

# Where to build a GYM in Madrid, Spain?

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## GYM Benefits

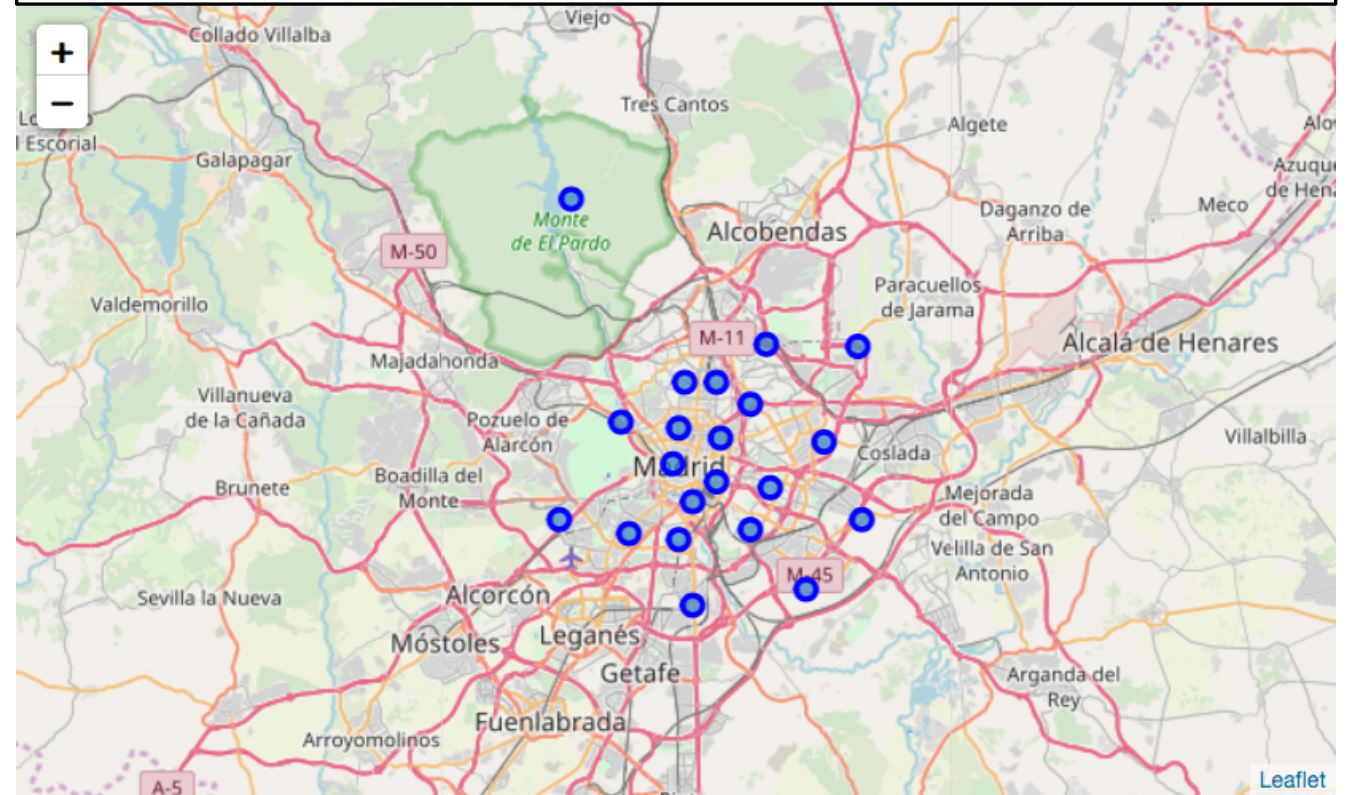
- Health benefits
- Access to a vast variety of equipment
- Socialize
- Establish a healthy routine
- Motivation for other tasks



## Data

- Geocode with openstreetmas API
- Foursquare API

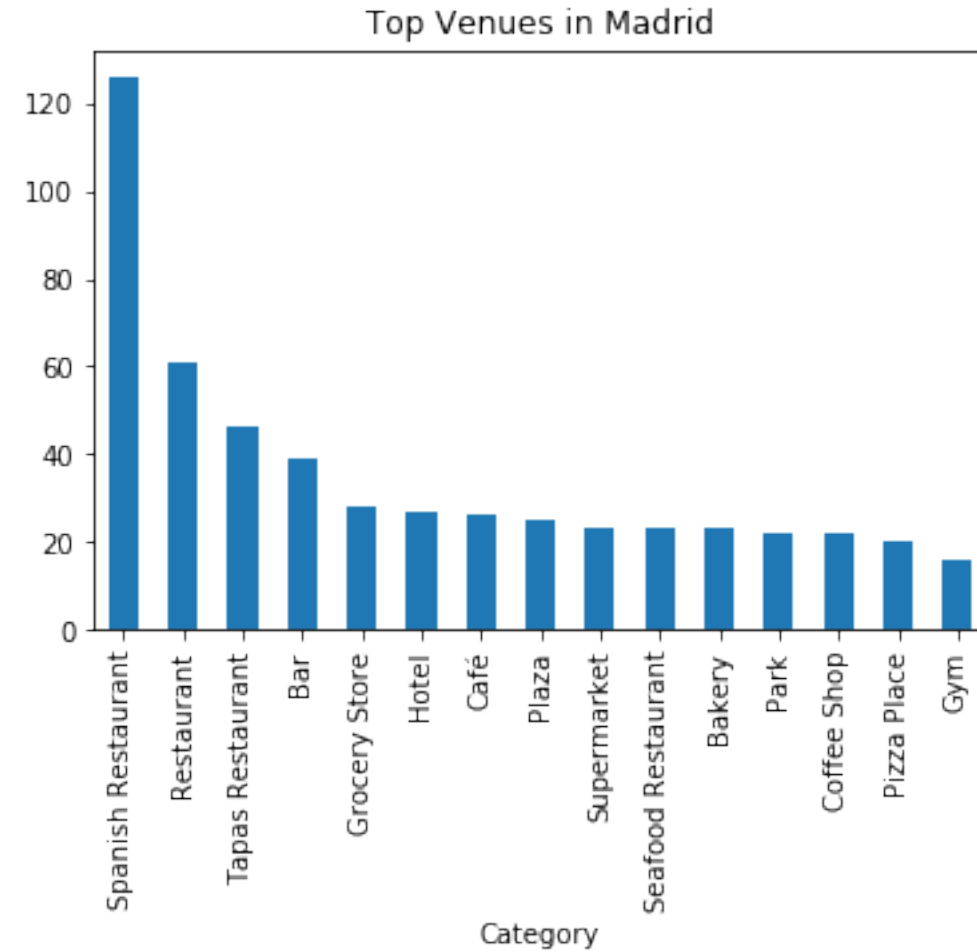
## Districts obtained with Geocode API



## Exploratory analysis of the top venues in Madrid

### Methodology

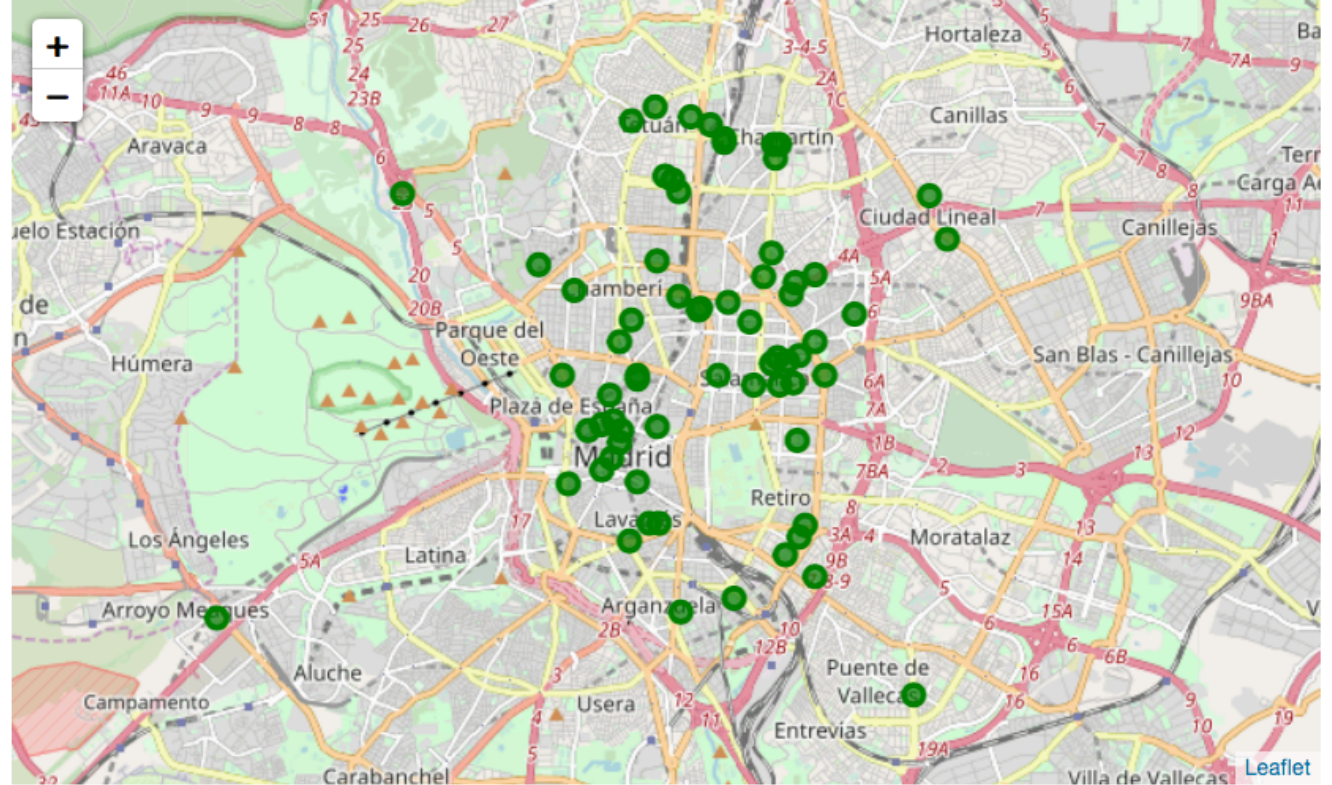
- Exploratory analysis
- Cleaning Data



## Methodology

- Exploratory analysis
- **Cleaning Data**

## Gyms in Madrid after cleaning data





## Results

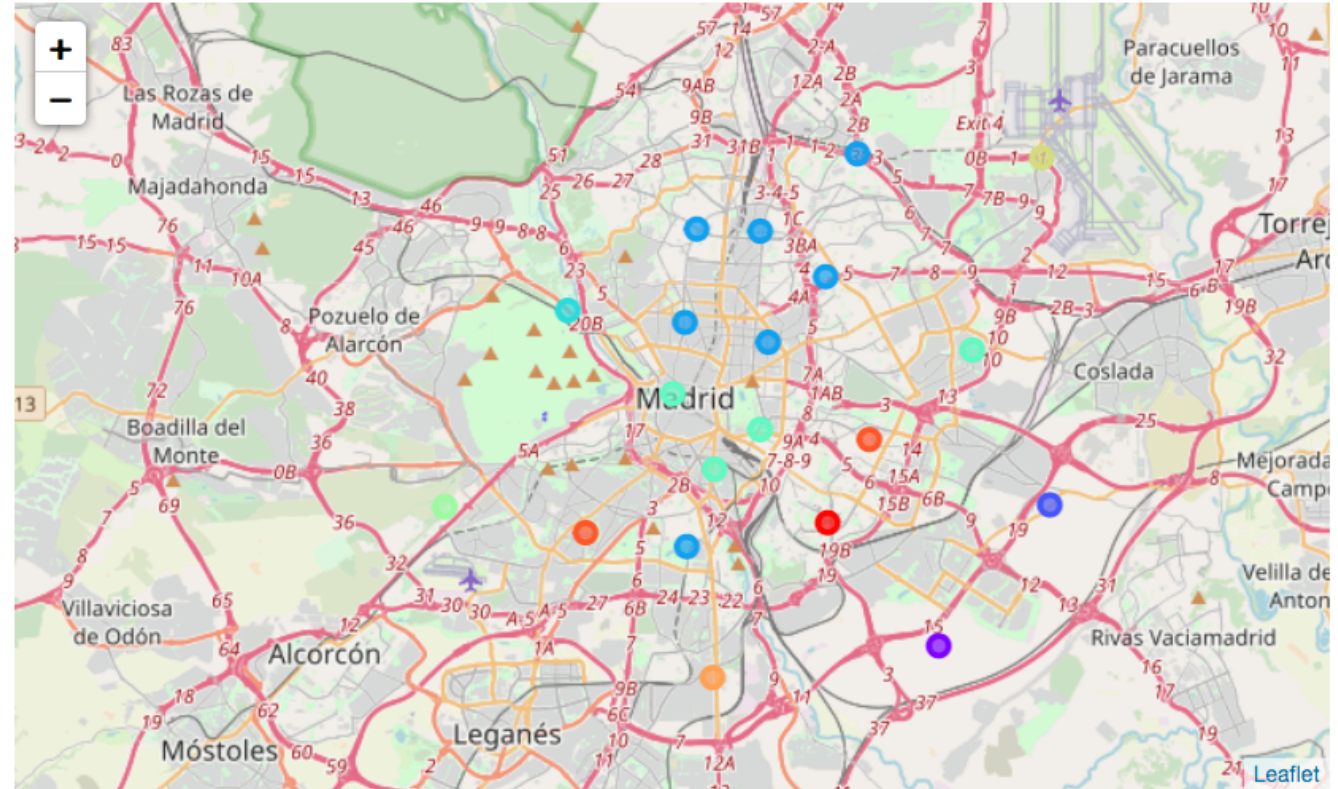
- Most in gyms in the center of Madrid
- Relation between clusters and number of gyms

District	District Latitude	District Longitude	gym
Arganzuela	5	5	5
Centro	12	12	12
Chamartín	6	6	6
Chamberí	10	10	10
Ciudad Lineal	2	2	2
Latina	1	1	1
Moncloa-Aravaca	1	1	1
Puente de Vallecas	1	1	1
Retiro	5	5	5
Salamanca	18	18	18
Tetuán	6	6	6

## Results

- Most in gyms in the center of Madrid
- Relation between clusters and number of gyms

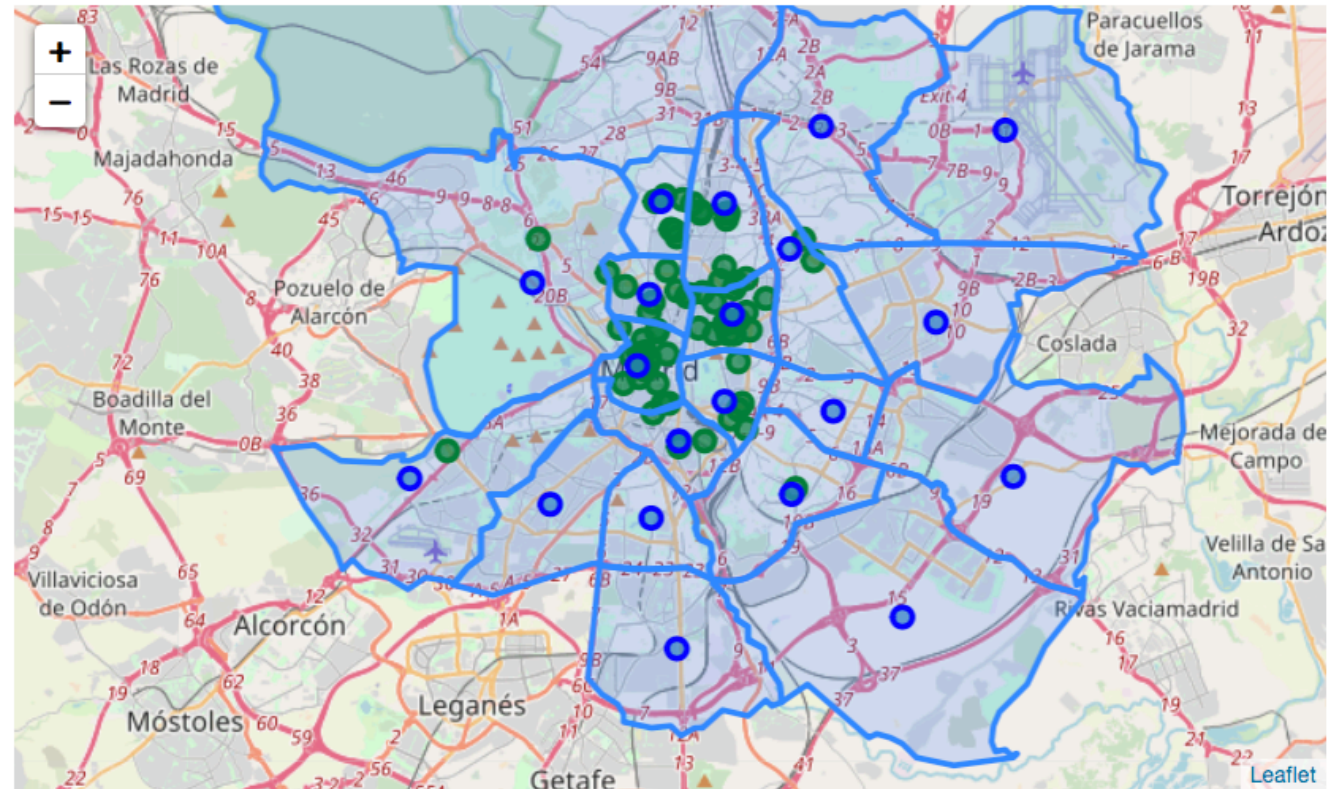
## Clusters



## Discussion

- Beware of foursquare data
- Correlation between economy and number of gyms?
- Correlation between number of restaurants and gyms

## External districts without gyms





## Conclusion

Best place to build a gym:

External Districts with the most restaurants.

# Thank You