

# **Coursera Capstone**

## Opening a new shopping mall in Madrid, Spain

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### **1 Data**

To answer the business question the following data will be needed:

- List of neighbourhoods in Madrid, Spain.
- Latitude and longitude coordinates of those neighbourhoods.
- Venue data, particularly data related to shopping malls.

#### **1.1 Data gathering**

First, to gather the list of neighbourhoods in Madrid a table has been downloaded from a public government data source, available at: <https://datos.gob.es/en/catalogo/101280796-barrios-municipales-de-madrid>. The dataset contains a list of all 131 neighbourhoods of Madrid.

Then, to get the geographical coordinates (latitude and longitude) of the neighbourhoods the Python Geocoder package will be used.

After that, the Foursquare API is going to be used to get the venue data for those neighbourhoods. This API can provide many categories of venue data, but the Shopping Mall category is the most interest one for this project.