

Exploring the Neighborhoods in Madrid: Data Science for finding a place of a new hindu restaurant

Introduction

As a part of the final IBM Capstone Project, we get to know of what data scientists go through in real life. Objectives of the final assignments were to define a business problem, look for data in the web and use Foursquare location data to compare different districts within the city of Madrid to figure out which neighborhood is suitable for starting an hindu restaurant.

In this report, we discussed about where is the best place to start an hindu restaurant in Madrid.

Business Problem

The city of Madrid has a population of 6 millions of people approximately. During last decades, it has received thousands of immigrants from all places in the world. This fact, linked to the growing number of fans who loved this cuisine aimed us to provide solutions about where it would be the best places to set up a new hindu restaurant.

Target Audience

This project is particularly useful for entrepreneurs who are decided to start up a restaurant in the capital of Spain, Madrid. This project is timely as the number of international restaurants has been constantly growing during the last years.

Data Selection

To realize that, data from 2 different sources were used. Data about hindu restaurants in Madrid was taken from Foursquare tool and eltenedor.es website. It was collected information related to postal code, name of the restaurant, address, latitude, longitude and average price per night and it was integrated into a database which contains 90 observations about hindu restaurants from Madrid. For a better analysis, some data about the population of each neighborhood was collected from institutional Madrid website <https://www.madrid.es/>.

The final database which combines Foursquare location data and Paris hotels data will be used to develop our machine learning models and to cluster Madrid areas neighborhoods in order to provide the best places to start our restaurant based on several factors.