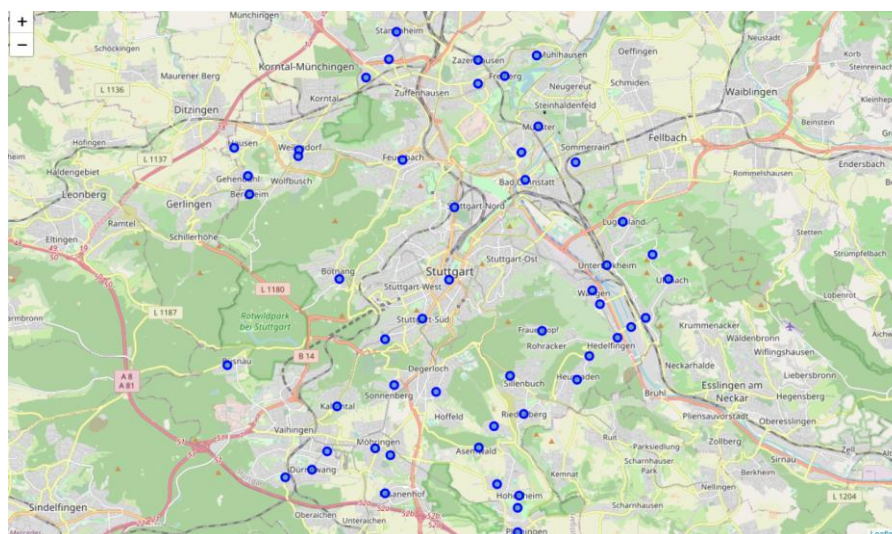


Figure 3. Neighborhoods in Stuttgart

2. Most of the data will be acquired with the FourSquare API [1]. At each location previously defined, we will gather many data. For example, we can find all food places in each neighborhood:

Table 1. Food places in Stuttgart

Neighborhood	Afghan Restaurant	African Restaurant	American Restaurant	Asian Restaurant	BBQ Joint	Bakery	Bar	Beer Garden	Bistro	...
0 Asemwald	0	0	0	0	0	0	0	0	0	...
1 Bad Cannstatt	0	0	0	0	0	2	0	0	0	...
2 Bergheim	0	0	0	0	1	1	0	0	0	...
3 Birkach	0	0	0	0	0	0	0	0	0	...
4 Botnang	0	0	0	1	0	1	0	0	0	...

Successive API calls will allow us to gather much information about each neighborhood concerning the work places, the transportation system, the food places, the outdoor possibilities and the medical system.

References

[1] Wikipedia

[2] <https://raw.githubusercontent.com/zauberware/postal-codes-json-xml-csv/master/data/DE/zipcodes.de.csv>

[3] foursquare.com