A Japanese Restaurant in Madrid

Margarida Santos

March 30, 2020

1   Introduction/Business Problem

In this project we will try to find possible locations for a restaurant. Specifically, this report will be targeted to stakeholders interested in opening an Japanese restaurant in Madrid, Spain.

Since there are lots of restaurants in Madrid we will try to detect locations that are not already crowded with restaurants. We are also particularly interested in areas with no Japanese restaurants in vicinity. We would also prefer locations as close to city center as possible, assuming that first two conditions are met.

We will use our data science powers to generate a few most promising neighborhoods based on this criteria. Advantages of each area will then be clearly expressed so that best possible final location can be chosen by stakeholders.

2   Data

Based on definition of our problem, the factors that will influence our decision are:

- number of existing restaurants in the neighboorhood (any type of restaurant)

- number of and distance to Japanese restaurants in the neighboorhood, if any

- distance of neighboorhood to city center

The following data sources will be needed to extract/generate the required information:

- coordinates of Madrid center will be obtained using Geopy of well known Madrid location (Kilómetro Cero - Puerta del Sol, 7, 28013 Madrid, Spain)

- location and limits of each district will be obtained using geopy and an open-source json file

- number of restaurants and their type and location in every neighboorhood will be obtained using Foursquare API