

# How to decide where to rent a flat in Prague

If you see this, maybe you or your client wants to find a nice apartment in Prague.

## Why it's not that easy?

This is Prague:



This is also Prague:



This is Prague as well:



Fancy about living in an old castle? Now, but everyone'd love their place to be a real home.

My exploration couldn't teach you how to choose wisely, but I can save your time.

Remember last time you were looking for an apartment? To get lost in god-knows-where, spending an hour to find a right building, and at the moment understand, that you hate the ‘quite’ and ‘excellent’ neighborhood for being boring and empty?

Or, if you an agent, to find a really ‘good for families’ locations for your client, that they immediately hate because there are no coffee shops around?

Let’s save five days and do the job for five minutes exploring the neighborhood. We will need just Wikipedia and some Data Science knowledge.

We have a list of metro stations that we got from Wikipedia:

	Name	Photo	District	Named after	Line	Opened	Notes
0	Anděl(Moskevská)	NaN	Smíchov	a building named "U zlatého anděla" ("At a gol...	B	November 2, 1985	formerly Moskevská, after Moscow
1	Bořislavka	NaN	Červený vrch	the surrounding suburb	A	April 6, 2015	NaN
2	Budějovická	NaN	Krč	the nearby square	C	May 9, 1974	NaN
3	Černý Most	NaN	Černý Most	the surrounding district	B	November 8, 1998	means Black Bridge in EnglishLocated above-gro...
4	Českomoravská	NaN	Vysočany	—	B	November 22, 1990	the original planned name was Zápotockého (or ...
5	Chodov (Budovatelů)	NaN	Jižní Město	the surrounding suburb	C	November 11, 1980	formerly Budovatelů
6	Dejvická (Leninova)	NaN	Dejvice	the surrounding suburb	A	August 12, 1978	formerly Leninova, after Vladimir Lenin
7	Depo Hostivař	NaN	Strašnice	the metro depot	A	May 26, 2006	NaN
8	Flora	NaN	Vinohrady, Žižkov	—	A	December 19, 1980	NaN
9	Florenc (Sokolovská)	NaN	Karlín	a nearby intersection	BC	May 9, 1974 CNovember 2, 1985 B	formerly Sokolovskálocated at the central bus ...

It’s just the head of it, not the whole metro, don’t worry. Prague is tiny, but not THAT tiny :)

As you can see, this list has a lot of information. If you are not a history fun, we don’t need all this text.

In fact, all we need is that:

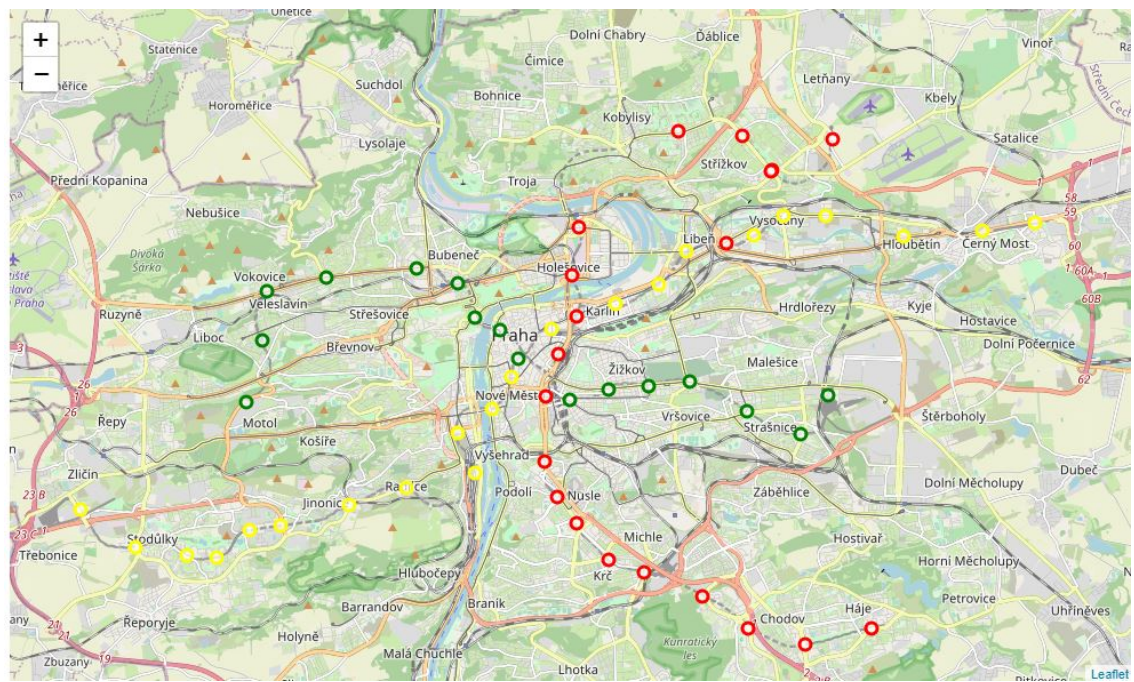
	Name	District	Line
0	Anděl(Moskevská)	Smíchov	B
1	Bořislavka	Červený vrch	A
2	Budějovická	Krč	C
3	Černý Most	Černý Most	B
4	Českomoravská	Vysočany	B

Then we use an excellent instrument for us to find coordinates of these stations: Foursquare API.

Some voodoo, and our list is looking like that:

	Name	Latitude	Longitude
0	(Anděl (metro), Prague,)	50.0685	14.4041
1	(Bořislavka (metro), Prague,)	50.0986	14.3645
2	(Budějovická (metro), Prague,)	50.044	14.4494
3	(Černý Most (metro), Prague,)	50.1091	14.5776
4	(Českomoravská (metro), Prague,)	50.1066	14.493
5	(Chodov (metro), Prague,)	50.0309	14.4913
6	(Dejvická (metro), Prague,)	50.1002	14.3917
7	(Depo Hostivař (metro), Prague,)	50.0758	14.5155
8	(Flora (metro), Prague,)	50.0777	14.4613
9	(Florenc (metro), Prague,)	50.0911	14.4397

At this step we can make a map of Prague metro:



Look at that red dot! It seems to get lost. However, it is its real place.

So, let's look what's interesting we have around!

I am not going to give a detailed explanation of what is happening next (it's not so entertaining, and you also can see it in the Jupyter Notebook), I'll just show you the result:

	Name	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
0	Anděl (metro), Prague	Hotel	Vietnamese Restaurant	Pub	Café	Cocktail Bar	Sushi Restaurant	Other Nightlife	Bike Shop	Gastropub	Beer Store
1	Bořislavka (metro), Prague	Pizza Place	Insurance Office	Pharmacy	Czech Restaurant	Bus Stop	Café	Metro Station	Bakery	Newsstand	Dessert Shop
2	Budějovická (metro), Prague	Electronics Store	Clothing Store	Café	Drugstore	Czech Restaurant	Bakery	Hotel Bar	Health Food Store	Bookstore	Fast Food Restaurant
3	Chodov (metro), Prague	Clothing Store	Coffee Shop	Cosmetics Shop	Shoe Store	Bakery	Gift Shop	Salad Place	Furniture / Home Store	Bookstore	Boutique
4	Dejvická (metro), Prague	ATM	Hotel	Coffee Shop	Café	Electronics Store	Gourmet Shop	Bookstore	Drugstore	Food Stand	Tram Station

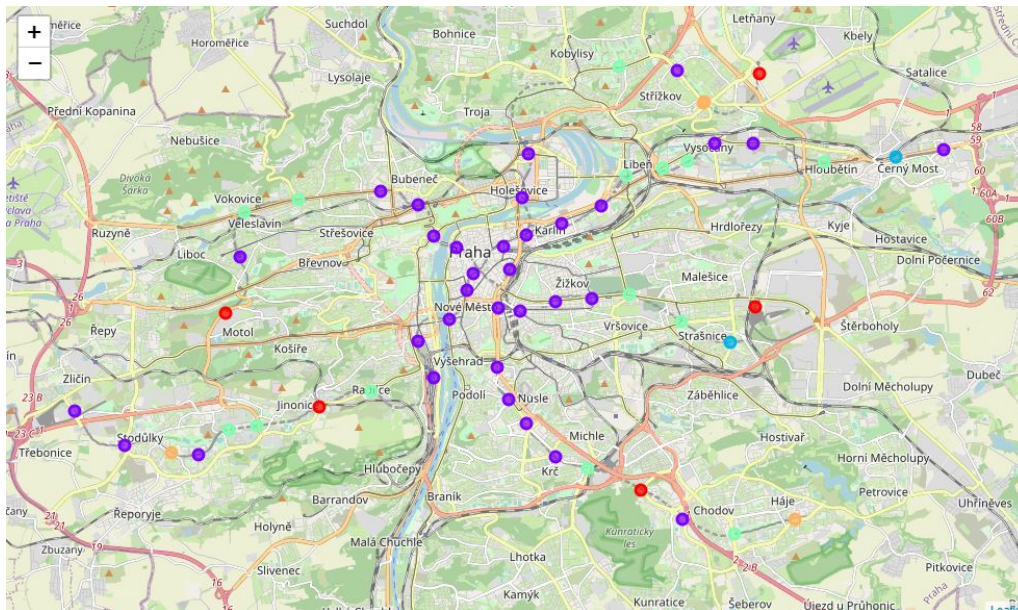
Cool, right? You'll never have cash problems if you're living on Dejvicka (in fact it's true, you exit the metro and see the huge rounded square surrounded by BANKS!)

But you say: OK, I got it, what's next? To look through all 58 stations to choose mine?

No.

We have a useful instrument names KMeans clustering. It will show us, that some stations have a lot in common:





Doesn't says to you a lot? Let's look what is hidden behind each color:

## Purple

	Name	Cluster Labels	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
0	Anděl (metro), Prague	1	Hotel	Vietnamese Restaurant	Pub	Café	Cocktail Bar	Sushi Restaurant	Other Nightlife	Bike Shop	Gastropub	Beer Store
2	Budějovická (metro), Prague	1	Electronics Store	Clothing Store	Café	Drugstore	Czech Restaurant	Bakery	Hotel Bar	Health Food Store	Bookstore	Fast Food Restaurant
3	Černý Most (metro), Prague	1	Smoke Shop	Italian Restaurant	Convenience Store	Gourmet Shop	Warehouse Store	Pet Store	Clothing Store	Zoo Exhibit	Exhibit	Farmers Market
5	Chodov (metro), Prague	1	Clothing Store	Coffee Shop	Cosmetics Shop	Shoe Store	Bakery	Gift Shop	Salad Place	Furniture / Home Store	Bookstore	Boutique
6	Dejvická (metro), Prague	1	ATM	Hotel	Coffee Shop	Café	Electronics Store	Gourmet Shop	Bookstore	Drugstore	Food Stand	Tram Station
8	Flora (metro), Prague	1	Café	Coffee Shop	Dessert Shop	Clothing Store	Pub	Mobile Phone Shop	Furniture / Home Store	Multiplex	Sushi Restaurant	Frozen Yogurt Shop

Pub, Café, Other Nightlife... you got it, right? These stations are for youngsters and party people. Live there, if you're one of them. Avoid them, if you love to sleep at night.



Andel



Chodov

## Red

	Name	Cluster Labels	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
7	Depo Hostivař (metro), Prague	0	Bus Stop	Bakery	Metro Station	Diner	Tram Station	Food & Drink Shop	Fast Food Restaurant	Fish Market	Flower Shop	Zoo Exhibit
17	Jinonice (metro), Prague	0	Supermarket	Bus Stop	Gym / Fitness Center	Salad Place	Bakery	Auto Garage	Cafeteria	Coffee Shop	Hotel	Sushi Restaurant
25	Letňany (metro), Prague	0	Bakery	Bus Stop	Wine Shop	Convenience Store	Coffee Shop	Farmers Market	Fast Food Restaurant	Fish Market	Flower Shop	Food & Drink Shop
36	Nemocnice Motol (metro), Prague	0	Bus Stop	Coffee Shop	Bistro	Food & Drink Shop	Zoo Exhibit	Exhibit	Fried Chicken Joint	French Restaurant	Fountain	Food Truck
46	Roztyly (metro), Prague	0	Coffee Shop	Restaurant	Fast Food Restaurant	Bakery	Mobile Phone Shop	Dog Run	Metro Station	Bus Stop	Food Truck	Curling Ice

Love bus stops? You better should, because it's going to be your only entertainment there. In fact, these locations are perfect for you if you want your place to be a cheap box for the bed and nothing else. Sounds a little rude, but it's quite true.



Depo Hostivar



Jinonice

## Light blue

	Name	Cluster Labels	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
1	Bořislavka (metro), Prague	3	Pizza Place	Insurance Office	Pharmacy	Czech Restaurant	Bus Stop	Café	Metro Station	Bakery	Newsstand	Dessert Shop
4	Českomoravská (metro), Prague	3	Bridal Shop	Gym / Fitness Center	Czech Restaurant	Pizza Place	Restaurant	Roof Deck	Organic Grocery	Buffet	Music Store	Tea Room
12	Hloubětín (metro), Prague	3	Drugstore	Pub	Asian Restaurant	Shopping Mall	Fast Food Restaurant	Food & Drink Shop	Supermarket	Metro Station	Tram Station	Bed & Breakfast
14	Hůrka (metro), Prague	3	Plaza	Indian Restaurant	Dessert Shop	Czech Restaurant	Bus Stop	Pet Store	Health Food Store	Pizza Place	Market	Playground
19	Kačerov (metro), Prague	3	Restaurant	Pharmacy	Czech Restaurant	Fountain	Deli / Bodega	Farmers Market	Hotel	Bus Stop	Zoo Exhibit	Fast Food Restaurant
24	Ládví (metro), Prague	3	Pizza Place	Asian Restaurant	Clothing Store	Coffee Shop	Café	Brewery	Shopping Mall	Farmers Market	Metro Station	Grocery Store
30	Muzeum (metro), Prague	3	Chinese Restaurant	Electronics Store	Bar	Cocktail Bar	Restaurant	Grocery Store	Discount Store	Vietnamese Restaurant	Art Museum	Food & Drink Shop

Everything an active person may need: gym and coffee shop, pet store and brewery, art museum and playground... really a good place if you don't want to be isolated from your social life but have kids.





Ceskomoravska



Ladvi

## Indigo blue

	Name	Cluster Labels	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
45	Rajská zahrada (metro), Prague	2	Bus Stop	Pub	Pizza Place	Farmers Market	Metro Station	Clothing Store	Hobby Shop	Gym / Fitness Center	Bridge	Ice Cream Shop
47	Skalka (metro), Prague	2	Bus Stop	Kebab Restaurant	Chinese Restaurant	Pharmacy	Dog Run	Hotel	Pub	Furniture / Home Store	Food & Drink Shop	Electronics Store

Small choice. But good, if you're a student and live with your friends. You have pub, and pizza, and gym, and everything – except, maybe, rough shopping.



Skalka



Rajska Zahrada

## Orange

	Name	Cluster Labels	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
10	Háje (metro), Prague	4	Electronics Store	Drugstore	Pizza Place	Grocery Store	Bakery	Pet Store	Gym	Turkish Restaurant	Restaurant	Dessert Shop
21	Kobylisy (metro), Prague	4	Bakery	Drugstore	Restaurant	Gym	Pet Store	Pharmacy	Buffet	Italian Restaurant	Diner	Exhibit
26	Luka (metro), Prague	4	Gym	Bakery	Casino	Italian Restaurant	Farmers Market	Fast Food Restaurant	Gastropub	Restaurant	Beer Store	Grocery Store
43	Prosek (metro), Prague	4	Bakery	Drugstore	Restaurant	Gym	Pet Store	Pharmacy	Buffet	Italian Restaurant	Diner	Exhibit

This is what we really call quite. Calm, nice, sweet... maybe I'll go there when I'm retired :)



Kobylisy



Haje

And now: no jokes. Compare:

- You can Google or, even worse, visit these places randomly looking for an apartment. It takes 5 days.
- You can look through this report. It took 5 minutes.

I exaggerate, but just a bit. If you're a client, and your agent still pushes you to go to different places to 'have a look at an apartment in a perfect location...'. No, don't fire them. Show this to them.

If you're an agent – show this to your client before you client shows it to you.

Thank you!.