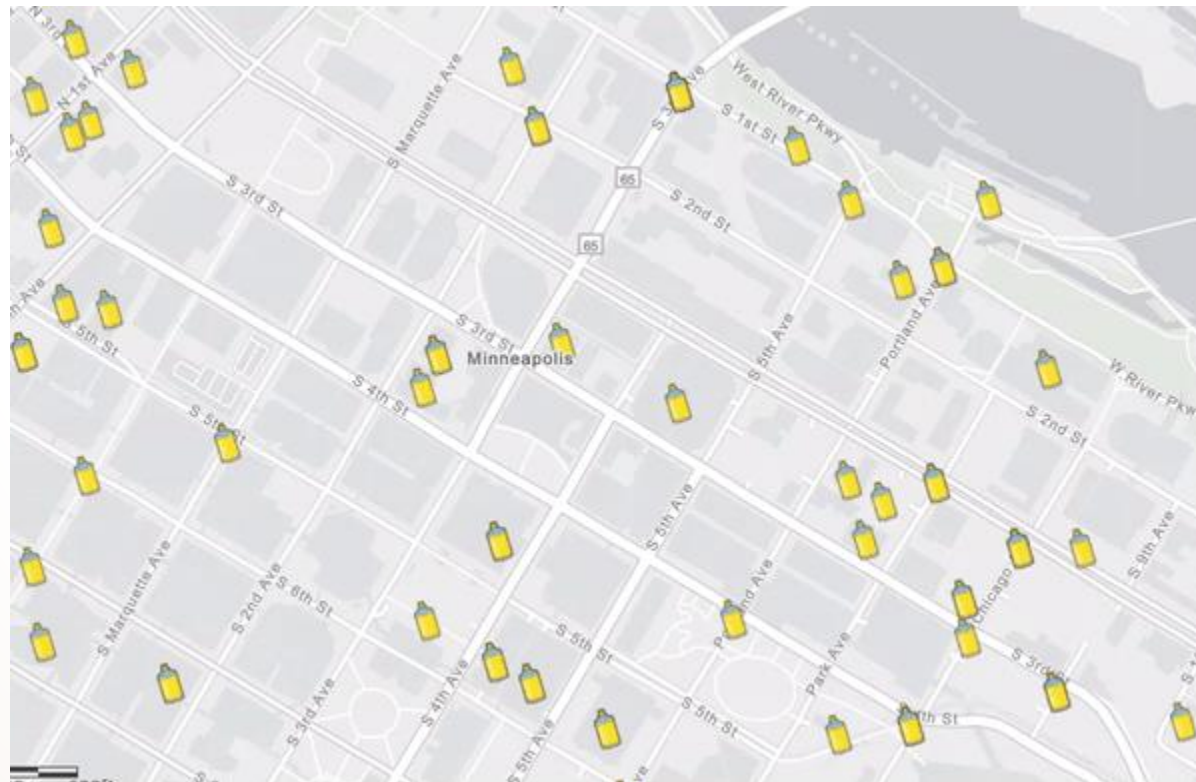


Capstone Project

Applied Data Science Capstone
Week 5

Problem Description

- How to predict the most promising location to build a new restaurant?

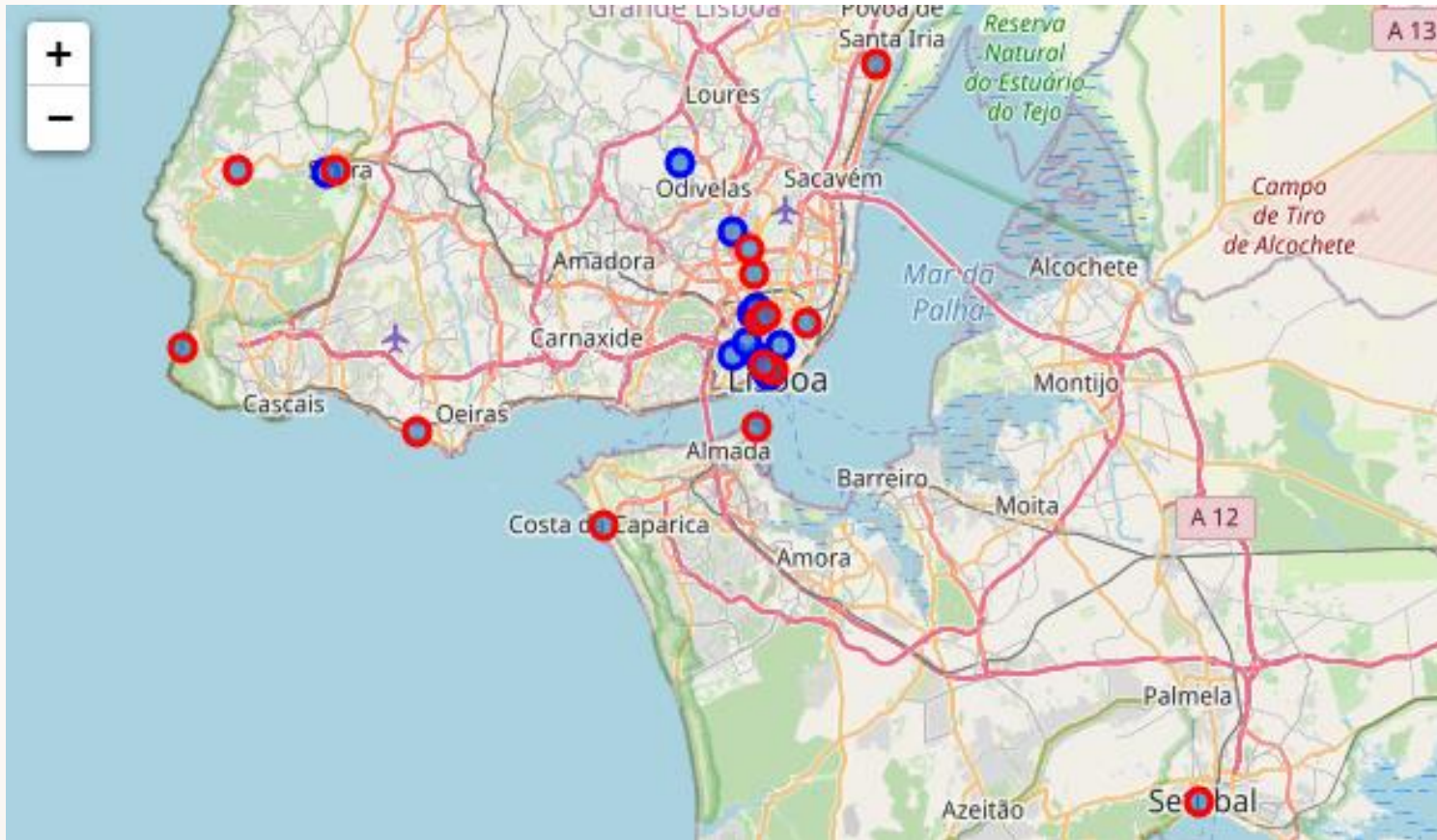


Data description

- Lisbon Area
- Selection of top 15 restaurants and bottom 15 from <https://www.zomato.com>
- Location data from Foursquare

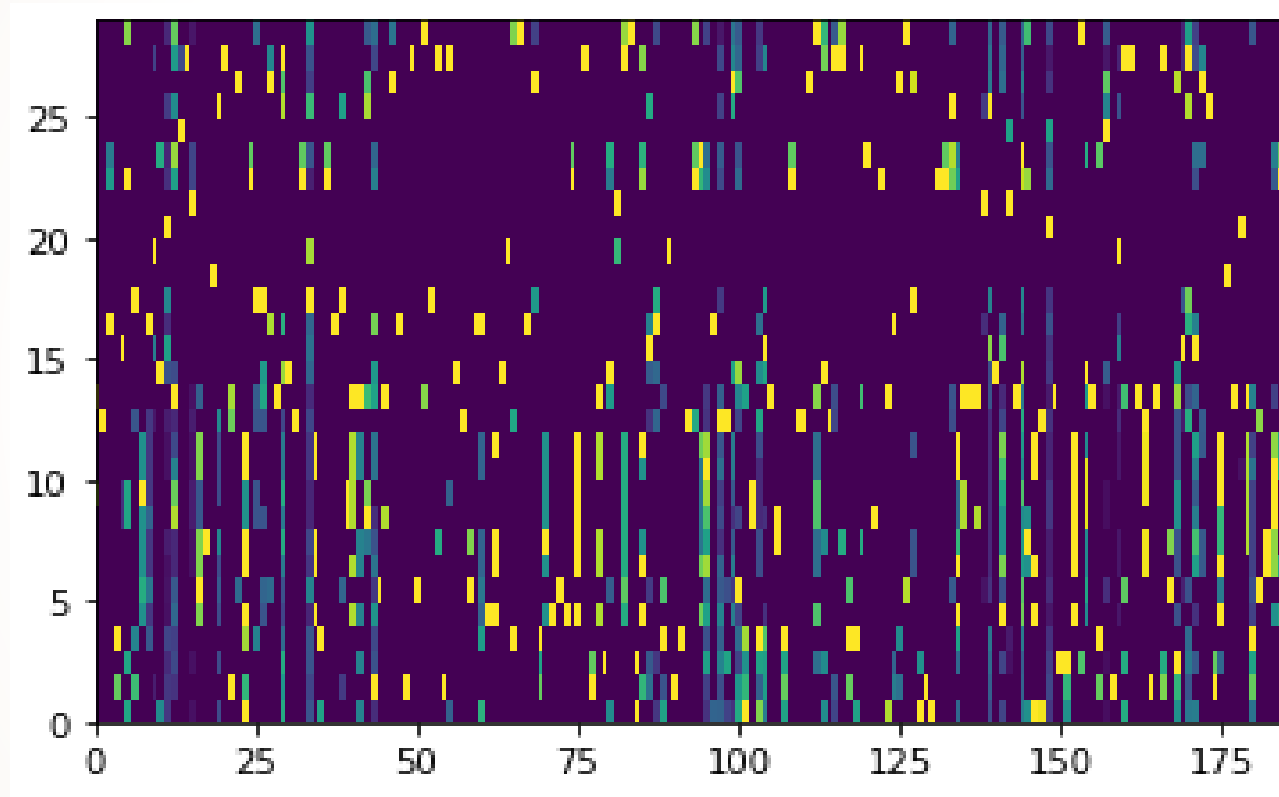
	Address	Name	Label	Latitude	Longitude
0	1600-488 Lisboa	Volver de Carne Y Alma	1	38.771081	-9.162281
1	1150-017 Lisboa	Ramiro	1	38.721504	-9.135401
2	1250-096 Lisboa	Yakuza First Floor	1	38.717896	-9.161970
3	1050-149 Lisboa	Go Juu	1	38.735616	-9.152228
4	1200-443 Lisboa	Belcanto	1	38.710550	-9.141636

Results – Data points



Restaurants' locations. Blue top 15, Red bottom 15

Results - Features



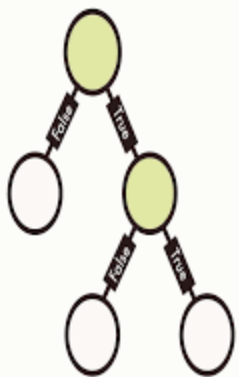
From the Foursquare location data it was possible to extract information about the environment and encode it into the features represented in this heatmap

Results - Classification

- Split Train/Test dataset (66/33)

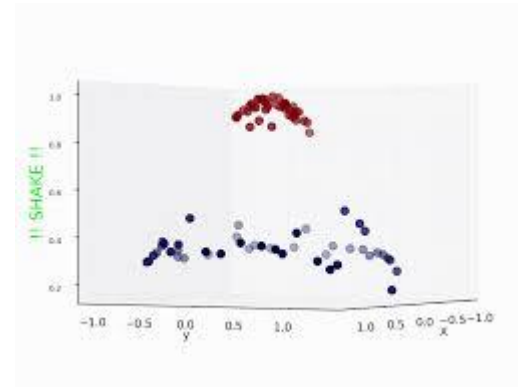
- Decision Tree Classifier

- Accuracy of 90%



- SVM Classifier

- Accuracy of 90%



Conclusion

- It was possible to achieve High accuracies with the simple methods use
- However the dataset should be bigger in order to have more meaningful results
- The project was a great experience and allowed to really put what has been taught into practice