* I decided to analyze apartment rental listings in New York City
* I chose renthop over streeteasy since streeteasy has severely limited its rental listings as of the summer of 2017
* The scraping process was relatively straightforward, and you can see the items I chose to download. The amenities examined included, elevator, doorman and whether or not there was laundry in the apartment.
* While the scrape was easy, data integrity was a problem. There were many duplicate listings due to brokers using them to secure new leads. This is the common “That apartment is gone, but I have another just like it…”. Furthermore, many listings were missing complete address information. This is not unique to Renthop, every rental site in New York has this problem because there is nobody policing it for integrity, a situation that has been going on for some time. When it as all said and done, approximately 54,000 records were downloaded, but when duplicates were removed, only 37,000 remained, a loss of over 30%.
* So what do we know now? We can see how rents stack up once the extremely expensive ones are removed. The bulk of them are in the $3,000 - $4,000 range.
* Breaking that down by borough, not surprisingly, Manhattan is the most expensive, however, there are apartments in Brooklyn that also reach the high end as well.
* I was hoping to find some neighborhoods in Manhattan that were more attractively priced than Queens but did not.
* I find the bottom up approach more interesting and decided to examine a couple of case studies
* For example, a landlord (me), looking to fill a vacant studio in a walk-up building.
* Here is a box plot of the all the studios on the upper west side split based on doorman and elevator. As expected, doorman buildings command higher rents, with the 25th percentile being around $2,400. Please note, all doorman buildings on the UWS except for one have elevators. As an aside, surprisingly, elevator buildings without a doorman do not command a premium compared to walkups.
* Using this info, I’ll set the rent at $2,375 so it’s below most of the doorman buildings and lower it each week until it rents or reaches $2,150 which is the lower range of the walkup studios.
* Roommates
* First, look at the prices for 3 beds by neighborhood. Next, see how many apartments are available in each one.
* More apartments is probably better, but please remember, that some neighborhoods are physically larger than others.
* Looking at both charts, Greenpoint seems to be a reasonable place for further exploration since it has a fair amount of apartments to choose from at a reasonable price point.
* Using the Google API in python, I plotted all of the 3 beds available for rent. Immediately, you can see which ones are close to mass transit and which will offer water views.
* As for next steps, looking at snapshot is very informative, however, to be useful to a developer, trends are even more important since their projects take years to complete and rent out. So, scraping this data on a monthly basis will yield some insights as to which apartment type is doing well in which neighborhoods.
* Also, incorporating more neighborhood info, such as amount of new developments coming on, new restaurant/bar openings, school ratings for the larger apartments, etc. can further help with the decision making process.