



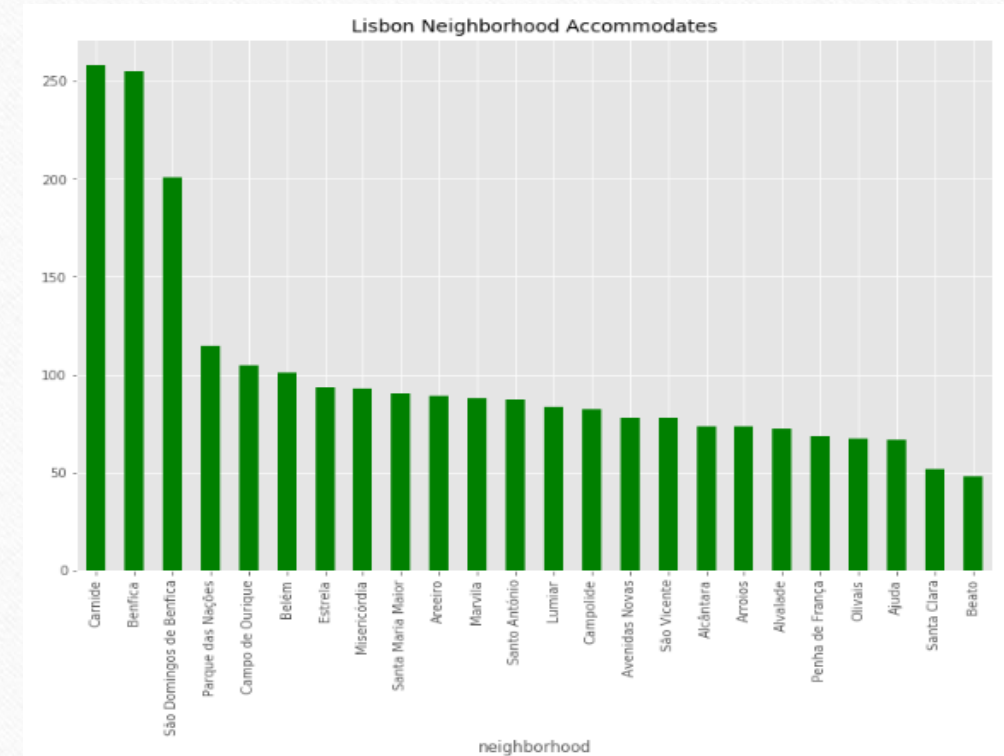
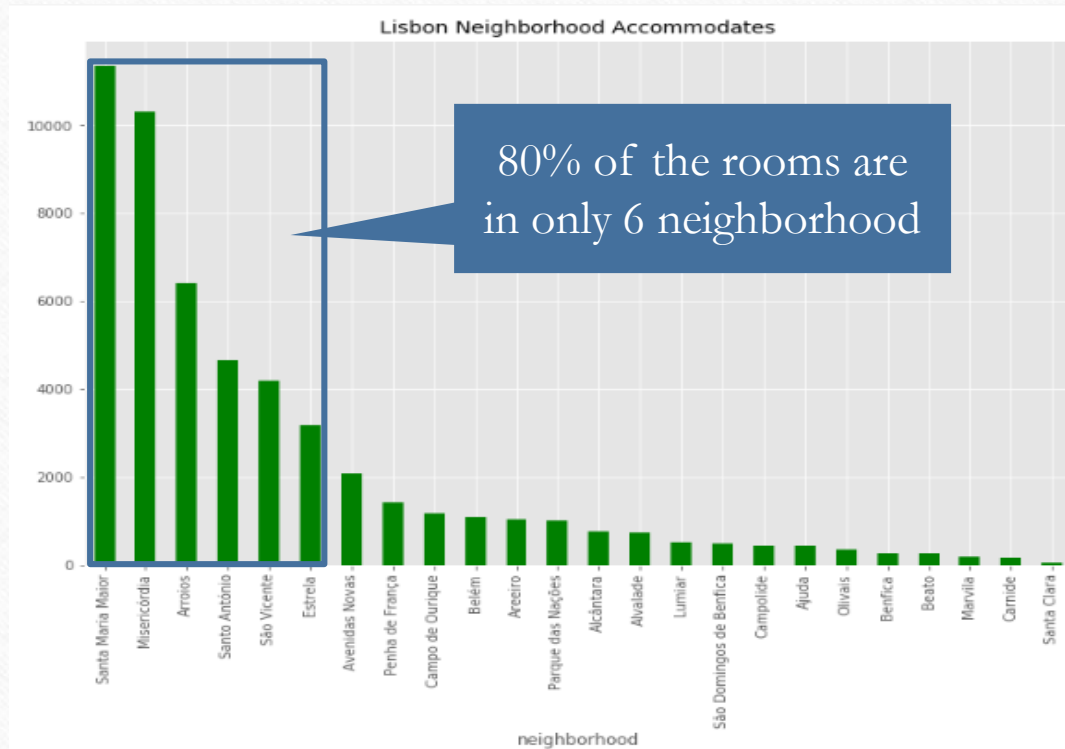
Lisbon

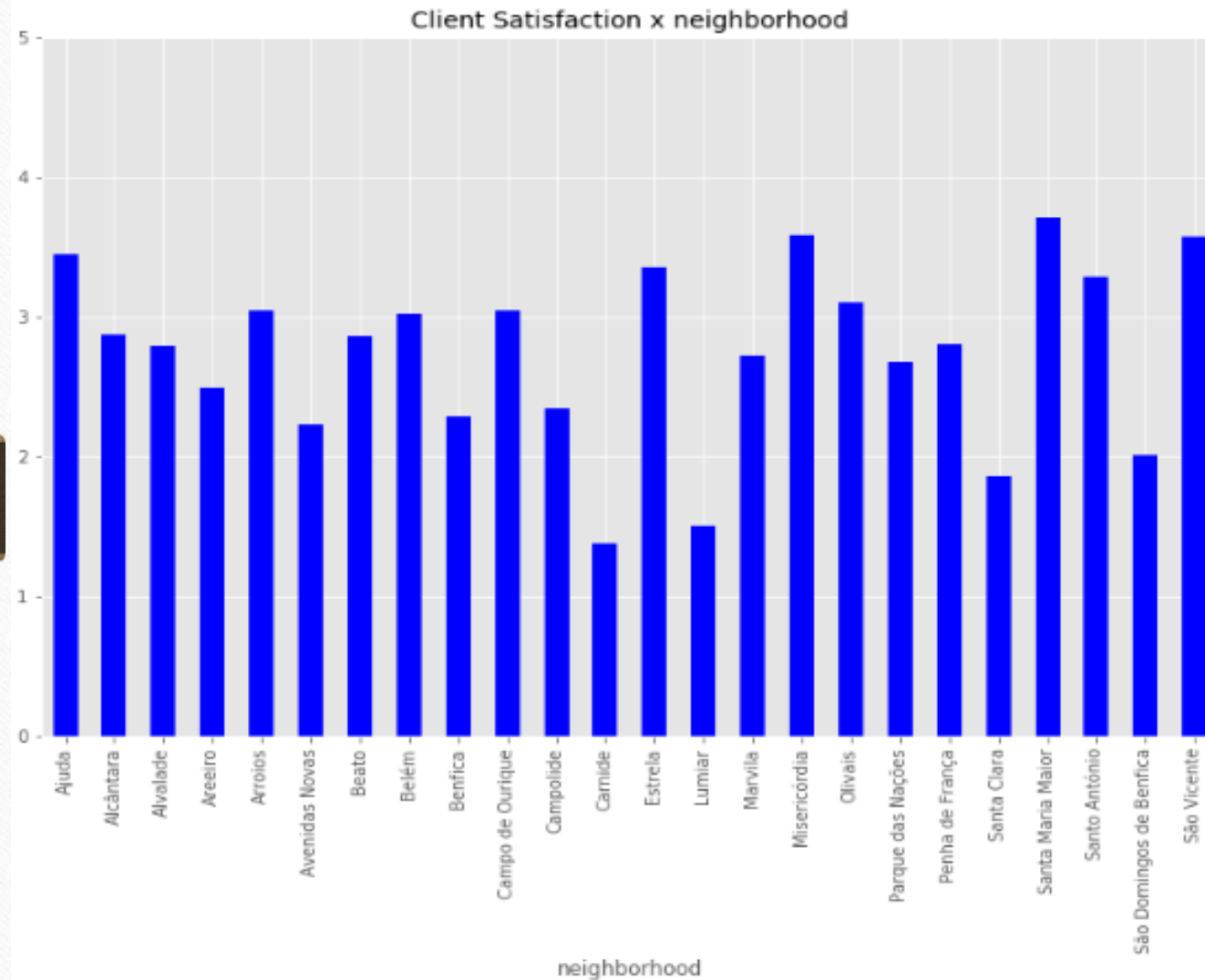
Correlation between Airbnb rooms in the Lisbon neighborhood and its surrounding venues

Questions:

- ☐ Which kind of neighborhood is more attractive?
- ☐ Are there potential neighborhood to explorer?
- ☐ Can the venues surrounding an accommodation affect market value?
- ☐ What kind of venues can affect the most?

Availability of rooms by neighborhood



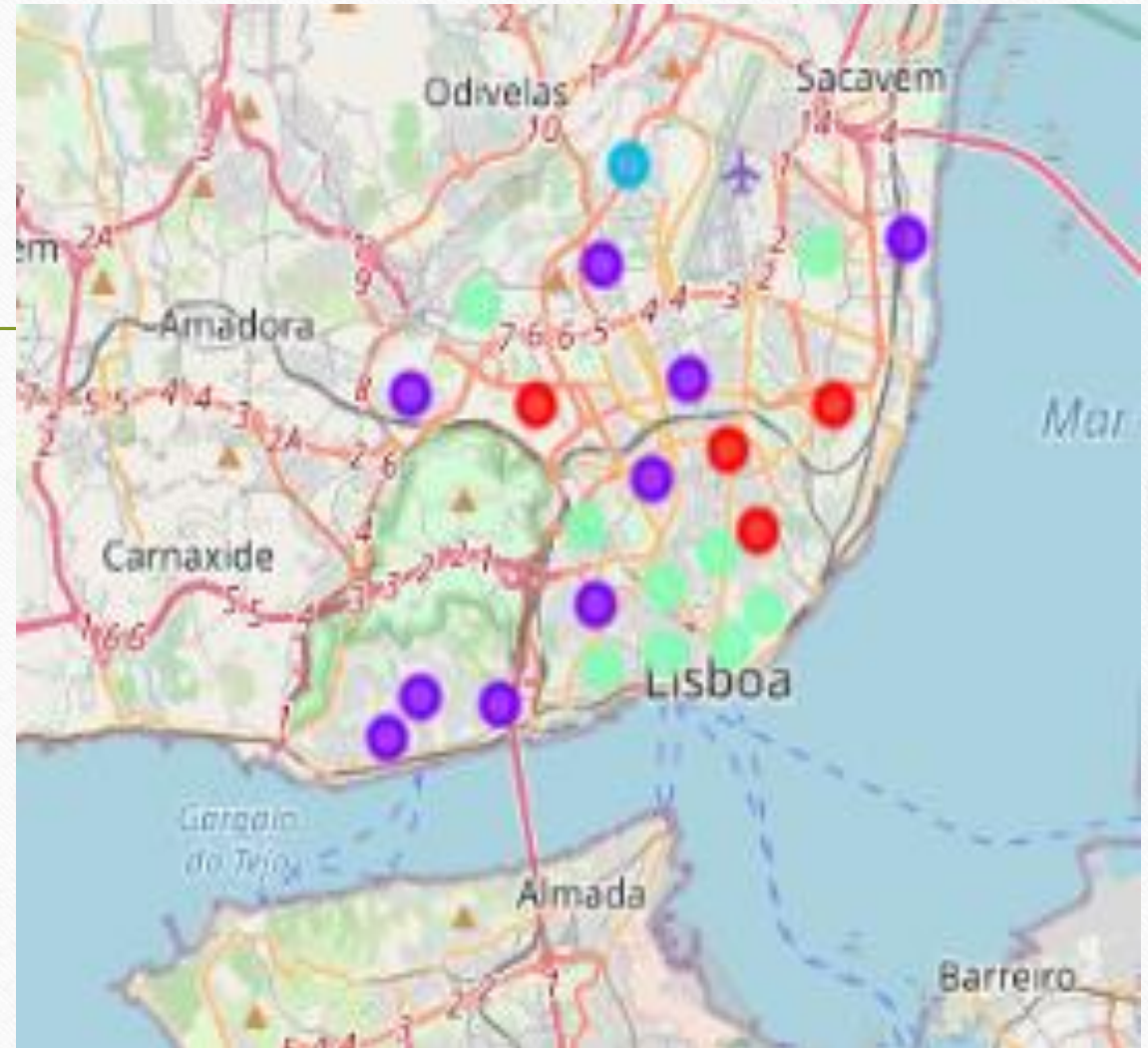


Client Satisfaction

Low satisfaction grade from neighborhood that are far from tourism areas.

Identifying type of neighborhood per venues

- Cluster 0 (red): Tourism area;
- Cluster 1 (purple): Business area;
- Cluster 2 (blue): Living Area far from tourism areas;
- Cluster 3 (light green): Living Area very close to tourism and business areas.



Linear Regression and Principal Component Regression

Linear Regression Results:

R2-score: -0.26474502153617285

Mean Squared Error: 2.25123818429021

PCA Results:

R2 score: -0.13414596721356475

MSE: 2.0187726889398983

The predict model doesn't have a good score and even after applying a more sophisticated method, the model is still not suitable for the dataset. Thus, it can't be used to precisely predict a neighborhood average price of Airbnb rooms.

Conclusion and future directions

- ❑ Transport, restaurant, coffee shop and market are important to settle any Airbnb investment as well close to tourism (priority) and business area;
- ❑ Interest fact is that only 4 neighborhood having been explorer massively and exist other neighborhoods that have high potential to new investments;
- ❑ It's unfortunately that the analysis couldn't produce a precise model or showing any strong coefficient correlation for any venue type. But we can still get some meaningful and logical insights from the result.
- ❑ Analise data of noise and crime in the neighborhoods to see the impact.