Determining the best neighbourhood to raise kids in Barcelona

Data science project

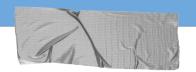
Why is this necessary?

 Choosing the right neighbourhood to settle in when moving is important.

 Saves time and energy for families who want to settle with kids in the city.

 Using data science for this allows access to more location and venue data than if a person was doing the comparison.





Data to be used

→ Foursquare venues

From the Foursquare API.

→ Education (Schools)

https://www.elmundo.es/mejores-colegios. html

→ Districts

https://opendata-ajuntament.barcelona.cat/data/en/dataset/20170706-districtes-barris

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What methodology to use?

By elimination:

- 1. Eliminating districts that have a lot of nightlife and are tourism hubs.
- 2. Proximity to the best schools in Barcelona.
- The district with most family-friendly venues wins.

```
freq
           venue
           Hotel
                  0.10
    Cocktail Bar
                  0.08
                  0.07
   Boat or Ferry
                  0.06
           Plaza
                  0.05
             Bar
   -Eixample----
                              freq
                       venue
0
                       Hotel
                              0.15
1 2 3
                    Boutique
                              0.07
           Tapas Restaurant
                              0.05
   Mediterranean Restaurant
                              0.04
```

Spanish Restaurant

0.04

----Ciutat Vella----

1. Eliminate Ciutat Vella and Eixample

(nightlife and tourist hubs causes noise pollution)

2. Eliminate Sant Andreu, Sant Martí, Nou Barris

(not the right region for the best education)



	District	Park	Playground	Garden	Museum	Movie Theater	Theater	Pool	Average frequency of family-friendly stuff
2	Gràcia	0.037500	0.0125	0.000000	0.025	0.0	0.0125	0.0	0.012500
3	Horta-Guinardó	0.100000	0.0000	0.000000	0.000	0.0	0.0000	0.0	0.014286
4	Les Corts	0.055556	0.0000	0.037037	0.000	0.0	0.0000	0.0	0.013228
8	Sants-Montjuïc	0.000000	0.0000	0.000000	0.000	0.0	0.0000	0.0	0.00000
9	Sarrià-Sant Gervasi	0.000000	0.0000	0.000000	0.000	0.0	0.0000	0.0	0.000000

3. Top 3 best districts are Horta-Guinardó, Les Corts, and Gràcia

(the venue types we are looking for are frequent here)

Evaluation and Discussion

Need to take into account more factors to narrow it down more quantitatively

Personal tastes makes it hard to choose just one district - that is why we have the top 3

So what is the best place to raise kids in Barcelona?

From the results, the top 3 are: Horta-Giuinardó, Les Corts, Gràcia.