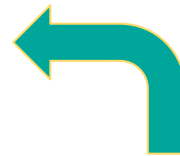# Airbnb price behaviour analysis in CDMX

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Overview

Summary

What do we want to analyze:

- Pricing and which factors affect it;
- We wondered if location was the only factor;
- We made new questions regarding if crime and the type of Airbnb that was going to be rented could also influence it;
- We also made some curious findings regarding touristic areas.

Hypothesis

1. Location influences Airbnb quantity in CDMX.
2. Location influences Airbnb price in CDMX.
3. Crime influences Airbnb price in CDMX.
4. Poverty influences Airbnb price in CDMX
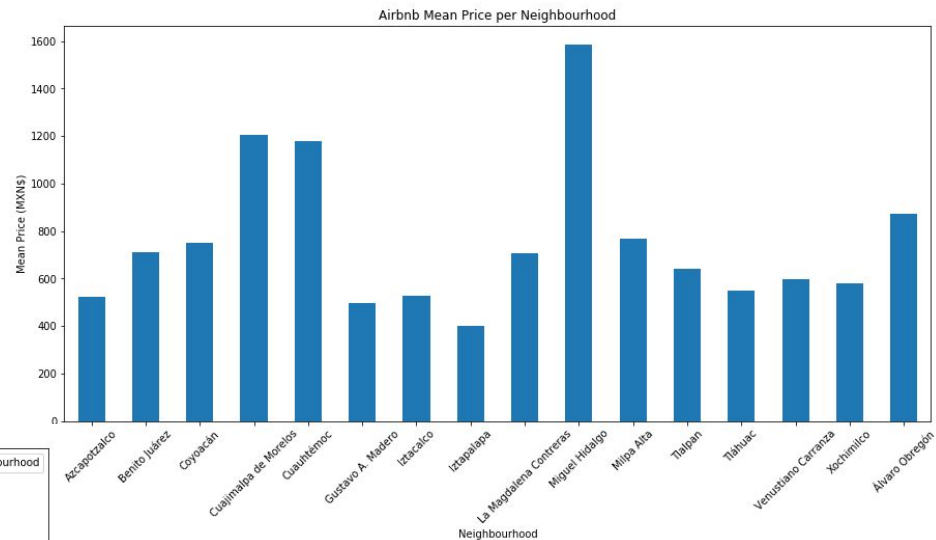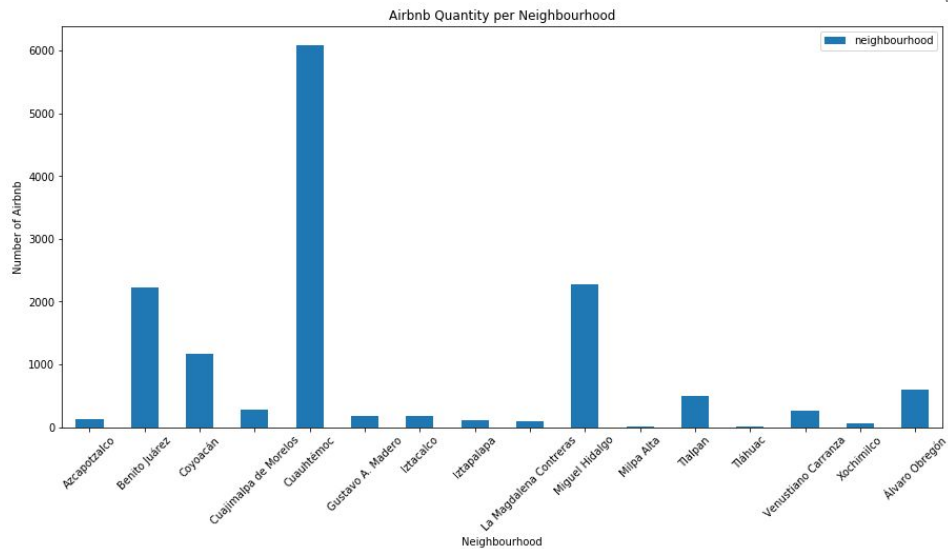5. Multiple Airbnb owners will lower price
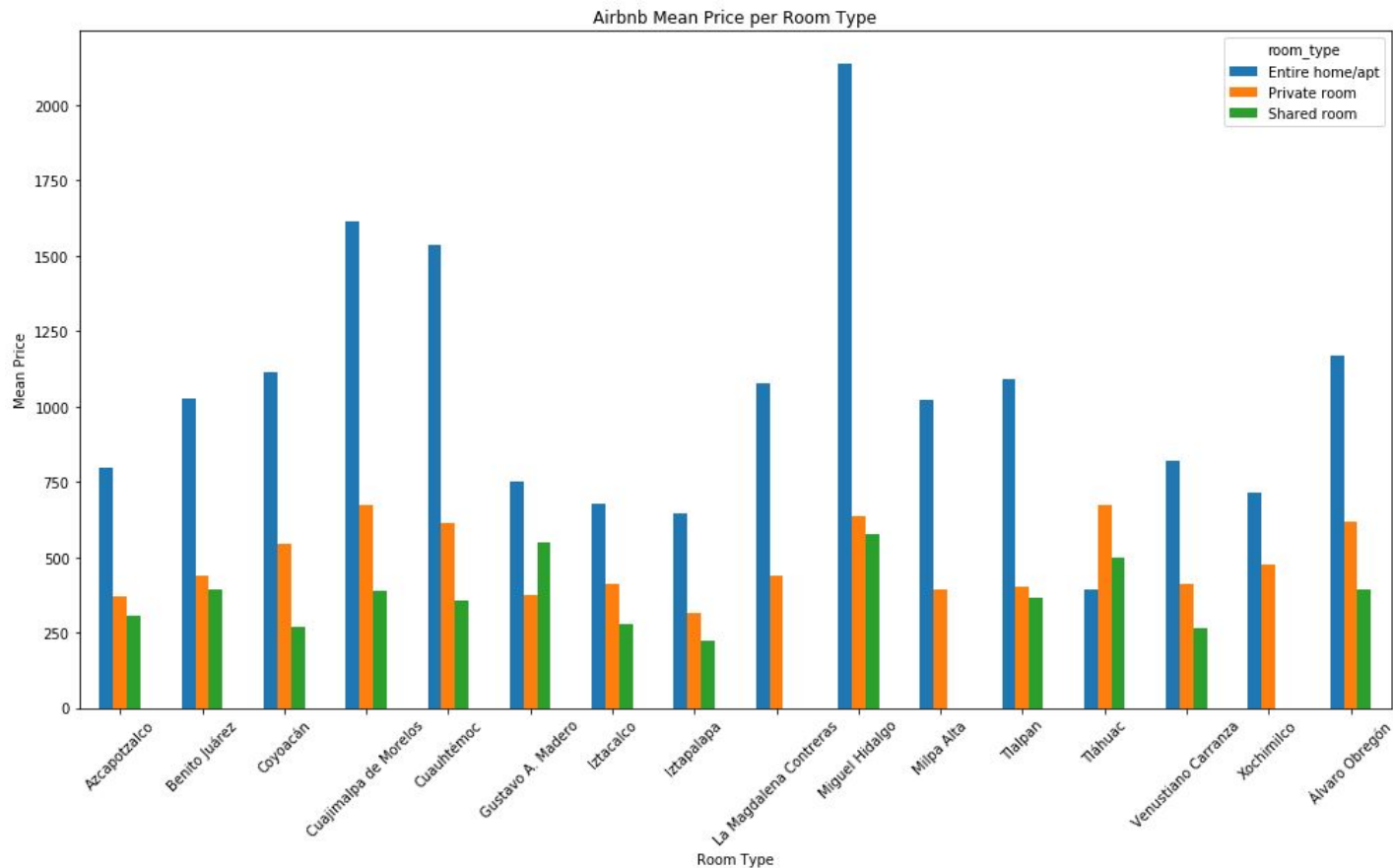
All About the Data: Sources

- https://www.kaggle.com/tsarina/mexico-city-airbnb
- https://datos.cdmx.gob.mx/pages/home/
- Google maps API for heatmap plots

Analysis

Airbnb Mean Price per Neighbourhood

Airbnb Quantity per Neighbourhood

Analysis

Airbnb Mean Price per Room Type
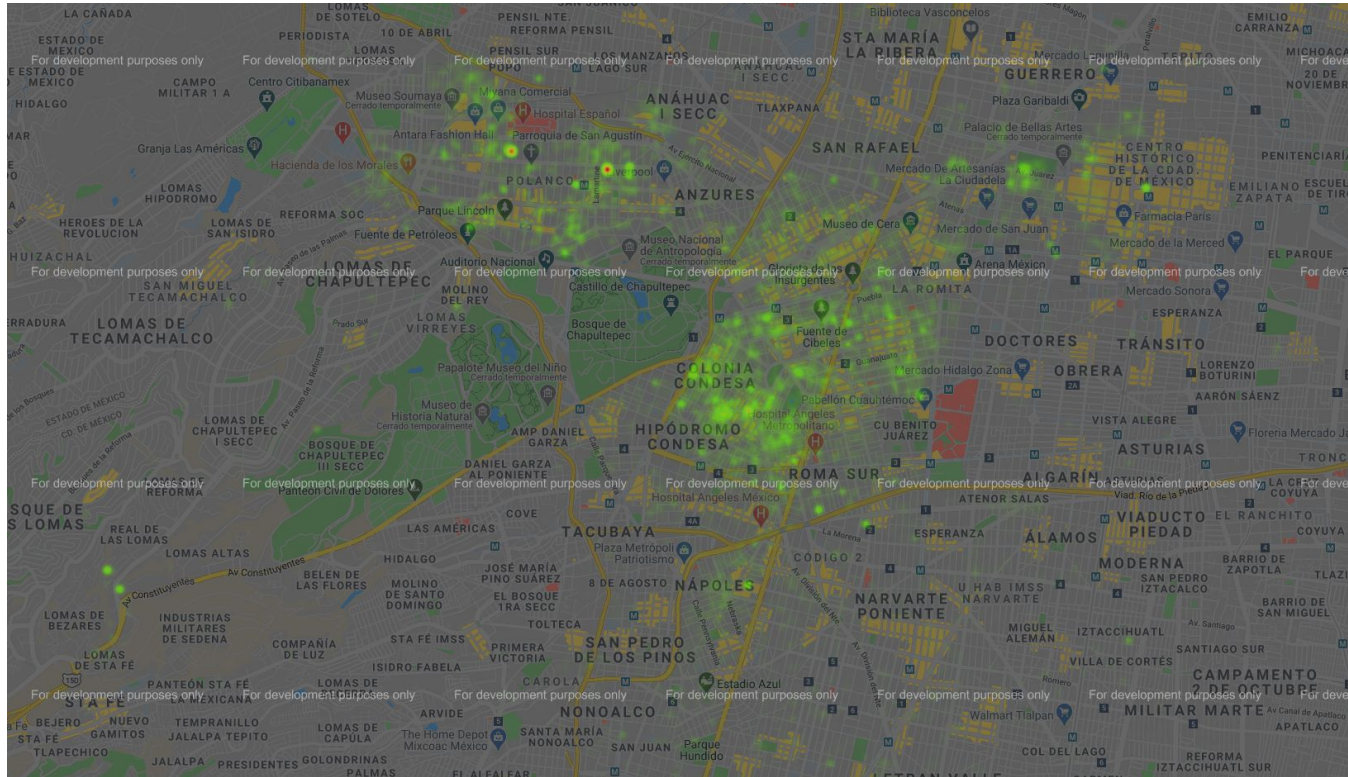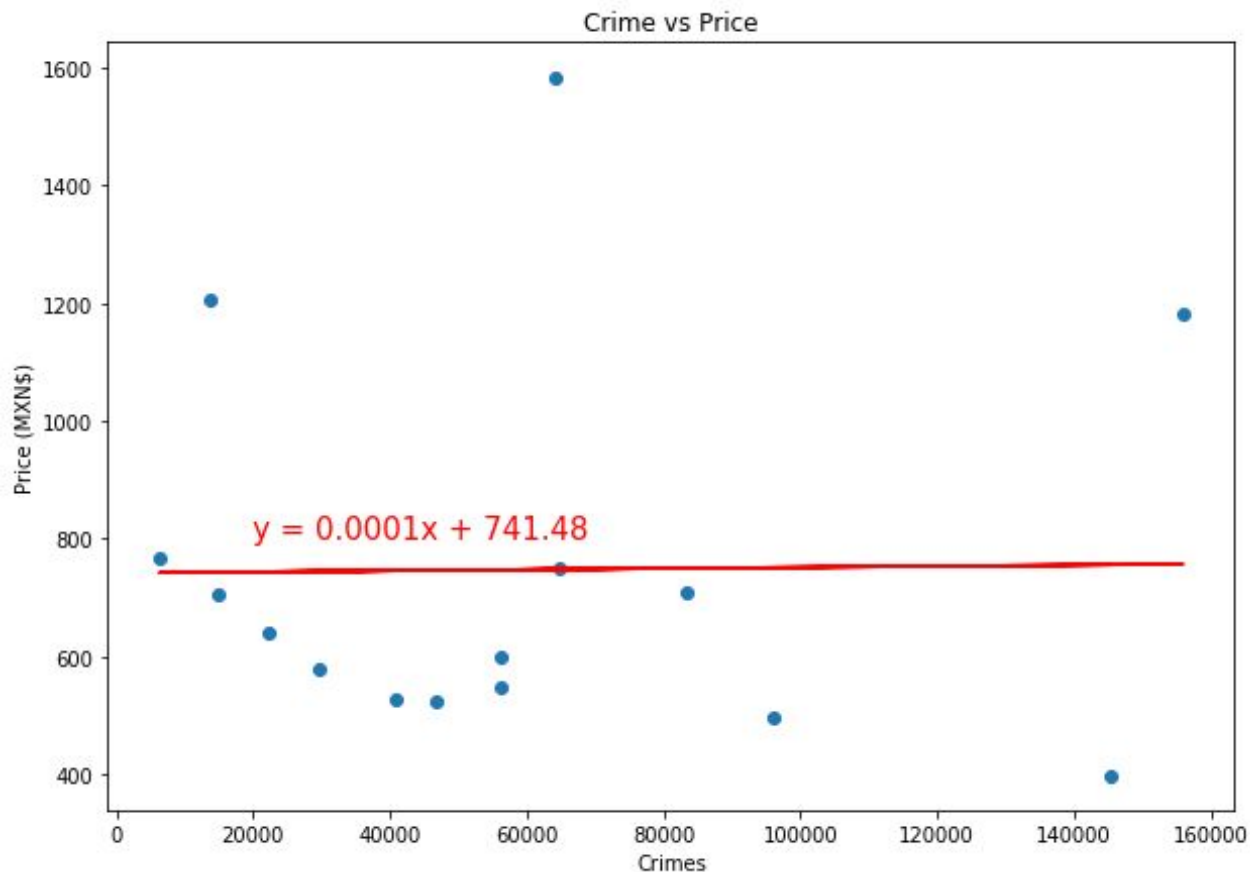
Analysis

Analysis: Crime

Analysis: Crime

Crime vs Price

$y = -0.0029x + 798.66$
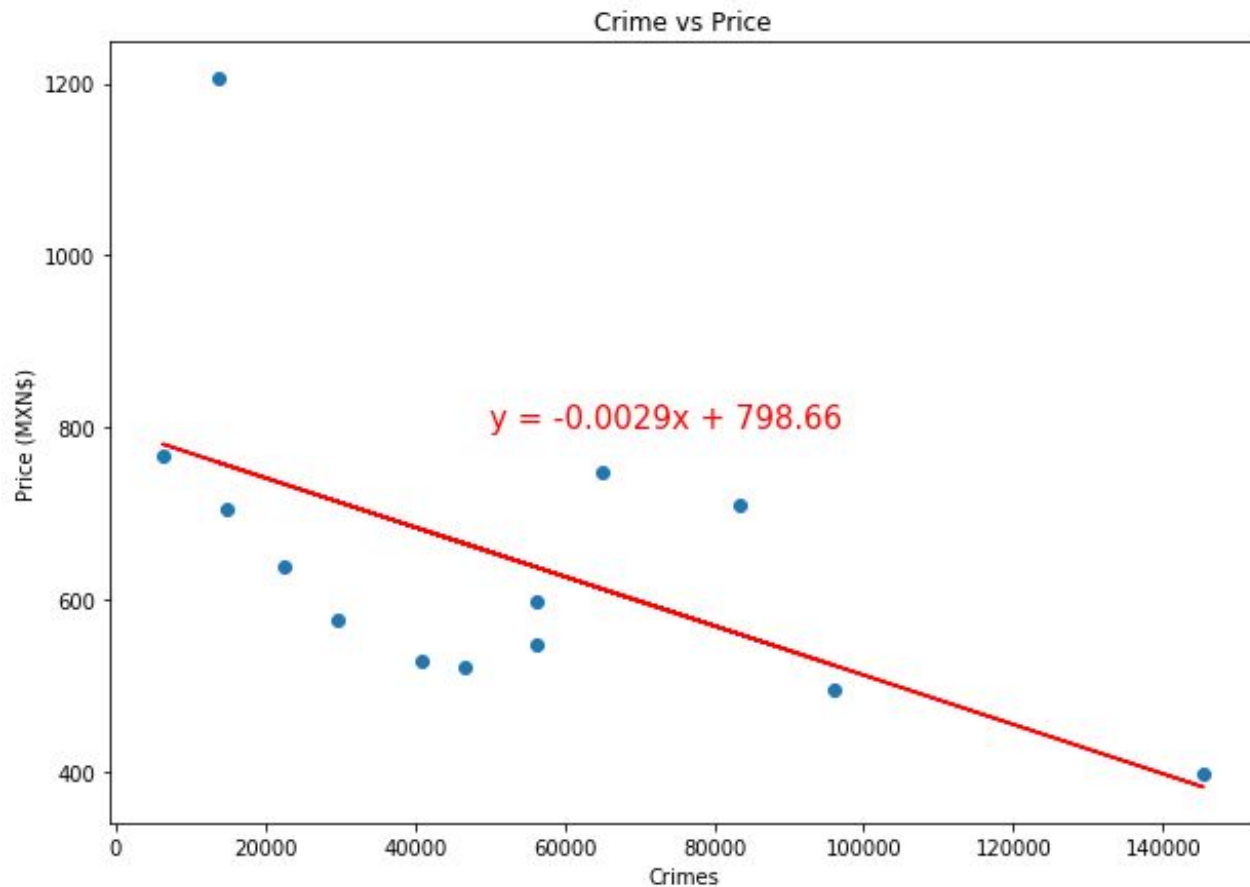
Analysis

Analysis: Poverty
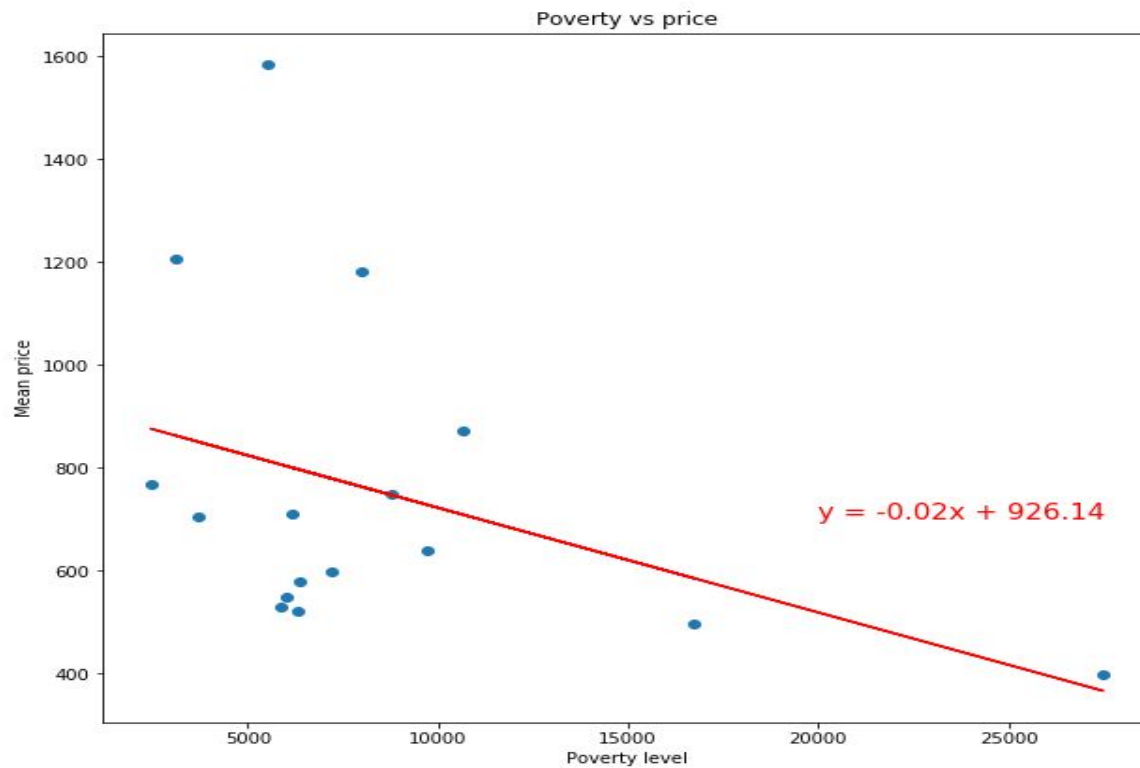
Analysis: Market Exploitation

Market Mean Price offer per Room Type
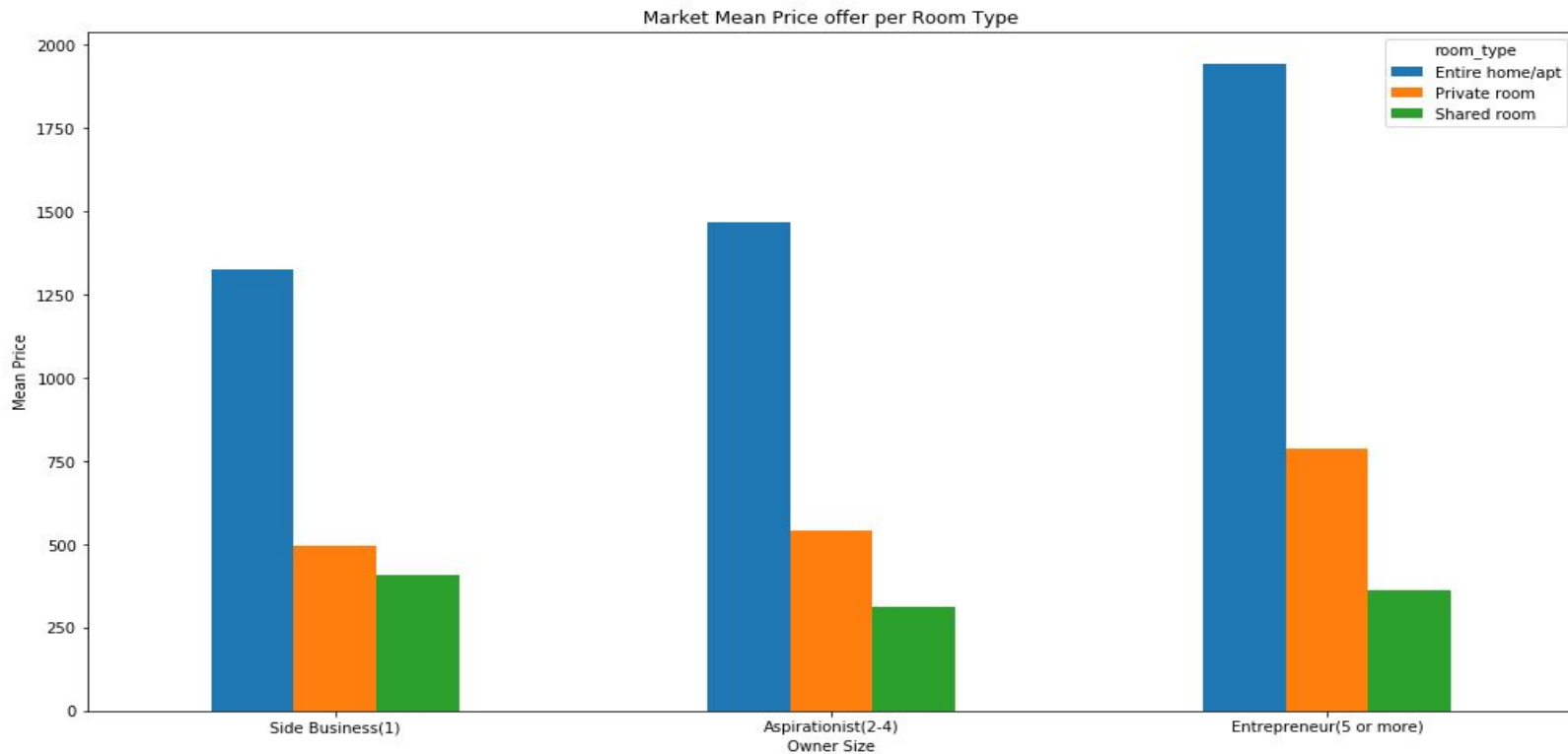
Challenges

- Messy data.
- Limited data available.

Post Mortem

Additional questions:

- We wanted to find out if location also influenced the disponibility of Airbnbs (since touristic places should get more requests on touristic dates).
- We wanted to discover any hidden relations between reviews, amount of bookings, location and price.
- We wanted to see if the population's income per location influenced the price of the Airbnbs, to see if they were aimed at locals or tourists.

Conclusions

Room Type offer composition
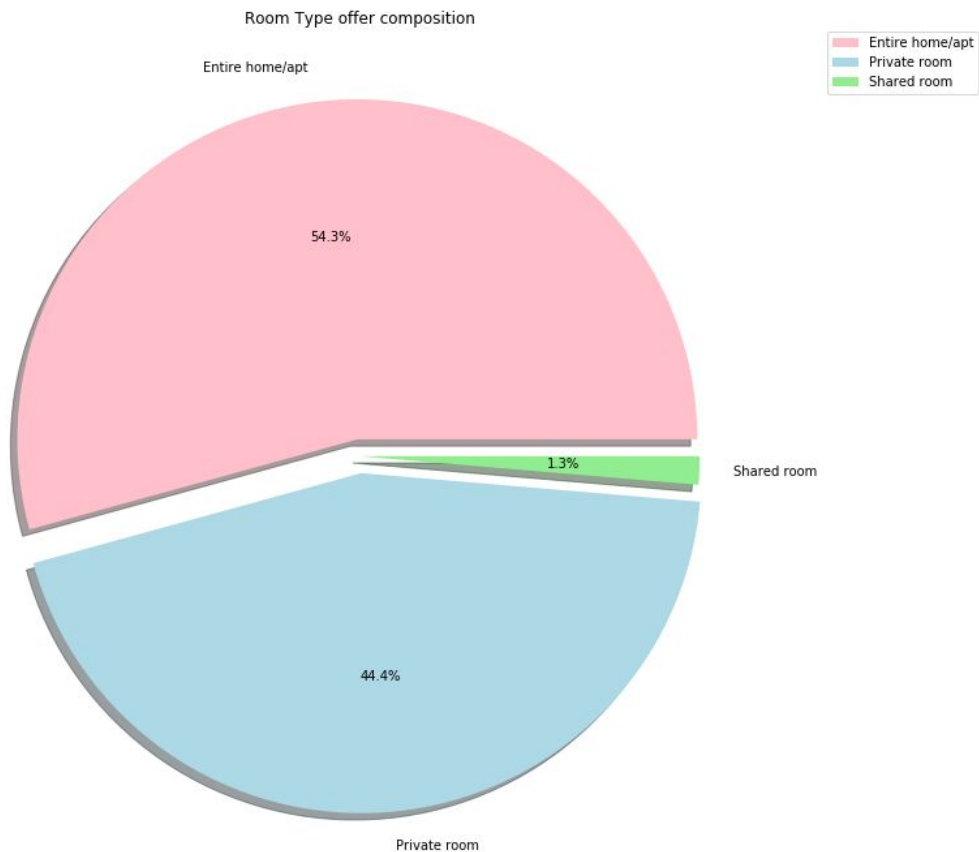
Conclusions

- Location strongly influences the price of the Airbnbs
  - Wealthier (and more touristic) areas can exploit the location benefits offering ridiculously expensive lodges. Full Airbnbs can surpass twenty thousand mexican pesos per night.
  - The strong location-price correlation can be clearly seen in Complete Airbnbs and Private Rooms
- Shared rooms have a little more variation, and some locations (like Tlahuac) can fall out of this rule due to external facts like Airbnb type demand.
- Crime negatively influences the price of Airbnbs (r=-0.56)
  - Fancy and touristic areas are not affected.
- Poverty negatively influences the price of Airbnbs (r = -0.39)