**Battle of the Neighborhood**

**Introduction**

Co-living has been the new buzz word in recent years. Traditionally, hunting down an apartment requires a real estate agent and then furnishing the place by renters themselves. Co-living companies are now offering a streamlined alternative in the form of move-in ready rooms in shared apartments with basic services such as utilities and housekeeping covered. Some companies focus on communal life while others emphasize getting out into the neighborhood. With rising co-living businesses rising – in particular, the city of New York – it is of paramount important to understand the area and the needs of their audience regarding a neighborhood.

**Business Problem**

In New York City, rents are notoriously high and flat sharing is common. With many new co-living businesses muscling into the city, it is essential to understand the neighborhood and its audience to create a successful business. The objective of this capstone project is to analyze and select the best locations in the city of New York for as a market research for businesses to target its audience. It aims to answer the question: If a co-living start-up is looking for the best location for its premises, where would you recommend so that it can leverage its competitive advantages and tailor its services for its target audience?

**Data**

To come up with the model, the following data would be necessary:

* New York City Neighborhoods
* Housing price of New York City
* Venue data of New York City from Foursquare API

The data can be downloaded from the above while venue data can be parsed through posting a GET request to foursquare API. The data is formatted using one hot encoding with the categories of each venue, as well as the crime rate.