

# Capstone Project

**Kebab Connection**

# A life-long dream is about to come true

This has to be your best business idea yet: You're going to get rich by opening a kebab restaurant in Berlin. People are seemingly always drunk here, so how hard can it be?

Your plan:

1. Find a neighborhood in Berlin that has **lots of bars**
2. Is somewhat **affordable** to live in
3. Has no or **barely any kebab restaurants**
4. Do it all **without leaving the apartment**

# Data used for analysis comes from different sources

Data	Used for	Source
A map of Berlin	Hanging on your wall and putting cool pins in	OpenStreetMap
A list of Berlin neighborhoods	Figuring out what neighborhoods there are in the first place	Wikipedia
Rent prices for Berlin	Where can you live off of 200€ a month? Anywhere? Oh God.	Statista
Location of all bars in Berlin	Where do people get drunk? Can I get it on this?	Foursquare
Location and maybe ratings of all kebab restaurants in Berlin	Is someone already feeding people kebab?	Foursquare

# Berlin has 96 neighborhoods in 12 boroughs

- List of neighborhoods scraped from Wikipedia
- Used Google geocoder API to get the coordinates for each one

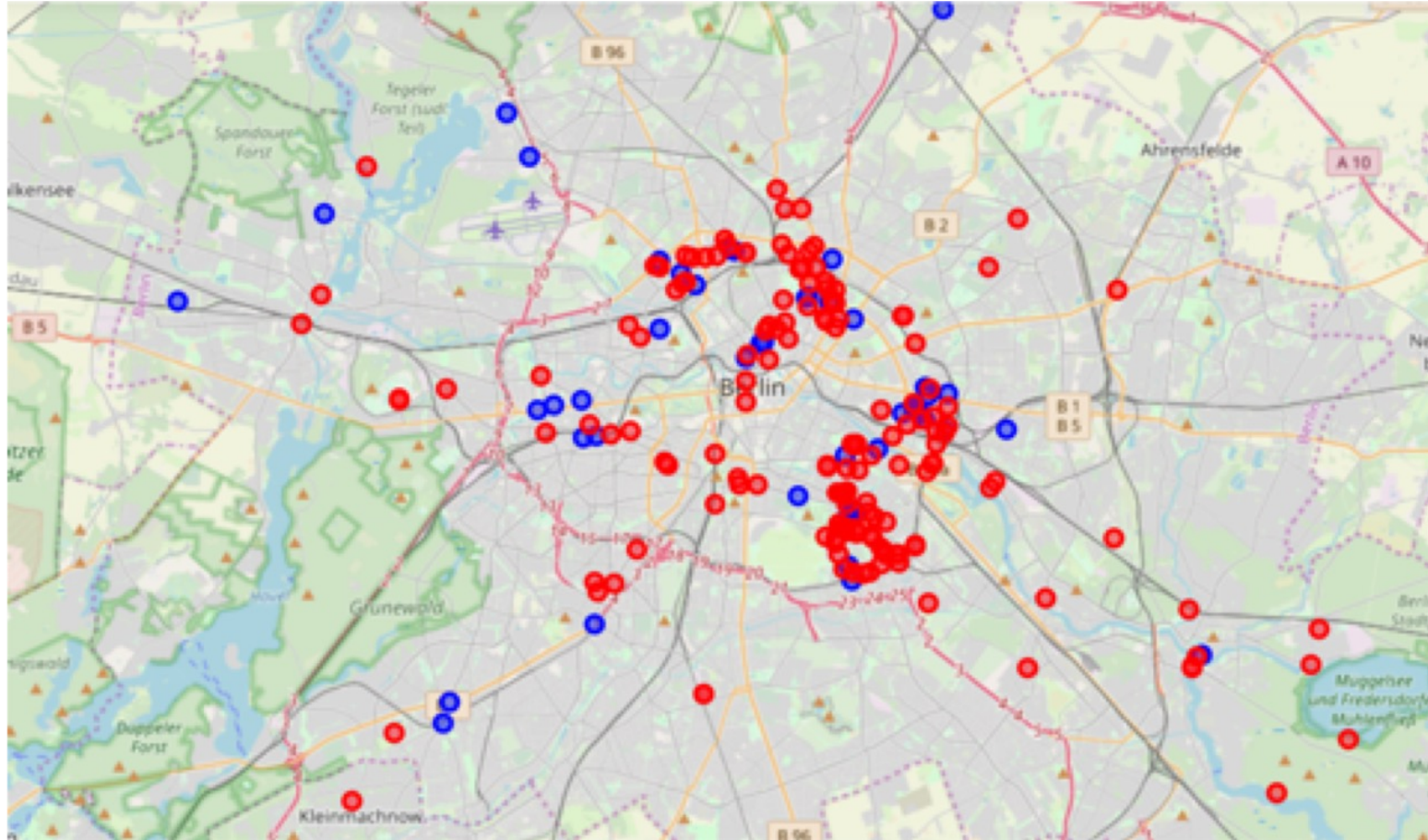


# Include rent prices for the neighborhoods

	Neighborhood	Borough	Latitude	Longitude	Rent
0	Mitte	Mitte	52.519444	13.406667	12.50
1	Moabit	Mitte	52.530783	13.347176	12.50
2	Hansaviertel	Mitte	52.521312	13.343322	12.50
3	Tiergarten	Mitte	52.514534	13.350101	12.50
4	Wedding	Mitte	52.550483	13.351984	12.50
5	Gesundbrunnen	Mitte	52.552345	13.381467	12.50
6	Friedrichshain	Friedrichshain-Kreuzberg	52.515824	13.453989	12.99
7	Kreuzberg	Friedrichshain-Kreuzberg	52.498344	13.406579	12.99
8	Prenzlauer Berg	Pankow	52.539179	13.424207	10.97
9	Weißensee	Pankow	52.553880	13.467545	10.97
10	Blankenburg	Pankow	52.594398	13.454750	10.97
11	Heinersdorf	Pankow	52.569684	13.437785	10.97
12	Karow	Pankow	52.611711	13.482460	10.97
13	Stadtrandsiedlung Malchow	Pankow	52.581568	13.471677	10.97
14	Pankow	Pankow	52.566250	13.412403	10.97
15	Blankenfelde	Pankow	52.624746	13.403770	10.97
16	Buch	Pankow	52.641401	13.496539	10.97



# Use Foursquare API to get location of bars and kebab restaurants



- Call the API for every neighborhood, filter results by venue type
  - Döner kebab and similar restaurants: 74 results
  - Bars and nightclubs: 200 results

# Analyze potential of neighborhoods

- **Hypothetical kebab saturation** = (# of kebab restaurants + 1) / # of bars
- Look for neighborhood with lowest saturation

	Neighborhood	Bars	Hyp. Kebab places	Hyp. Kebab saturation	Rent
2	Kreuzberg	20	3	15.000000	12.99
0	Plänterwald	6	1	16.666667	9.61
1	Weißensee	6	1	16.666667	10.97
4	Neukölln	31	6	19.354839	10.09
3	Gesundbrunnen	9	2	22.222222	12.50
8	Moabit	17	5	29.411765	12.50
9	Britz	12	4	33.333333	10.09
10	Prenzlauer Berg	12	4	33.333333	10.97
5	Alt-Treptow	5	2	40.000000	9.61
6	Schöneberg	5	2	40.000000	10.26

# Find perfect location in the chosen neighborhood

- Calculate the midpoint between the bars and set up your restaurant there
- **Kreuzberg, right on the edge to Neukölln on the Kotbusser Brücke**





# There are some limitations though ...

- Just look at the results for a „döner“ search around your chosen *perfect location*
- Apparently, your analysis missed a lot of venues due to API restrictions and inaccurate neighborhood geodata

→ There are a lot of improvements to be made with this analysis!



There's only one reasonable thing to do now,  
really

