In London, if someone is looking to open a restaurant, where should it be?

Description of problem:

- A client is asking to recommend an area to open a luxury Asian restaurant in London. They want their restaurant to be in an area with higher asian population, that area's household income to adjust price, area access to public transport.

- Interests:
1. Asian restaurants owner/entrepreneurs

2. Business looking to franchising Asian restaurants

Methodology

1. **Demographics of different areas in London, top 3 area with highest asian population %**

- The method starts by scraping data from the web and converting into dataframe, cleaning and filtering to find borough with highest population.

2. Average income in those area of London

- The method starts by extracting data from xlsx and converting into dataframe and cleaning. Matching with dataframe 1 to look for corresponding income of boroughs.

3. Amount of asian restaurants in those area competition

- Using foursquare to search for 'Asian restaurants' within radius 1000 and using folium API to visualize the area.

Determining Locations that can be chosen as potential restaurant locations

Results

- Top 3 areas and their corresponding income.

Borough	2020 Average income per week(£)
Harrow	566.7
Newham	519.4
Redbridge	581.4

Results

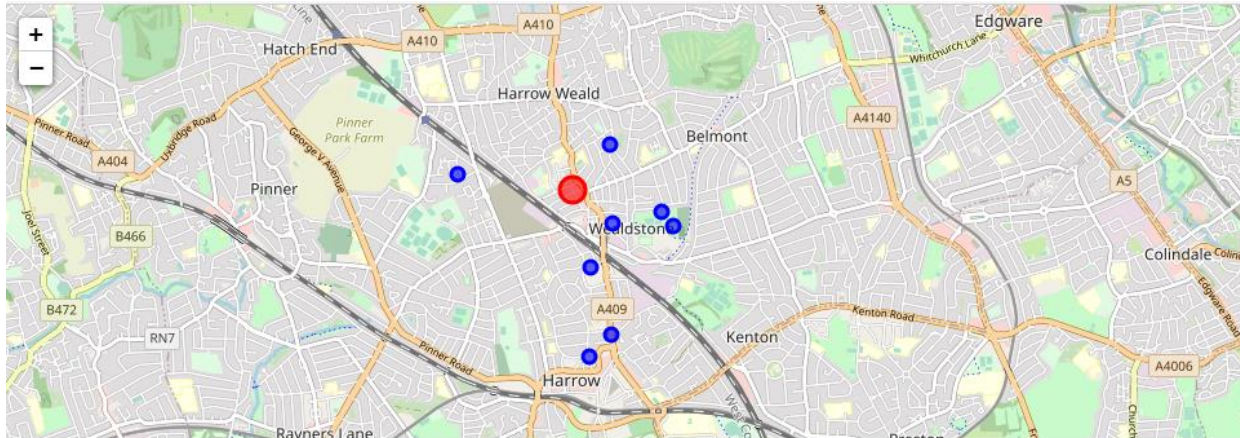No results found in Redbridge area.

Fig.1: Asian restaurants in borough of Harrow within radius 1000. Red=Centroid of Harrow, blue = restaurants.

This area will have competition with 7 other restaurants. However, this area is still far from the center of London where traffic is a key component. This will not attract that many customers.

Newham: competition with 10 other restaurants. This area is closer to the city center of London and will be a achieve a higher traffic. However, this area is the least profitable as the average income in this area is the lowest of 3.
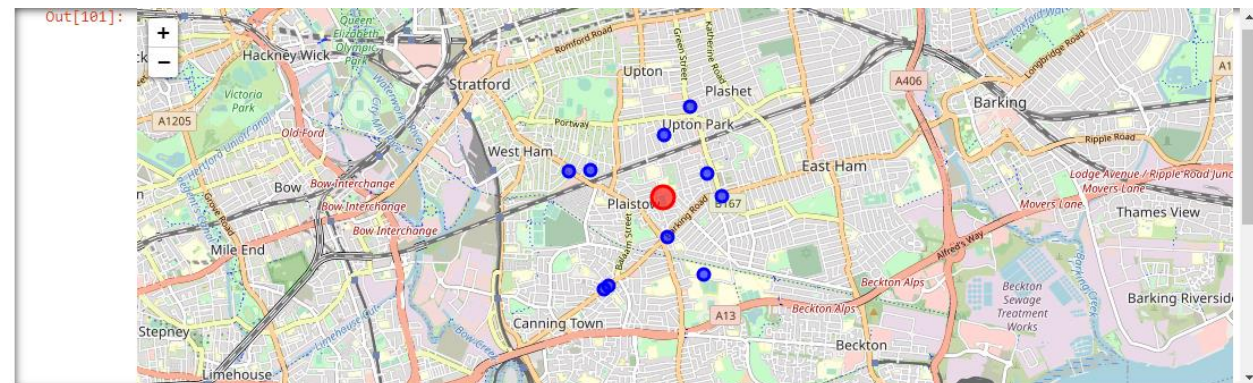

Fig.2: Asian restaurants in borough of Newham within radius 1000. Red=Centroid of Newham, blue = restaurants.
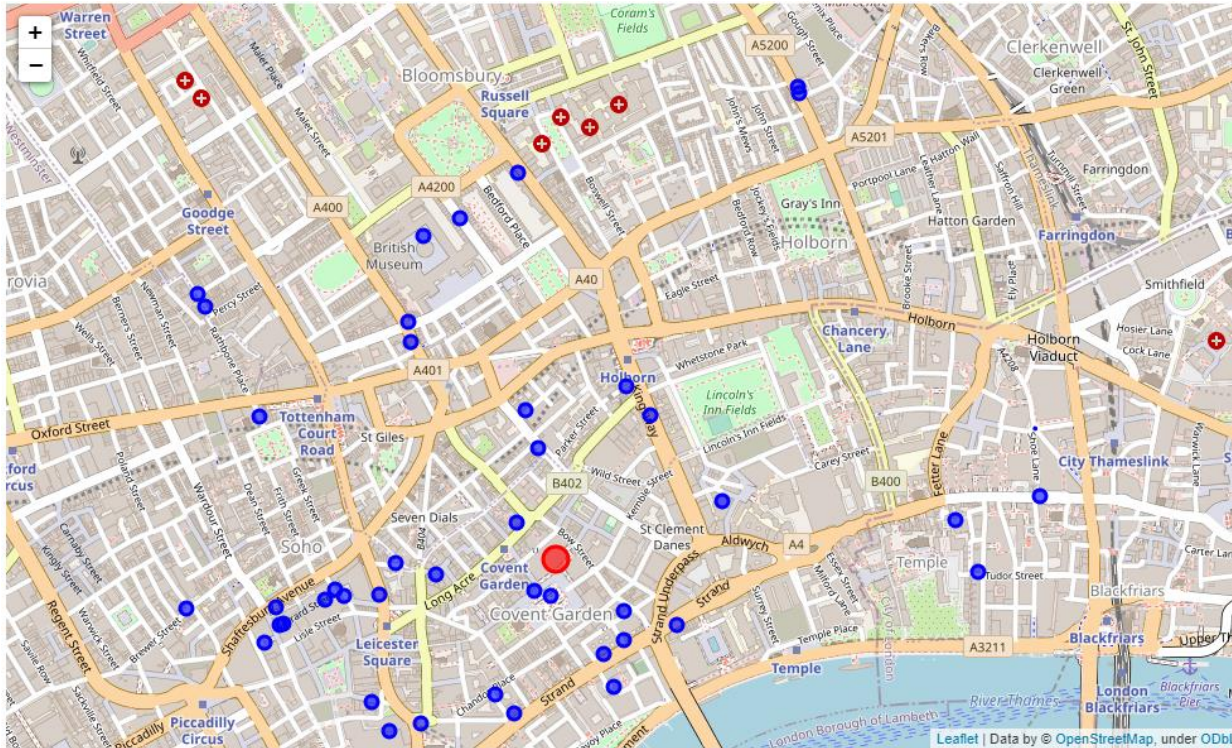
Fig.3: Asian restaurants in Covent garden within radius 1000. Red=Centroid of covent garden, blue = restaurants.
Ideal location for luxurious restaurant. However, stiff competition between 20+ asian restaurants. However higher traffic but at the same time higher costs of rent.

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Conclusion: London Borough of Harrow is the best area for opening an Asian

Conclusion:

• London Borough of Harrow is the best area for opening an Asian restaurants with least competition in a high asian population area with moderate average income. However, the location will exhibit less traffic as it is far from London busy city center. The second choice will be London Borough of Newham which is by far closest to the London city center amongst the 3 areas. However, client will need to reconsider if the restaurant is best for luxurious customers because Newham has the lowest average amongst the three. Redbridge is not recommended for an Asian restaurants as the search did not show a confident amount of restaurants, indicating that other asian restaurants chose not to open in Redbridge.

• Extra studies on London's busiest area, covent garden has shown 20+ asian restaurants. The competition will be stiff and the running cost is estimated to be high as well. However, it will attract the luxury customers. More analysis will have to be done.

• Future work: The investigation neglected a lot of factors that might affect the decision of opening a restaurant in London, for example: pedestrian traffic, type of area(i.e. residential or commercial or business), running costs(i.e. rent in higher traffic areas).