

## Predicting the location for opening a new hotel 'Lisbon', 'Portugal'

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## 1. Introduction

A major investment must be made. Lisbon is the chosen city. A major hotel chain is expanding its' operation and the Portuguese capital is the city to go. With the data science project developed, we expect to choose the best location for this new building, considering not only the location of the competitors but, also, the location for all the major attractions – mainly restaurants and bars.

## 2. Data

Our core location is 'Saldanha, Lisbon'. This is the business center for Lisbon, and the target customer is the executive one. This represent clients with business accounts, higher incomes and major plafond to spend.

For the project, we will be addressing information from **Foursquare**. What are we interested in?

Firstly, we want to know where the competitor hotels are located. With this, we pretend to be as far as possible from all of them.

Also, we want to know where the main attractions are located. With it, we want to be as for as possible for most of them.

In Figure 1, we mark the city business center – in red. With it, we are marking all the major competitor hotels in a kilometer distance from the center – in blue. Also, we are marking all the major attractions in the same radius – in green.

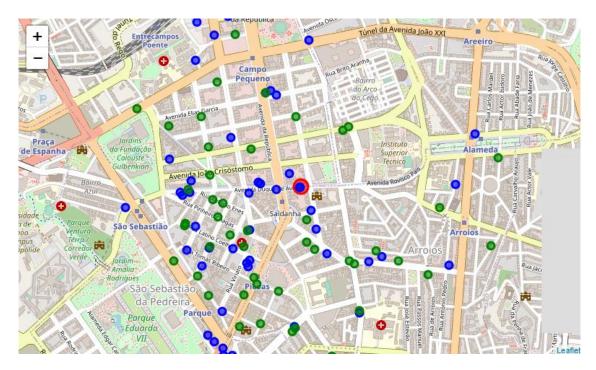
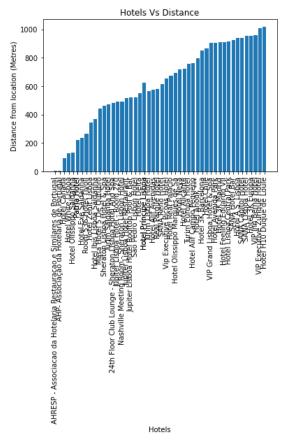


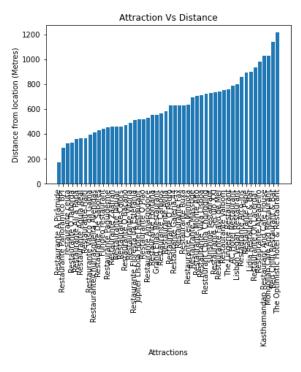
Figure 1 - City business center, hotel and attractions location

Also, we have been able to plot the distance from this major hotels – there are 50 hotels, at least – in a kilometer radius. With it, we have been able to understand that the average distance from this business center is more than 600 meters – more that expected, I guess. Is this an opportunity?



Average distance between hotels and core location is 603 metres

Also, we may find that there is a bunch of major attractions around this business center. With it, we understand that the average distance from the center is 624 meters.



Average distance between attractions and core location is 624 metres

Let's see what further investigation on this topic may bring us...