

Capstone Project – The Battle of Neighborhoods
Area price in Vilnius (Lithuania)

Introduction

More and more people want to live in a house and have space and private backyard. This desire grow even further this year then a half of people should work from home. There are many problems with building a house. The biggest problem is price of area. You want an area which are close enough to the city, but you don't want to pay huge price for that area. The next big question is area size you don't want to small and you don't want to big because price is going to increase.

In this project we will help people who are looking for to buy area for building a house. Our analysis should show how much should you invest in area if you want to live 5km, 10km or 15km from city. How big area for which price client can buy. Should the client to look at areas at south or west from the city center.

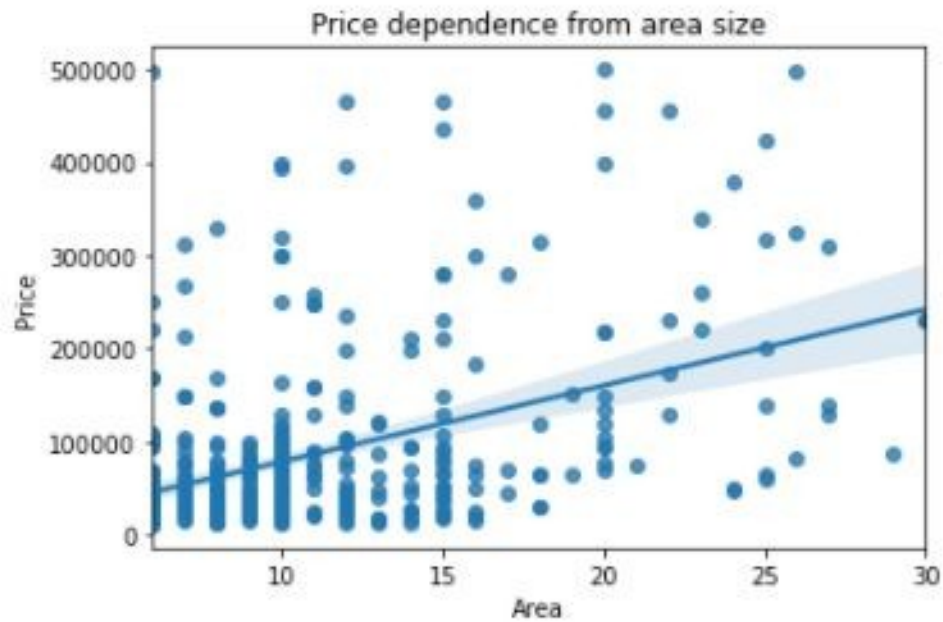
Data

- Data about area price in Vilnius city was taken from local website www.aroudas.lt. Filter used to filter area just in city, and the higher price limit was 500000 euros. Also we filter area for house building purposes.

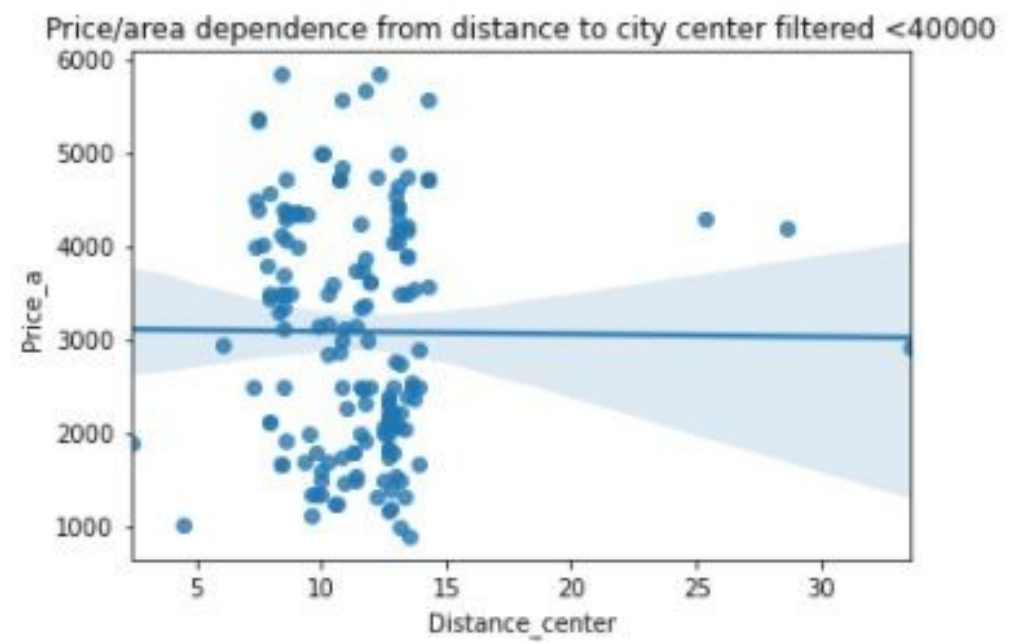
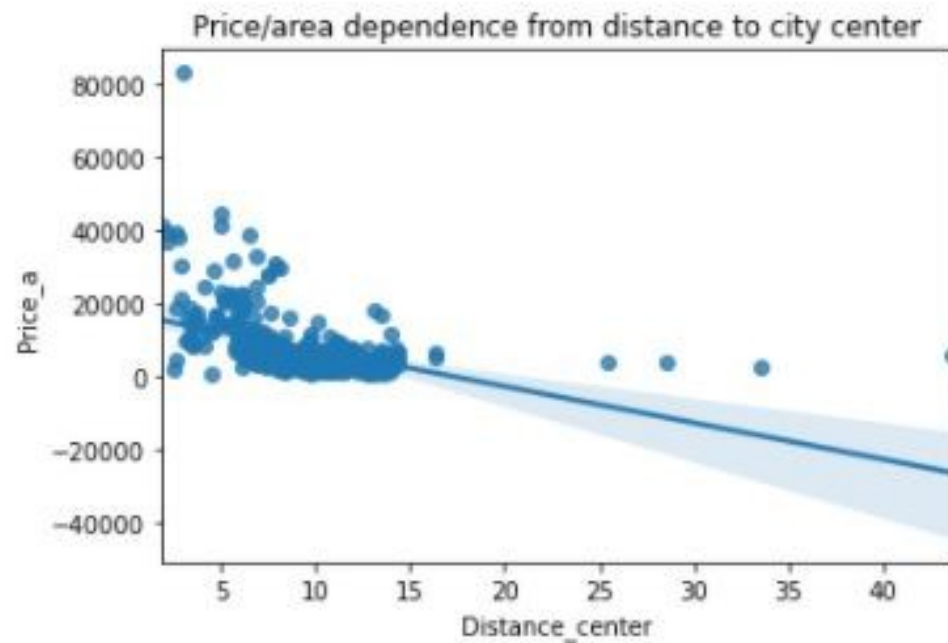
Methodology

- To get data from website we build a web scraper. We collected data about: price, address, area. Address contains district and street so we separate those. After separating we write a code to filter villages close to city, because they are not in the city, but often sellers write so to get more popularity.
- Geolocator was used to find coordinates of the area and calculate distance to the city center.
- Group by was used to determine all the districts and analyze. Which district is the closest to city center, which has the most selling areas and the price range.

Results

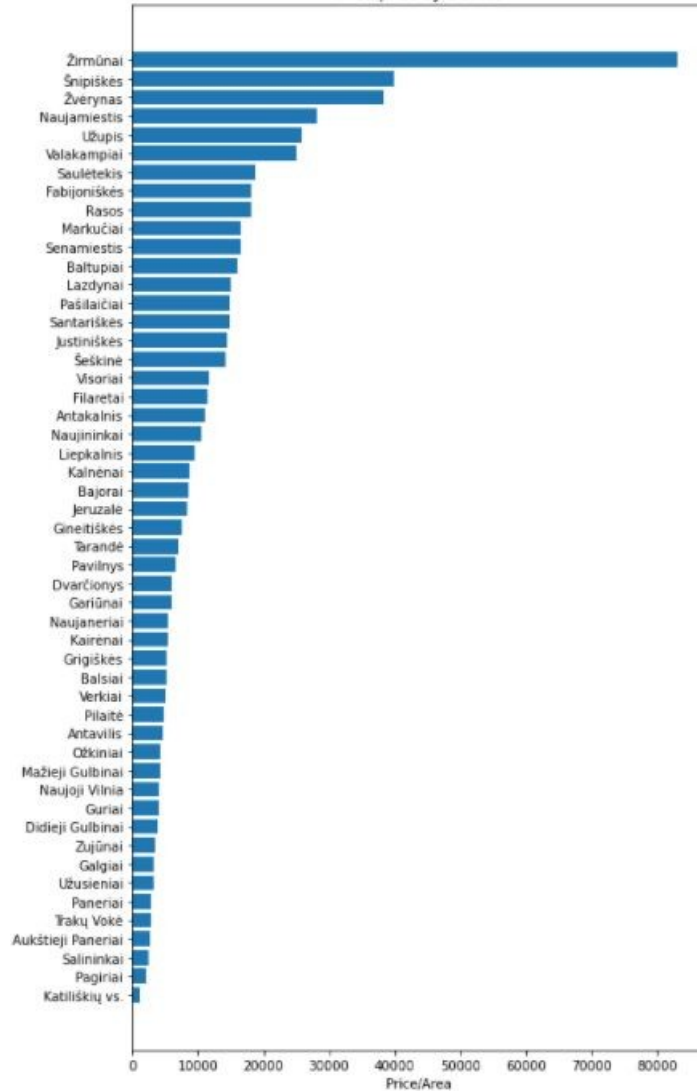


Results

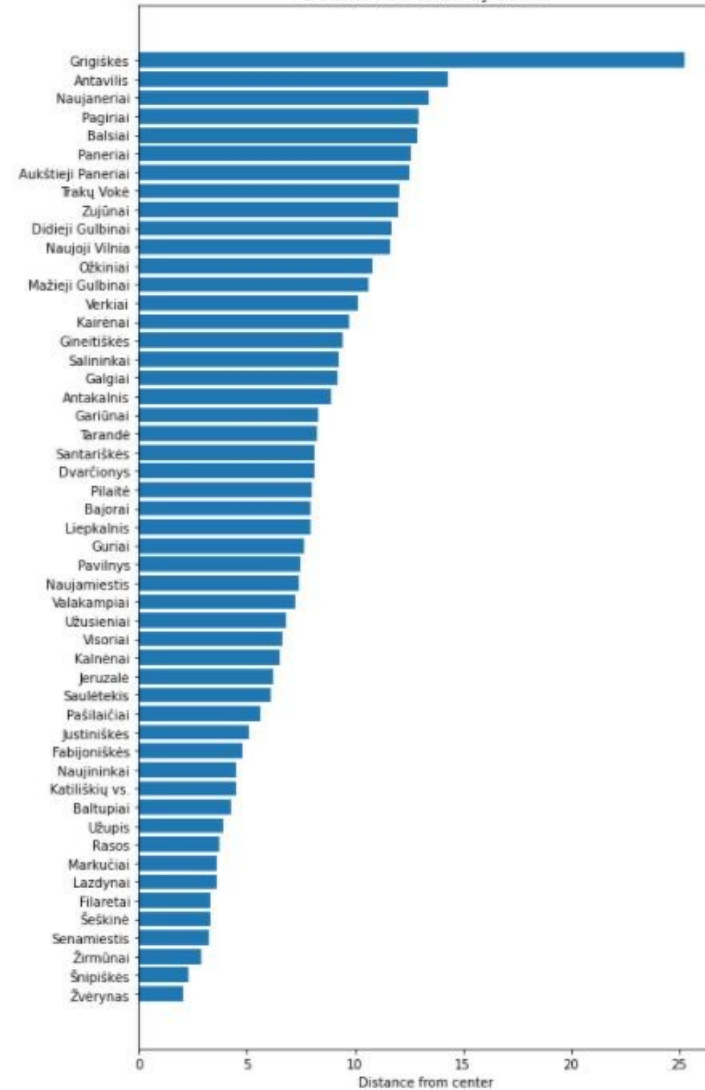


Results

Area price by district

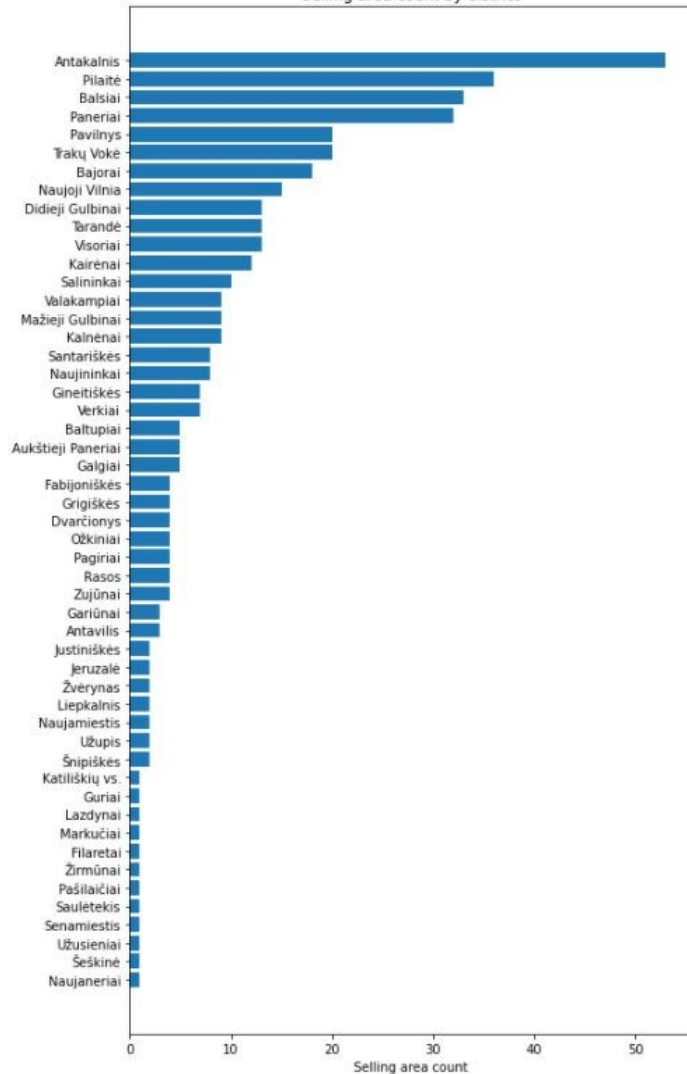


Distance from center by district

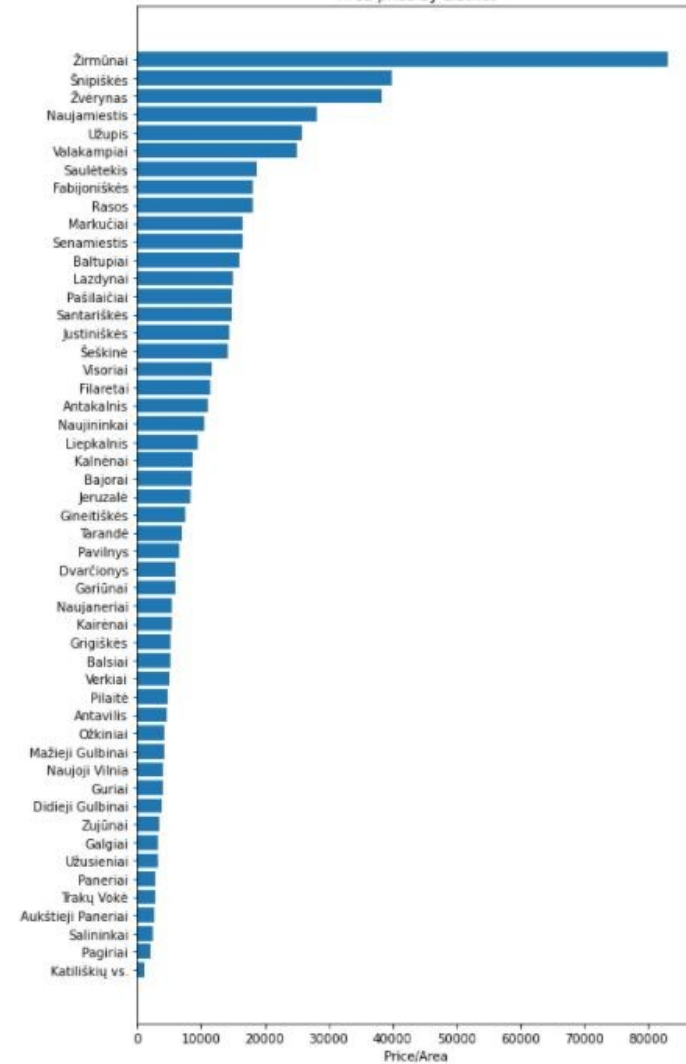


Results

Selling area count by district

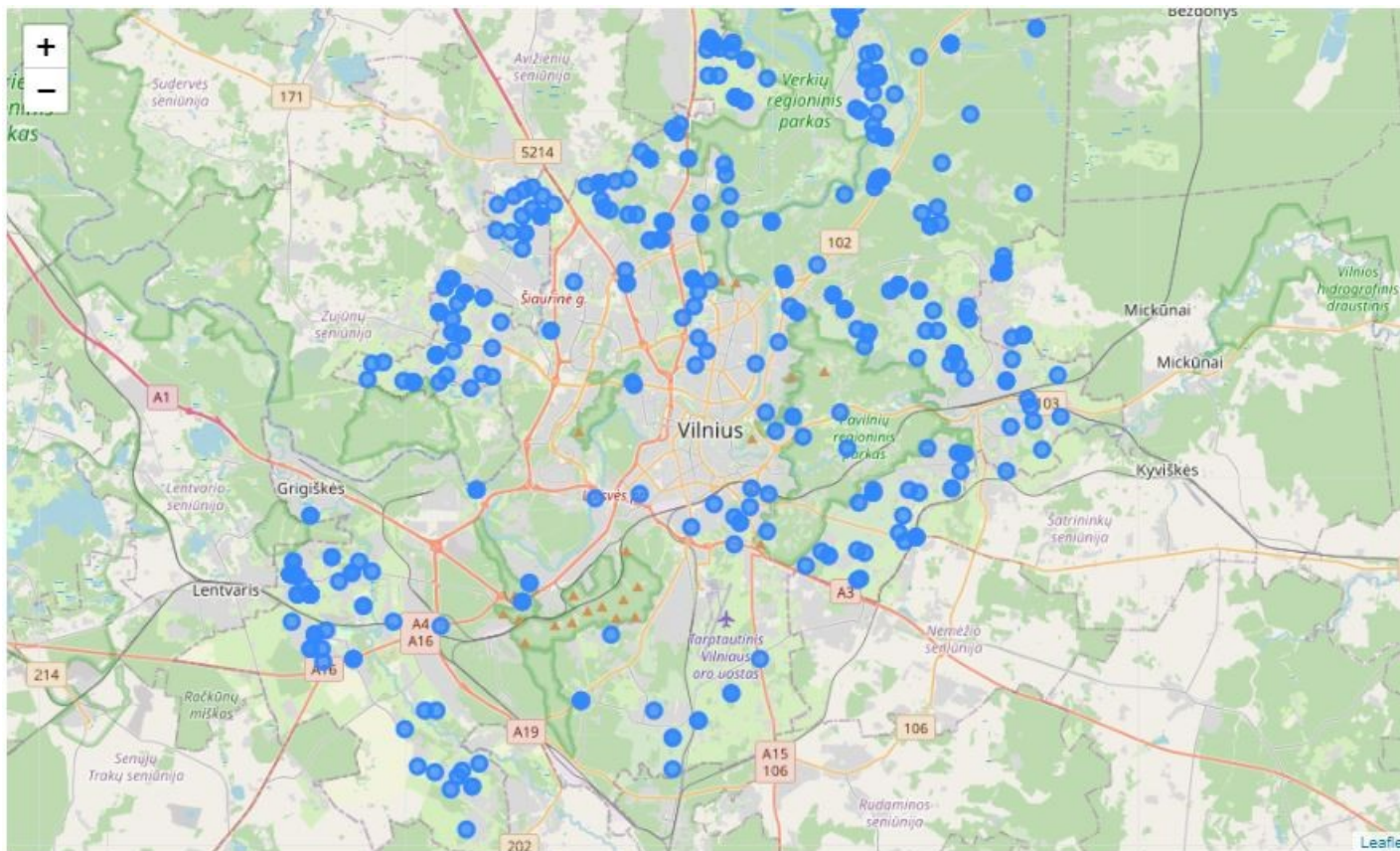


Area price by district



Results

All the areas that are for sale in the map.



Conclusions

- We can determine area price just by area size or distance to city center there are other parameters.
- Prices of areas that are very close to the city in a range between 0 and 6 km rises quit quickly (may be even exponentially).
- Top 3 districts in price are also the closest to the city center.
- Areas prices in rage 6 to 15 km are quite steady.