2. Data Section: Description of the data that will be used to solve the problem and the sources

To address the problems of the question the following data are required:

- Map of Manhattan Boroughs and Districts with their geodata (latitude and longitude)
- Directory of Manhattan Metro Stations with their website
- Directory of rental apartments in Manhattan city with their addresses and costs
- Preferably a list of rented apartments with additional details including size, address, location, # of beds, etc.
- Venues (which may be clustered) for every Manhattan neighbourhood
- Metro station positions, as required

When to use the data to address a question

They would use the details as follows:

- Using Foursquare and geopy data to chart top 10 locations for all Manhattan communities, divided into categories (as per LAB course)
- Using foursquare and geopy data to chart the position of metro stations, independently and on top of the clustered chart above, to classify places and facilities close each metro station or to discover each subway position independently
- Using Foursquare and geopy data to chart the site, in any manner, of rental places linked to subway locations.
- For eg, build a chart showing the average rental price per square foot, around 1.0-mile (1.6 km) distance from each subway station-or similar metrics. I'll be able to point to the popups easily to learn the relative price per subway sector.
- Using Geopy-distance and Nominatim, addresses from the rental locations will be translated to geodata(lat, long).

Processing these DATA would require the main questions to be addressed in order to take a decision:

1. Which are the rental costs (per square ft) at a mile radius from each metro station?
2. Which is Manhattan's best-priced rental area that fits defined criteria?
3. What is the gap from the place of work (Park Ave and 53 rd St) and what is the potential future home?
4. What are the safest cities to stay in for the two? Why will rates match?
5. Where will Downtown communities and across the subway stations allocate locations?
6. Are there tradeoffs between size and place, and price?
7. What other important statistical results of the real estate and the general knowledge